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Software Introduction

SenseBoard is an interactive whiteboard software which is based on touch operations. The software is suitable for smart panel classroom teaching, which provides whiteboard functions such as writing, erasing, notation, drawing and roaming. At the same time, it fully integrates smart panel interactive multimedia functions, providing powerful interactive teaching and display experiences such as subject teaching tools and multimedia demonstration.

Friendly user interface, convenient operating experience, and various subjects' scenes are all outstanding parts of the software.

Convenient operation experience – Navigation map is convenient for user to position page as per content location, mobile toolbars with gestures convenient for user easy switching between different modes like pen, select, erase, etc.

Various subject scenes – Different subjects are set with different subject scenarios, like English, Math, Chemistry, Physics, etc. Each subject provides different teaching tools, and the user can apply different background themes for teaching according to the current subject.

Convenient and practical presentation tools – Functions such as screen cover, spotlight, screen zooming, and annotation at any time, integrate traditional blackboard presentation into computer intelligence, which enhances practicality and convenience of the software while inheriting traditional operation habit.

Actual simulation of soft pen – Soft pen function provides feeling of simulating soft pen, and during writing process, user can present handwriting effect of different degree of thickness according to user's writing speed, to provide users better writing experience.

Personalized custom settings – Users can customize settings for brush, eraser and canvas background according to need, fully meeting demonstration need from each detail.

Installation Requirements

Following are the system requirements for installing SenseBoard.

Software

- Windows 8/8.1/10 system.
- Net Framework 4.6.2 or above version

Hardware (Minimum requirements)

- Dual Core Plus
- Hard Disk 200GB or more
- Ram 4 GB or more
- Network Speed 2Mbps
- Webcam and Microphone.
- Internet (required for voice commands)


Installing SenseBoard

SenseBoard comes pre-installed with the SENSES IIP Panel. You just need to double click on the desktop SB icon.



Figure 1: SB desktop shortcut icon

Application Startup

After software installation is completed, double-click on  icon on the desktop or select SenseBoard in drop-down list of "All programs" in the "Start" menu, to start SenseBoard application software.

➤ Authorization Mechanism

By default, the pre-installed software is already registered and all features will be available for the user to use. In case if a product key is asked for during start up, please contact Senses Support team and they would help you with it.

➤ Launch Screen



On startup, a launch screen is displayed with the software version no and updated date. This information can be used to report any issues.



Figure 2: SB startup screen

User Manual

SenseBoard application software includes standard mode and split screen mode. Software opens to enter standard mode by default.

In the user interface, the circular menu bar is displayed by default. It will be automatically hidden when the user starts using the canvas. The circular menu can be viewed again by tapping on the  menu side button. Circular menu contains 2 sets of menu items like Pen, Eraser, Shapes and other options as shown below. To show the second set of menu items, please click on  icon on the sides.




There is an additional bottom thumbnail toolbar which is hidden by default and can be viewed by clicking on the  icon at the bottom corners. This toolbar can be used to navigate the pages. More details about bottom thumbnails are [here](#).



Figure 3: SB showing the circular menu

Main menus

By default, there are circular menus available on both sides. User can choose to change the menu orientation from circular to vertical from 'Settings' page. User can choose to show or hide circular menu by clicking on the  /  buttons on the edges. Circular menu has 2 sets of menu functions available which user can choose to use.

Various user functions available by default are:



Set 1 → Select, Pen, Eraser, Shapes, Move, Tools, Desktop, More.

Set 2 → Text, Background, Fill, Resource, Menu, Subject, Math, Back.

More details about each menu item are described in detail later in the document.



Figure 4: Hidden circular menu on right and bottom menu bar

- Menu label – While opening the software, a text label is displayed under each menu icon to indicate what function it will do.
- Show/Hide buttons – Circular tool bar can be hidden on clicking  /  button on the edges.

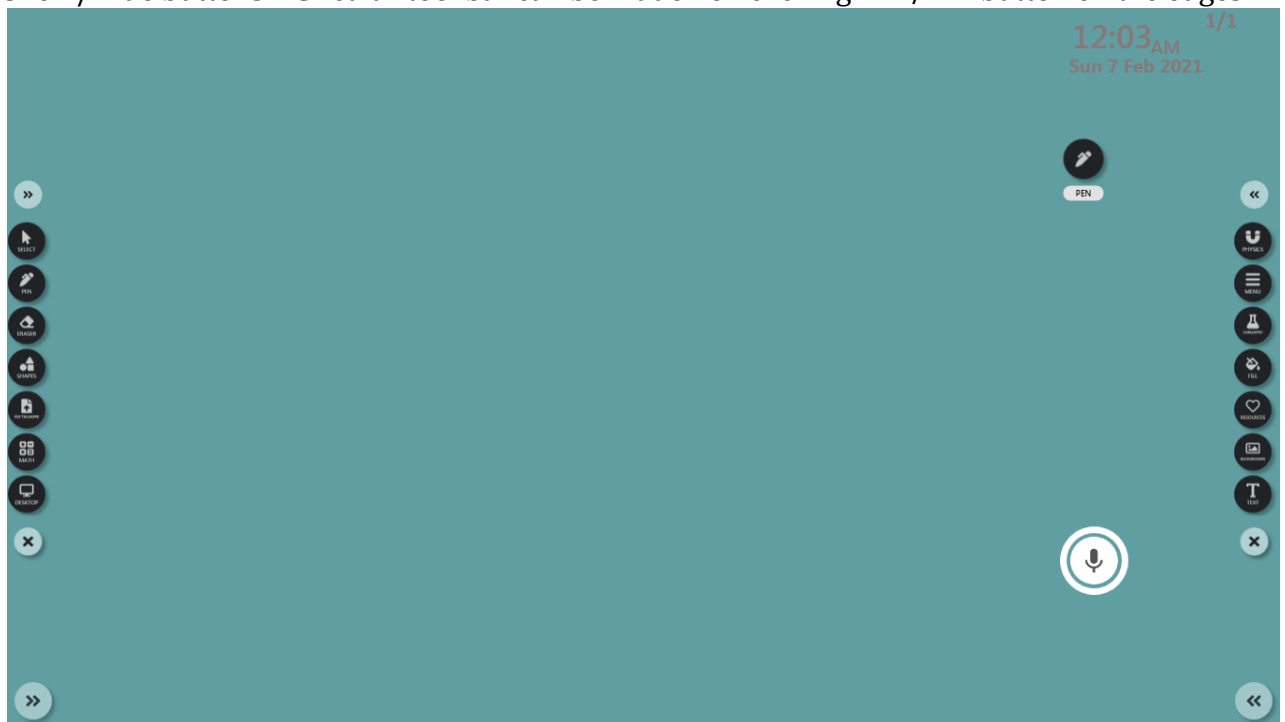


Figure 5: Vertical Menu Selected

App Menu





From the main menu, click on  to popup the SB app menu functions as shown below. This drop-down menu provides users with function options such as New, Open, Insert, Save, Save As, Print, as well as Setting, Help, contact us, Update, About Us, Register and Exit software.

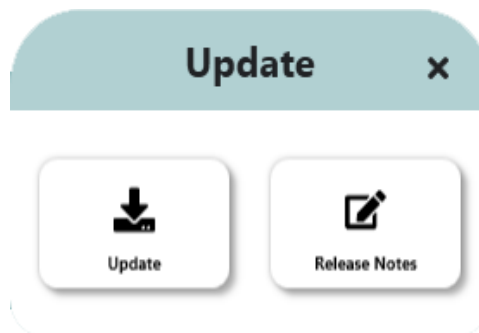


Figure 6: SB main menu drop down

Help: Click on  icon to open the help pages of SB


Register: Click on  to register the product. The product comes automatically registered with Senses IIP.


Update: Click on  to update the software to the latest version available on market.





Click on update to get latest version. Click on 'Release Notes' to see which bugs are solved & new features added in latest version.

Figure 8 : Contact us window

New: Click  icon to create a new blank session, each session can include as many pages based on user's needs.

(1) **Open:** Click  icon to open an EBF format file. After file is opened, it will automatically jump to scene page when saving the file.

(2) **Insert:** Click  icon to insert an image, video, PPT, PDF, Word files, into current page.

(3) **Google Drive:** Click  icon to you can access Your Google drive account when scan QR code or Click on Login with Google Drive.

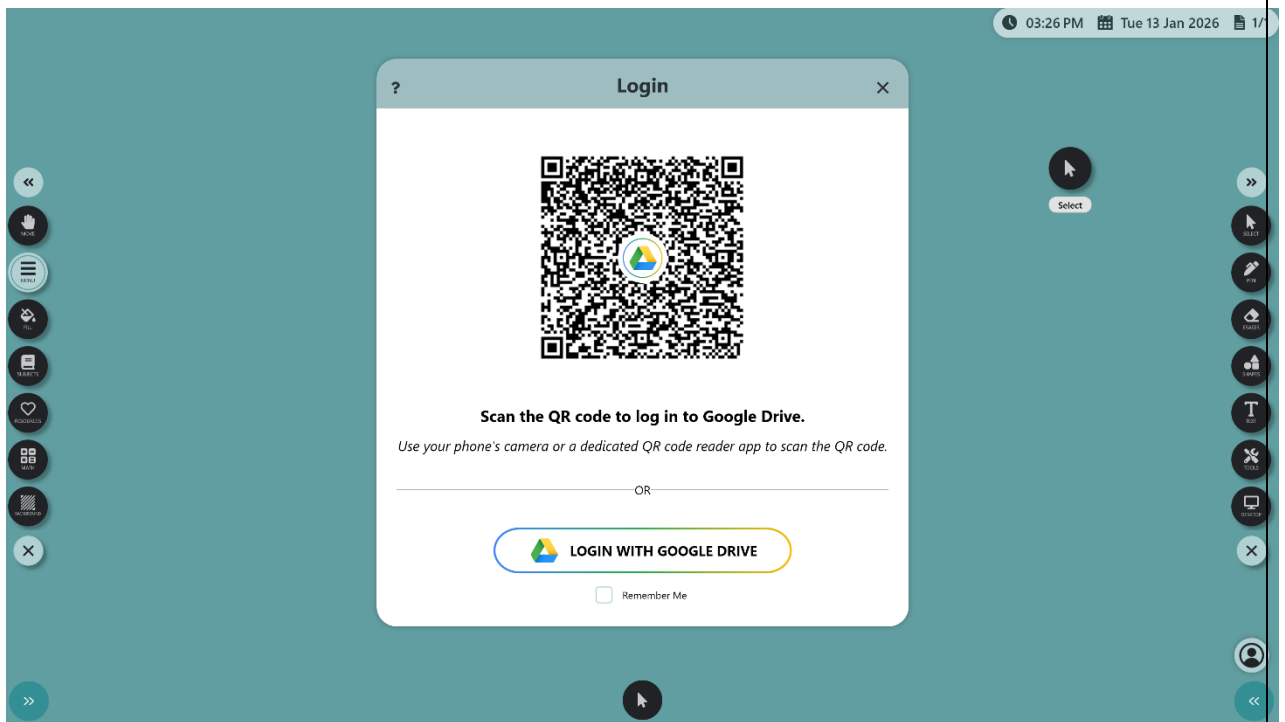



Figure 9 : Google Drive

(4) **Save:** Click  icon to save current document in EBF format file locally in the machine.


(5) **Save as:** Click  icon to save current document as *.EBF, *.jpg, *.doc, ppt, or pdf file formats.



Figure 10: Save as window

In this “Save As” option user can choose to save the file locally, on cloud and both as shown in below fig. you can select where you want to save the file.

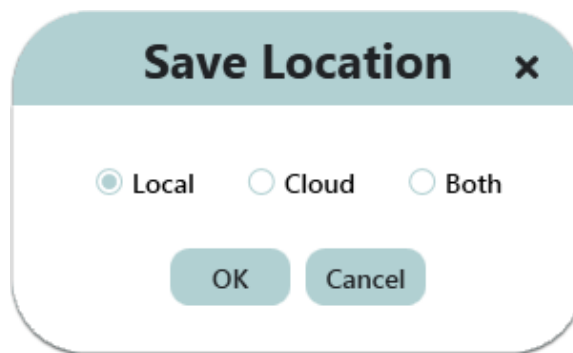
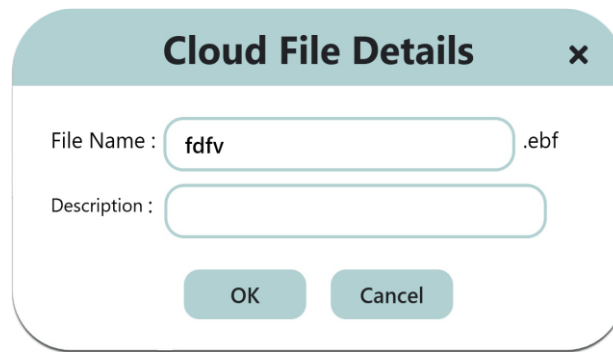


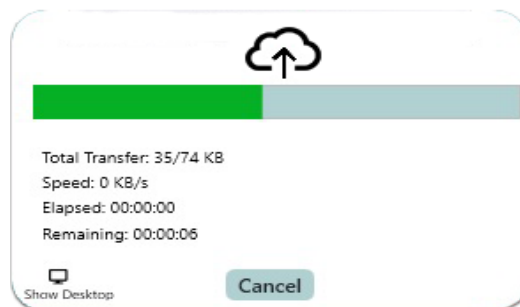
Figure 11: Save location

When select on cloud after that following window shows, then write file name and description and click on ok.




A dialog box titled "Cloud File Details" with a close button (x) in the top right corner. It contains two input fields: "File Name:" with the text "fdfv" and ".ebf" to its right, and "Description:" with an empty text box. At the bottom, there are two buttons: "OK" and "Cancel".

After that file compressed and upload to cloud, so whenever you want to download that file you can download from internet.




The files saved in cloud can be shared by link in email and can be downloaded anywhere over the internet.



(6) **Print:** Click  icon to print the select page

(7) **Exit:** Click  the option to leave the application. This is the option to close the application.

(8) **Setting:** Click  icon to open the settings page as shown below.

Application Settings

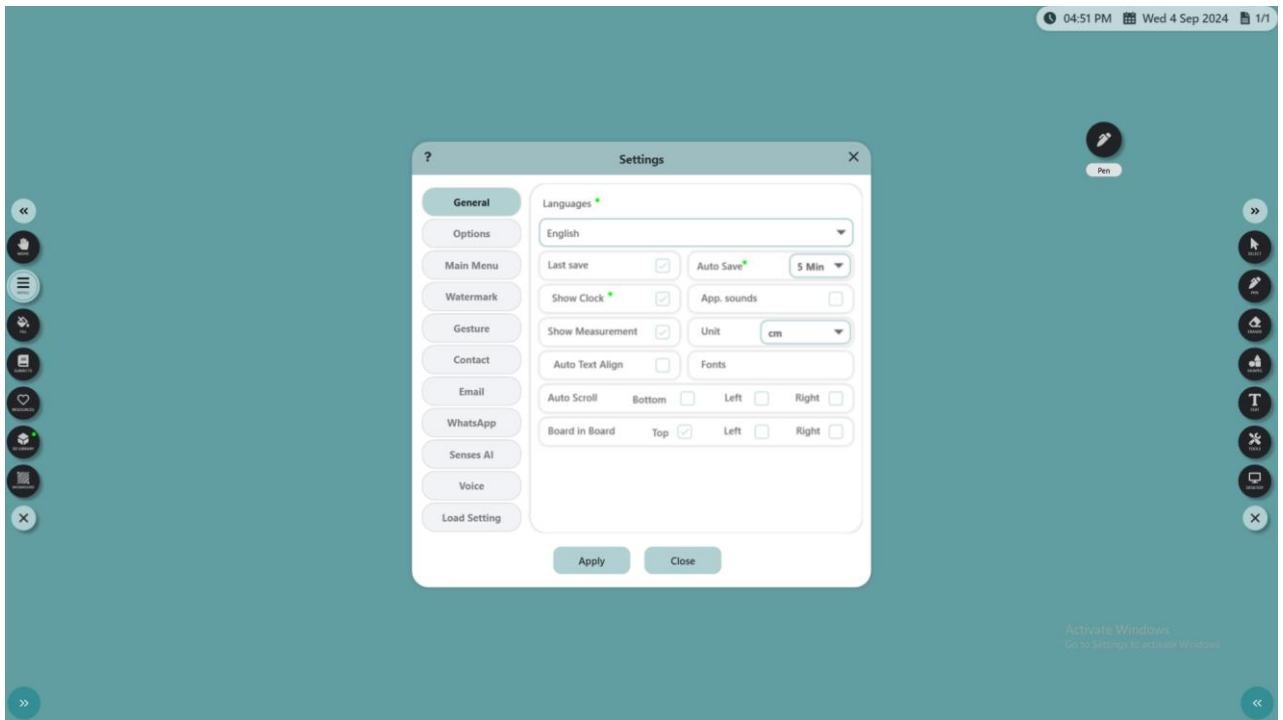


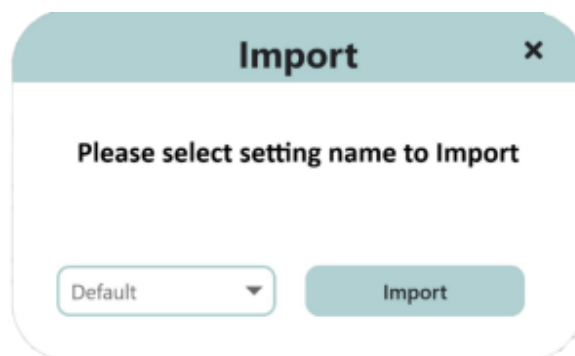
Figure 12: Settings page

From the settings page, user can configure various functions available in SB. The options available in each settings tab is described below:

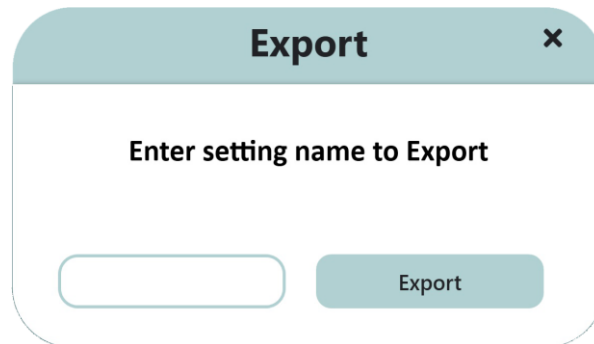
Settings Common Buttons

Following are the common action buttons available for all tabs in the setting page.

- Import:** The user can import the settings which he /she has previously saved using this option. All available settings are displayed in a drop down from which user can choose one to import.

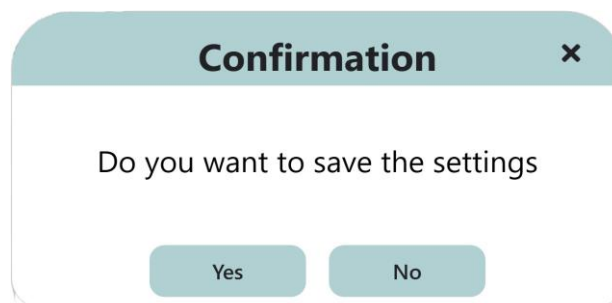


- **Export:** The user can export the settings which the user has set using this action. This can be used later during import.



The image shows a dialog box titled "Export" with a close button (X) in the top right corner. The main text inside the dialog is "Enter setting name to Export". Below this text, there is a text input field and a button labeled "Export".

- **Apply:** Click the apply tab to save the changes made. All changes in every tab will be saved on click of 'Apply'



The image shows a dialog box titled "Confirmation" with a close button (X) in the top right corner. The main text inside the dialog is "Do you want to save the settings". Below this text, there are two buttons labeled "Yes" and "No".

- **Close:** Click close to leave the settings page.

General Tab

Here the user can change the following settings according to their convenience.

- **Language:** In language setting they can choose the language for operating the panel, as of now there is options for English, Marathi, Hindi, Urdu, Kannada, Malayalam, Telugu and Gujarati Languages available.
- **Show measurement:** By checking the box, the measurement of all shapes drawn on SB is shown by default. If you do not wish to see the measurements, uncheck the box.
- **Unit:** The measurements on shapes drawn will be displayed in the mentioned in the unit of your choice. E.g.: cm or inches.
- **Auto Scroll Canvas:** Check the box if the user wants to have the gesture of auto scroll option for the endless canvas. This means, when the user reaches the end of the page while drawing or writing on the screen, the screen will automatically scroll up or right depending on the last stroke drawn.
- **Auto Scroll Left Side:** Check the box if the user wants to auto scroll the canvas for left side. This is to support those locales where writing is done from right to left. Leave it unchecked if not required.
- **App Sound:** Check the box, if the user wishes to listen to the sound of the application while performing any commands or actions, if not needed it can be unchecked.
- **Show Clock:** Check the box, if the user wants to see the clock by default on screen, uncheck the box if it is not needed.
- **Auto Update:** Check the box by default as the application is getting updated frequently. So, the user will be able get and use the new updates. Internet connection is required to get updates.
- **Auto Save:** Check the box, if the user wants to save session automatically, so when power off the session save in background, after opening application we can recover that file and we get all changes.
- **Two Pen:** Check the box, if the user wants to draw with two pen, then one color for large tip of stylus and another is for small tip of stylus.

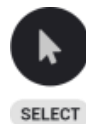
Options tab

In Options tab, user can set screen extension mode and main menu settings.



Figure 13: Settings-Options tab

- **Extended Mode:** Enable this to use extended modes, this mode is used for showing single whiteboard application in two panels
- **Show Canvas Mode:** Check the box, if the user wants to know which mode is selected at a particular point of time. On selecting this option, the mode is displayed on the screen as a transparent icon near the clock as below. Various modes can be – Pen mode, select mode, Text mode, Move mode, Shapes mode etc. User can double tap on the mode icon on the screen to reset the mode back to pen or select as per requirement.



- **Split Screen:** User can split the SB screen, choose this setting to open SB on which side after splitting

Main menu

- **Main Menu:** With the new version of SB, we are providing the user with an option to choose between Circular menu and Vertical Menu. Select which type of main menu orientation you want from here.
- **Main Menu Config:** User can choose which all user function should be shown as part of the main menu from this configuration window. This is very useful where users can choose the most commonly used menu items to be displayed on the circular menu by default.

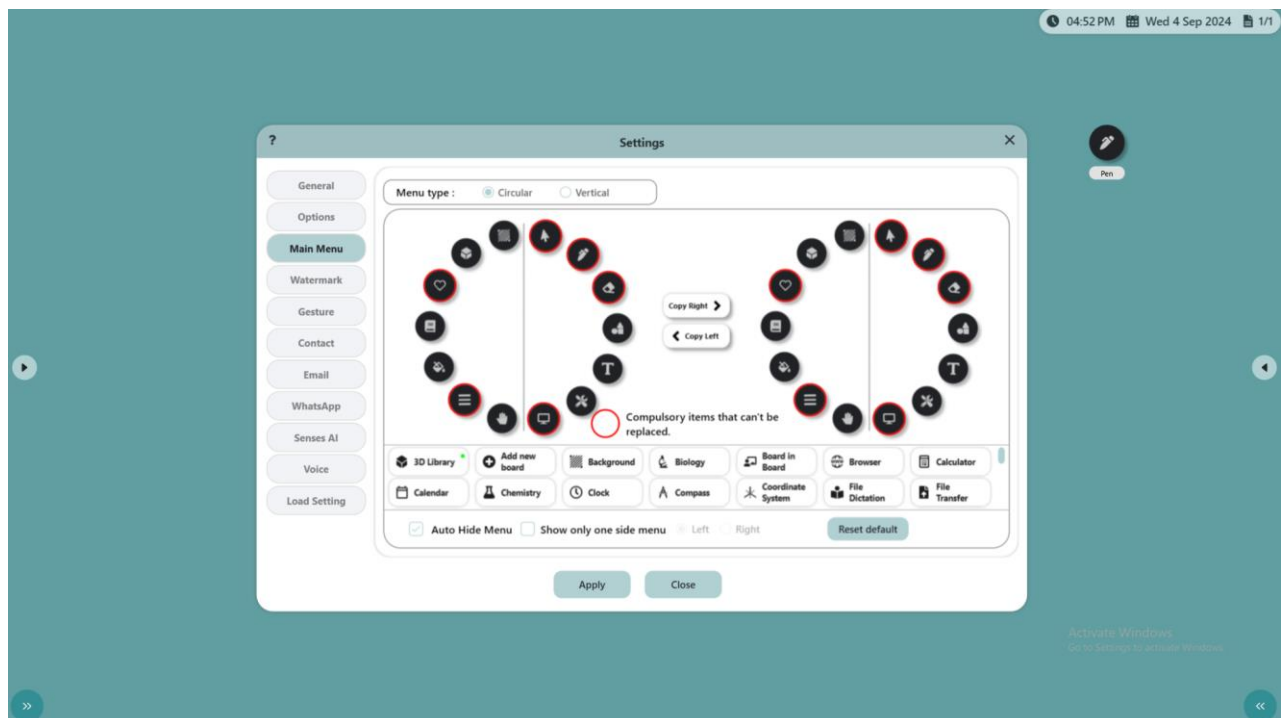



Figure 14: Circular Menu Config

- ✓ As shown in above figures, we can see the configurations of circular/Vertical menus on left and right side. On each sides of the menu we can have 14 items.
- ✓  This red mark shown items are by default cannot be removed from the circular menu. All menu list displayed on settings can be dragged and drop it to left or right side of circular menu wherever you want to add it.
- ✓ Similarly, for vertical menu config as shown below:

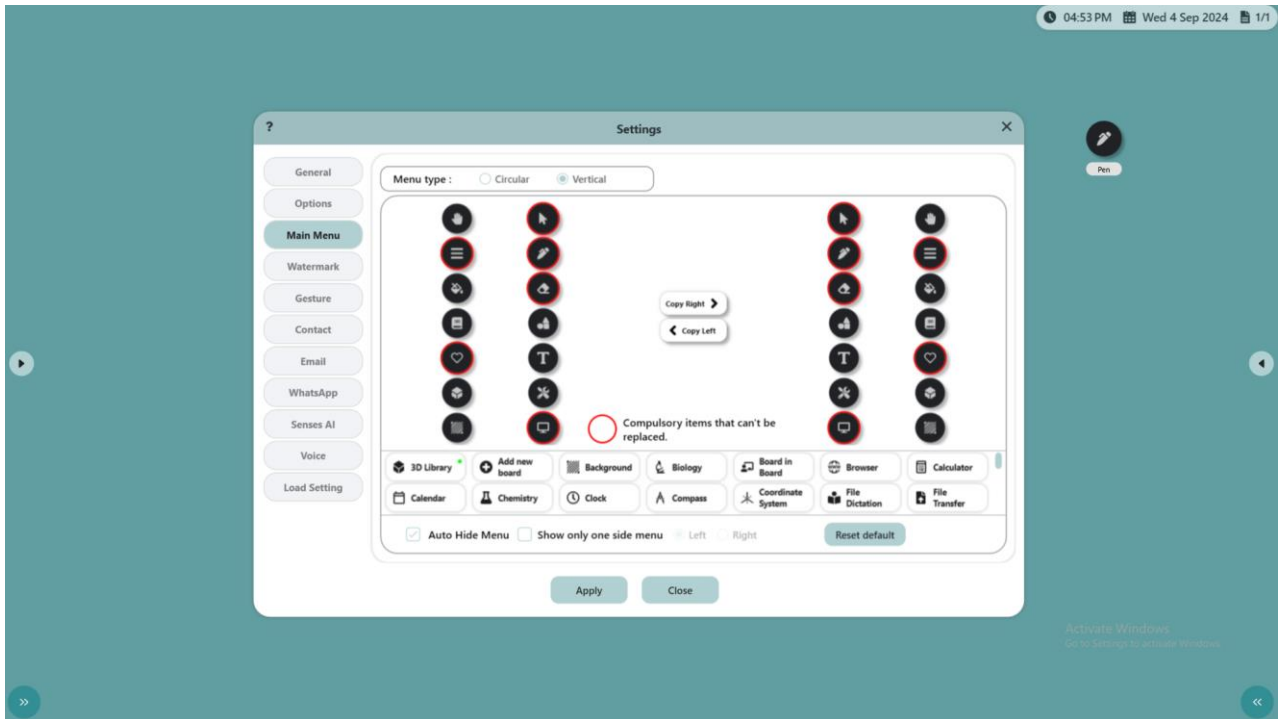
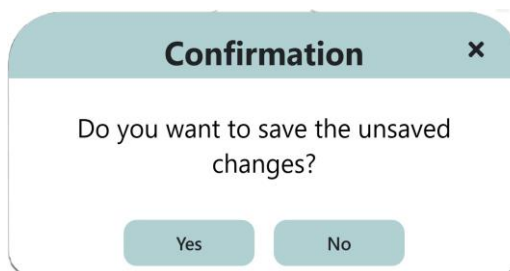


Figure 15: Vertical Menu Config

- ✓ Auto Hide Menu If checked, then you can hide the circular menus automatically, when you write on SB.
- ✓ Show only one side menu Left Right If checked and left radio button selected, then you can only see the left side circular menu same for right side.
- ✓ “Save” button is used for saving the settings after click on save one message box show for do you want to save the settings as shown in below fig. click on “Yes” if you want to save the setting otherwise click on “No”.



- ✓ reset default is used for set to default setting of circular menu.

Gestures tab

In gestures tab, user can define different gestures to operate the system.

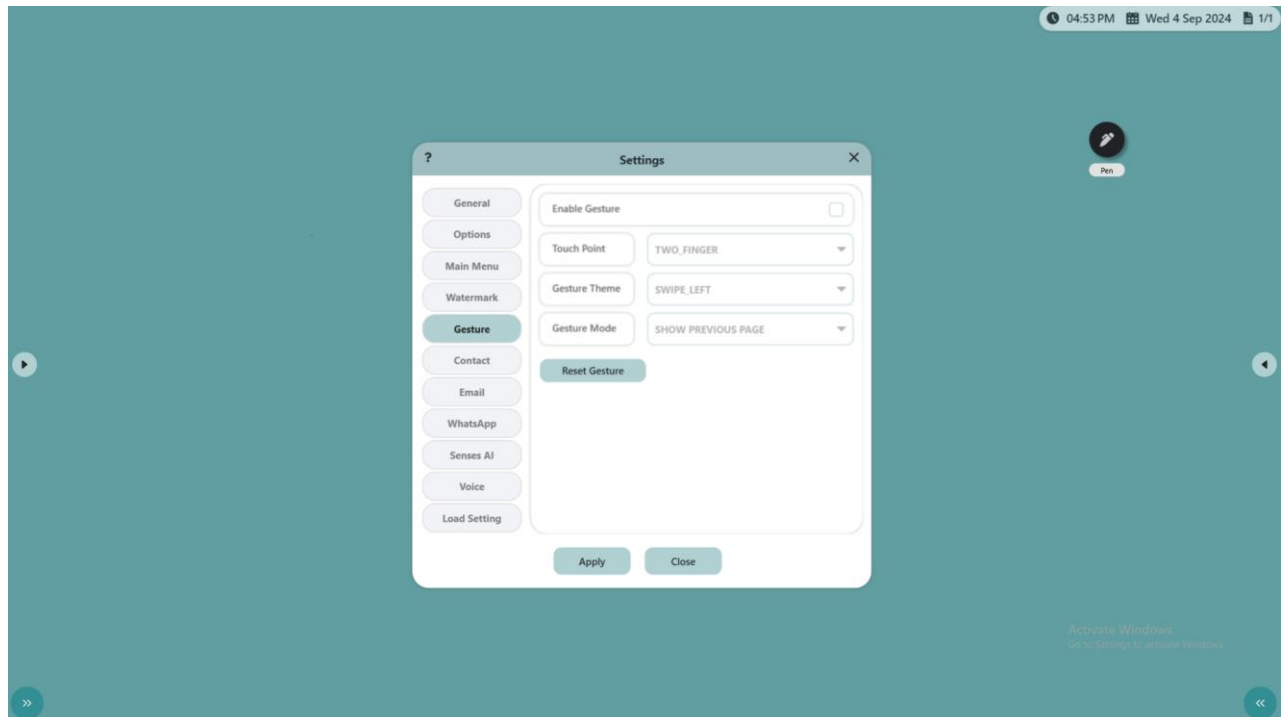


Figure 16: Gesture settings

✓ Enable Gestures

Click the check box to enable the gestures. A combination of touch point – gesture theme and gesture mode will decide what action will be performed on which gesture.

✓ Touch Point

Select the touch point as per the convenience of the user from single finger, two fingers, three fingers, four fingers, five fingers from the drop-down list.

✓ Gesture Theme

Select the gesture theme from swipe Left, Swipe right, swipe up, Swipe Down option which is available with the drop-down list

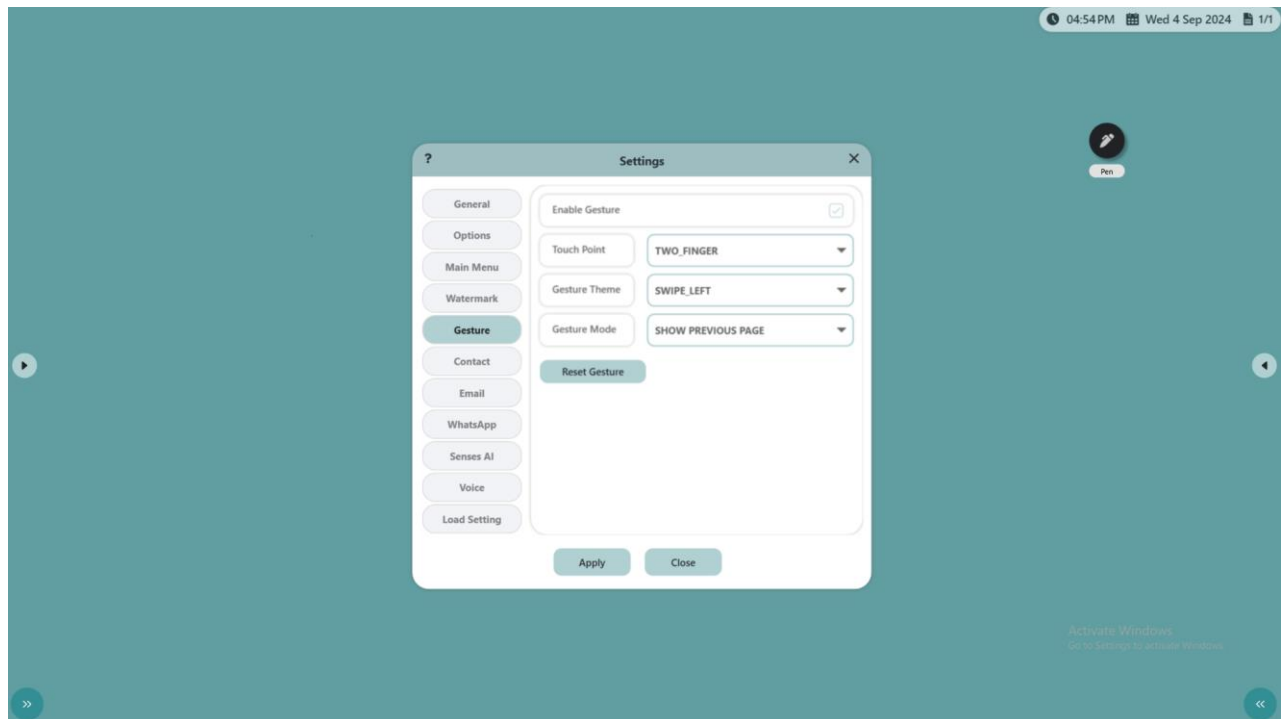


Figure 17: Gesture Settings tab

✓ Gesture Mode

The gesture mode can be selected using the drop-down list. The following actions can be performed for the selected gesture by choosing the respective action from the below list:

- | | |
|---------------------------|---------------------------------|
| 1. Show Previous Page | 19. Import Images |
| 2. Show Next Page | 20. Import Video |
| 3. Go to Pen Window | 21. Show Settings Window |
| 4. Show Pen Window | 22. Send Email |
| 5. Set Pen Color Randomly | 23. Import email contact |
| 6. Move Page | 24. Exit Application |
| 7. Add New Page | 25. Fill |
| 8. Zoom in Page | 26. Math Tools |
| 9. Zoom Out Page | 27. Math Recognition |
| 10. Show Desktop | 28. Text Tools |
| 11. Save Session | 29. Shape Tools |
| 12. Show Board in Board | 30. Physics Tools |
| 13. Hide Board in Board | 31. Chemistry Tools |
| 14. Show Mini Tools | 32. File Transfer |
| 15. Show Screen Shot | 33. Eraser window |
| 16. Show Screen Wrapper | 34. Background Theme |
| 17. Show Clock | 35. Resource Bank |
| 18. Show Calendar | 36. Circular Menu Configuration |

37. No Gesture

✓ Reset Gesture

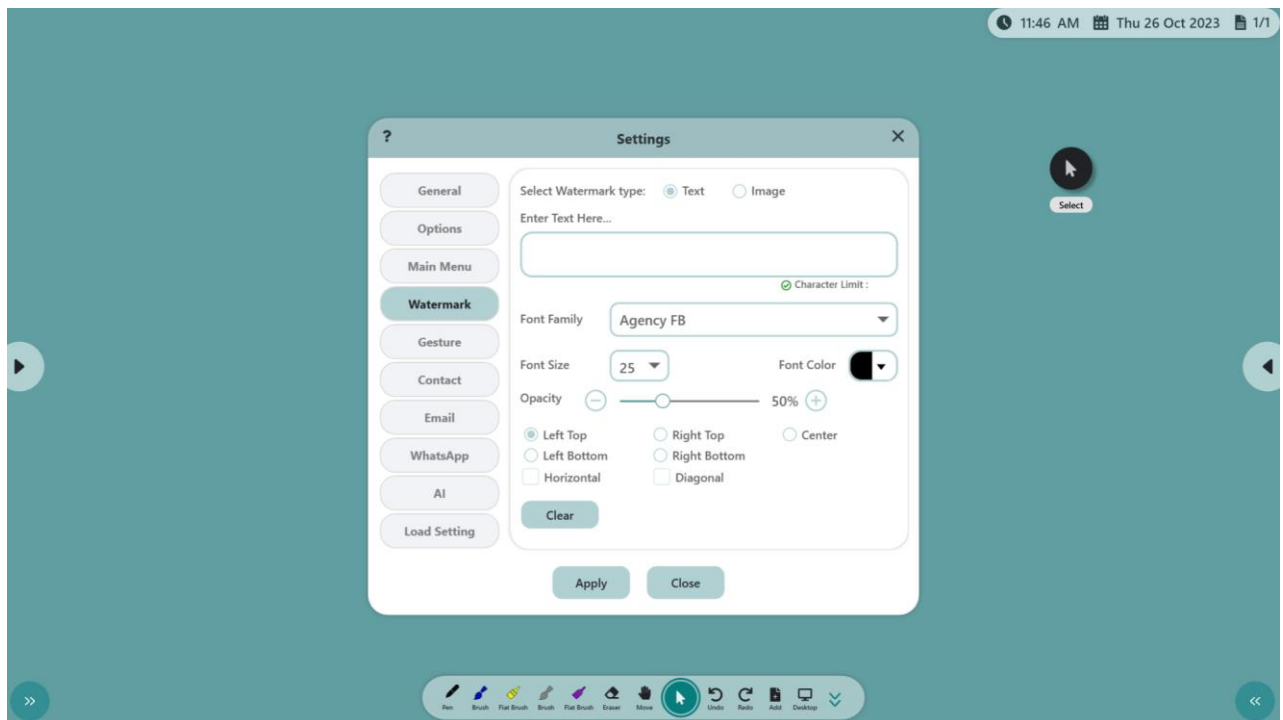
By clicking on the reset gesture, all gesture functions can be reset to factory settings.



Figure 18: Reset gesture functions

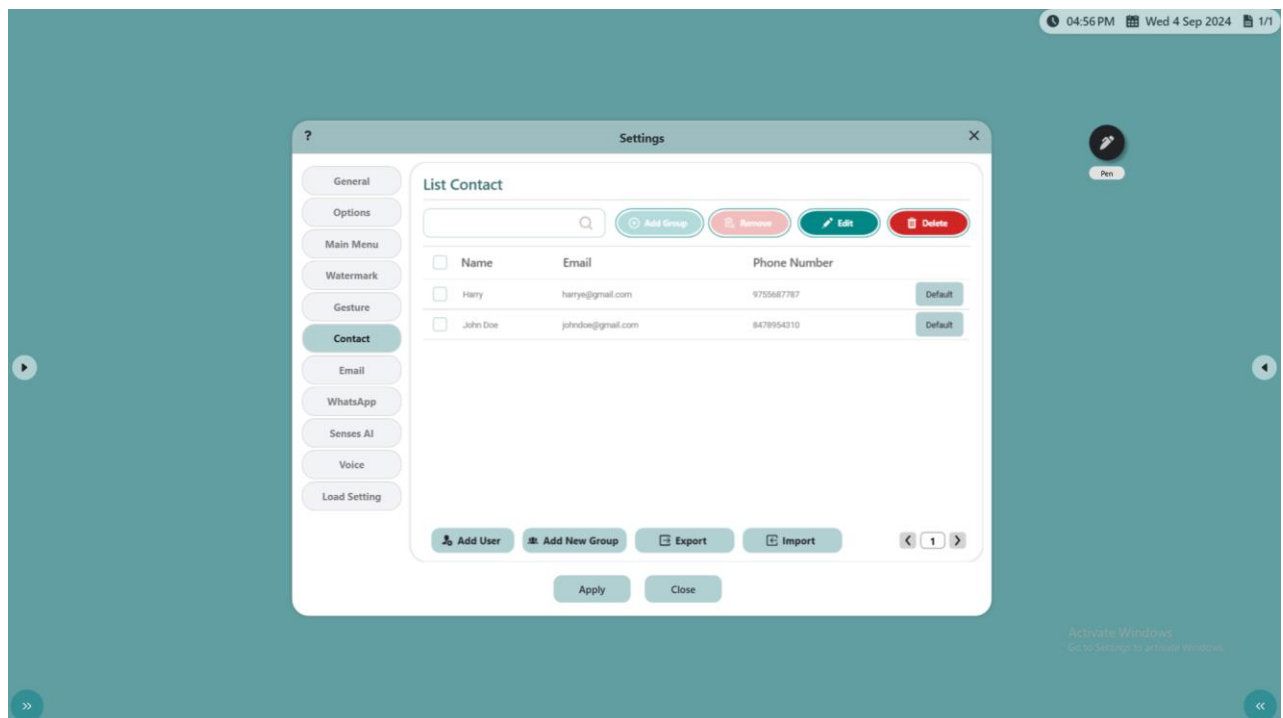
Watermark

You can add watermark to your whiteboard. The watermark can be text or image. You can change the alignment of the watermark accordingly.



Contacts Tab

The SenseBoard enables the user to manage contacts. User can import, export, delete, add contacts to groups, manage groups in the contacts tab.



- **Add user:** Add a new contact

- **Add group:** Add a New Group
- **Export contacts:** Export the contacts to a file
- **Import contacts:** Import the contacts from a saved file
- **Edit contacts:** Edit contact details from a list of contacts
- **Delete Contacts:** Delete contacts from selected list of contacts

Email tab

This SenseBoard enables the user to send the session or the pages through email. Click on the Email option to see the information required to use that feature. By default setting of the SMTP server/port and a user account is set, which can be used to send emails. User can change these values as per his/her requirement.

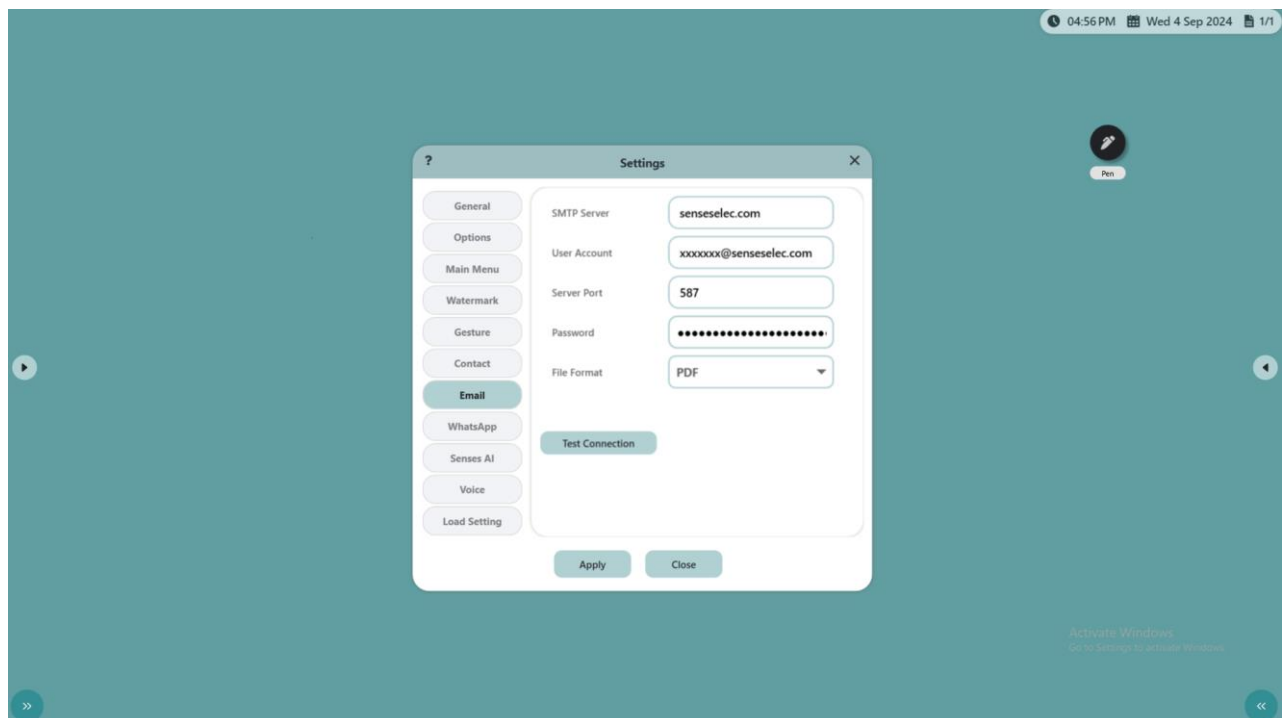


Figure 19: Email tab of settings page

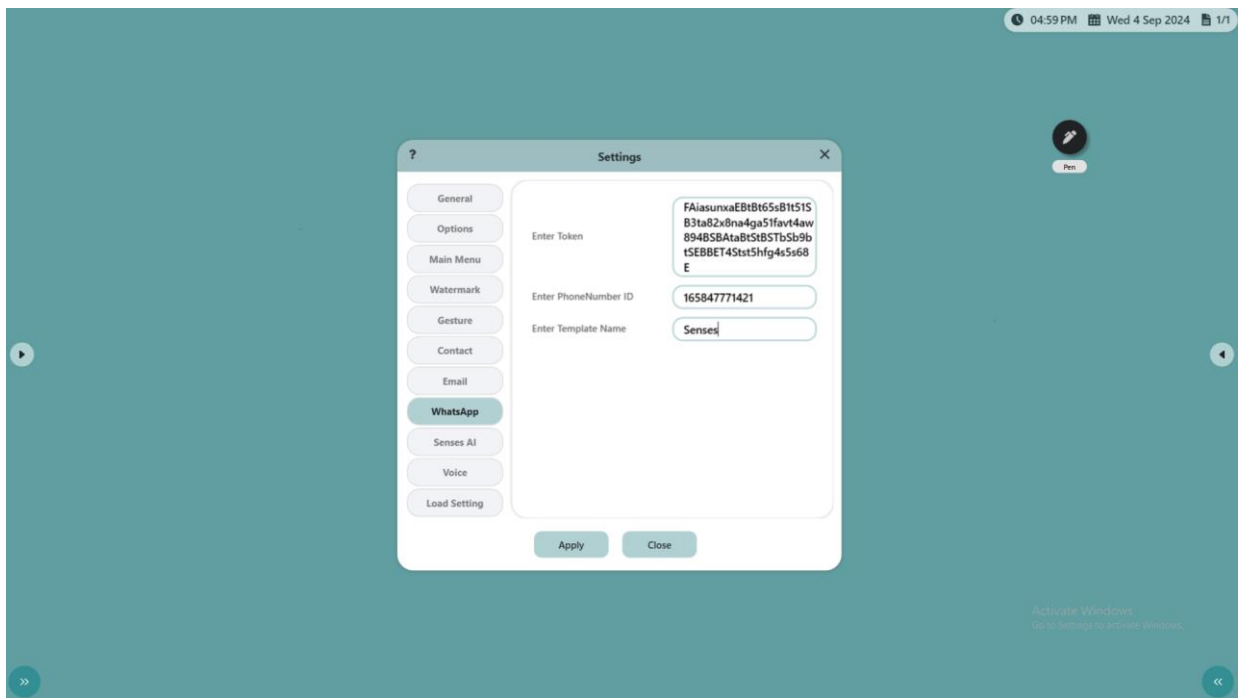
- ✓ **SMTP server:** The SMTP server address which will be used to send email. E.g: smtp.gmail.com

- ✓ **User account:** set this to the user id which should be used to send mails. E.g: easiboard.default@gmail.com
- ✓ **Server port:** The server port will have by default setting of 587.
- ✓ **Password:** The password for the user account mentioned above.
- ✓ **File Format:** The format in which the session/page will be shared in email. By default, the format will be PDF.
- **Test Connection:** before sending the notes to the users, the Email system can be tested using this Test Connection command. This ensures that the information given in Email settings tab is correct.



WhatsApp config

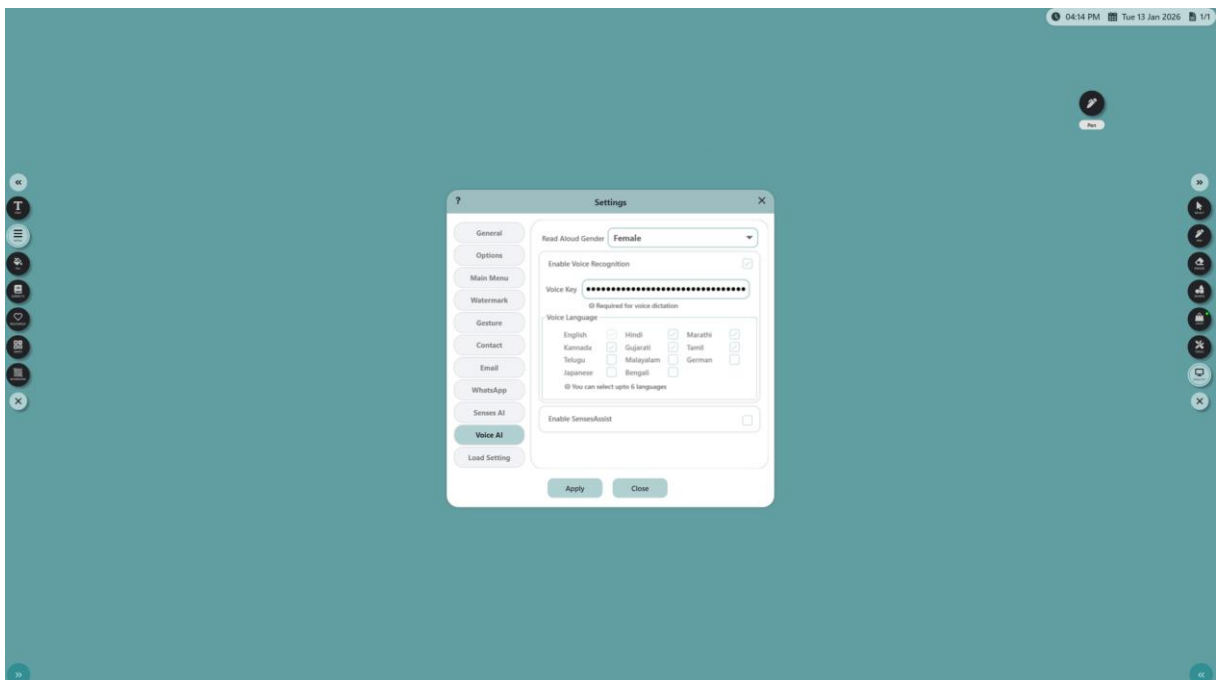
The SenseBoard enables the user to share the file over WhatsApp as a PDF document. For that a user must activate WhatsApp configuration. A user must enter a token, user account and phone no ID.



SensesAI

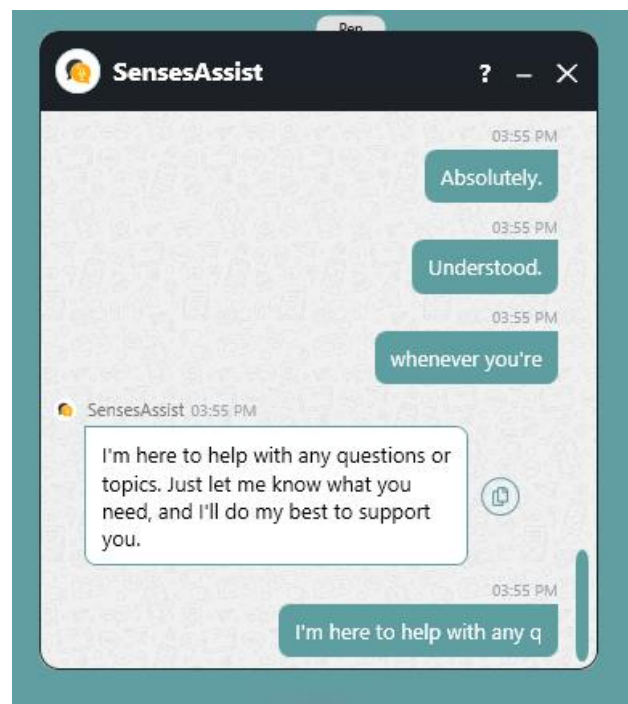
To enable AI Settings in SenseBoard, user need to put AI key. Enter AI key to enable all the features.

AI Syllabus is also available, you can get customized AI responses depending on the subject you've selected. You can also add Subject, Board or class.



SensesAssist

Click on the Enable SensesAssist checkbox to use SenseBoard’s AI voice assistant. Upon clicking, you will get an option to enable Speaker Verification where you can register your voice using a 3-step enrolment process. Then, you can initialize the bot by saying the wakeword “Hey SenseBoard” and start interacting with it using the smart remote mic. You can also copy the text responses to the SenseBoard main canvas by clicking the Copy button near the response textboxes.



Voice Tab

The SenseBoard enables the user to operate using voice commands. For that the user must activate the following settings in this tab.



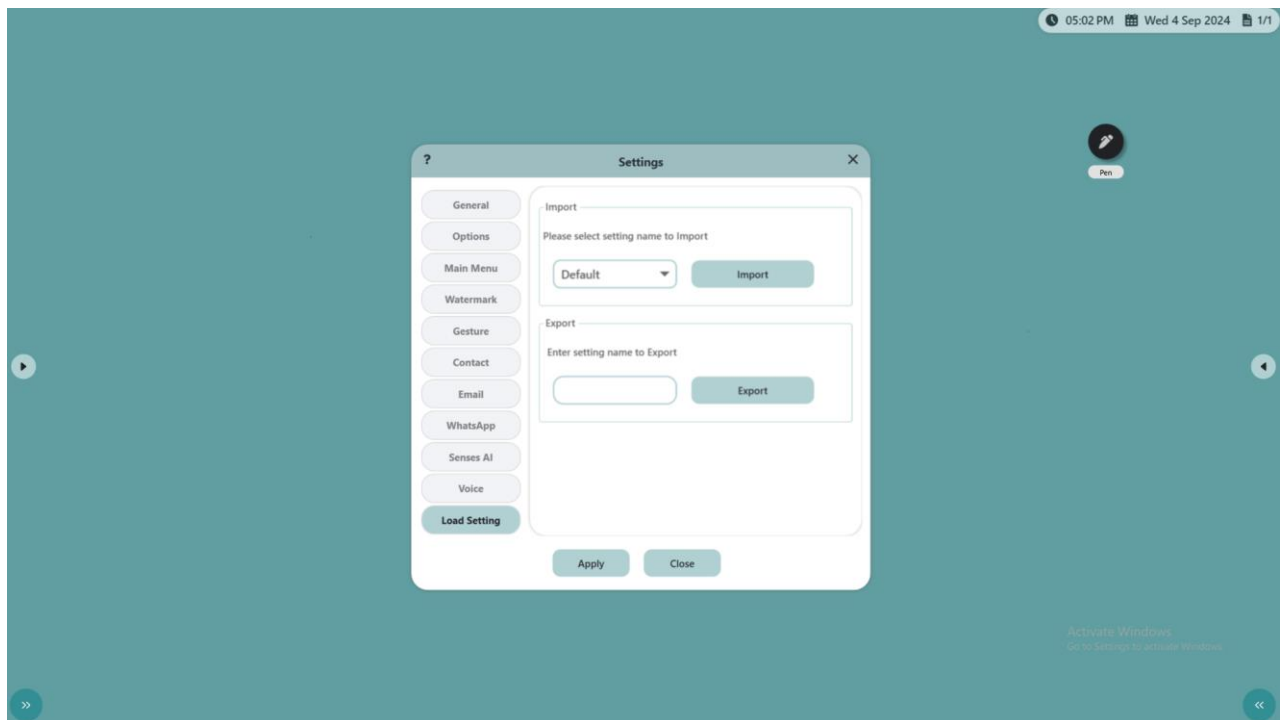
Figure 20: Voice Settings Tab

- **Enable AI:** Check the box to enable the voice commands.
- **Listening Timeout:** The listening timeout can be changed as per the user's choice.
- **Speech Rate:** The speech rate can be decided by the choice of user.
- **Speech Voice:** The voice of the speech can be change from Heather, Heera, Helen and ZiraPro.

Load or Save Settings

SenseBoard enables user to save the settings or load the settings according to user.

Click on the load settings tab and you can import or export the settings.



Canvas Mode

Canvas mode menu has been improved with this version so that the user can choose different menu mode directly from canvas mode shortcut without having to go to the main menus.

Click on the canvas mode to expand it and show the basic functionalities provided with it.



When you click on the 'Pen' label it will open the pen popup from which user can select the pen type or color etc.

This canvas mode can be moved and placed at any location. On selecting a function from the canvas mode menu, the respective popup will open near to the icon clicked.

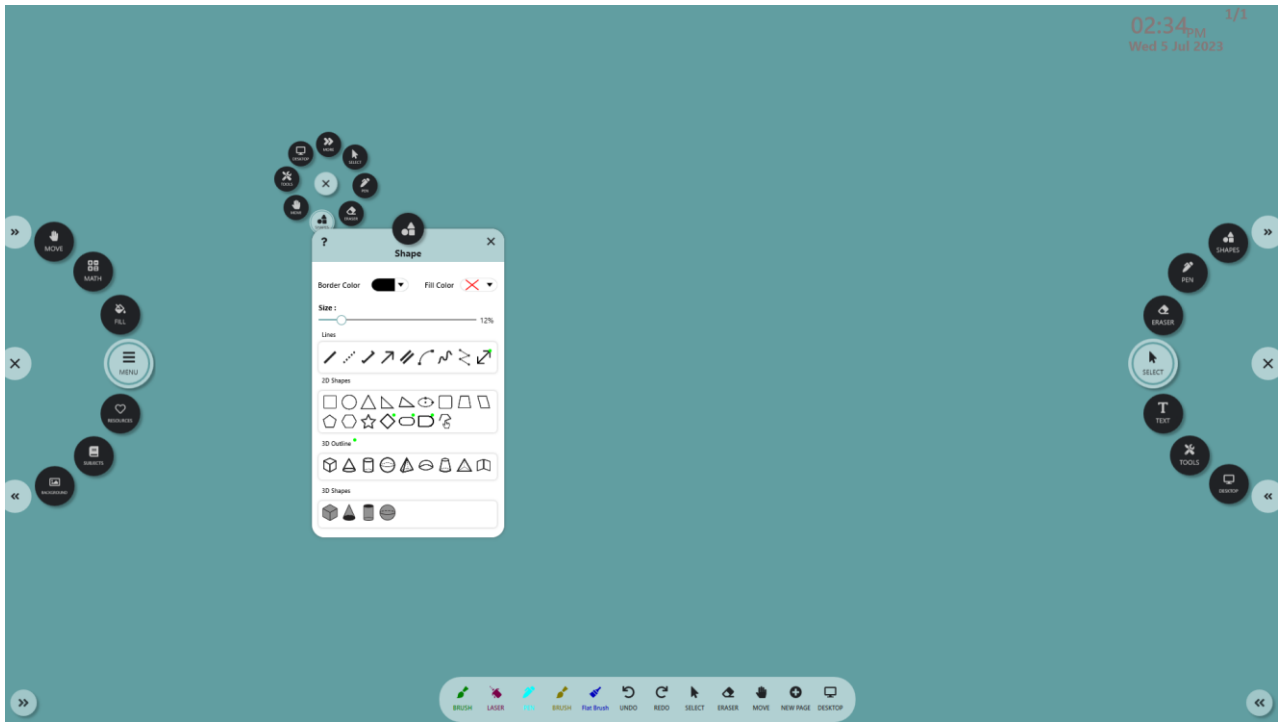


Figure 21: Canvas mode menu with selected popup shown

When moved to the sides of the canvas the alignment of the menu changes to horizontal automatically allowing the user to access as much space as possible as shown below:

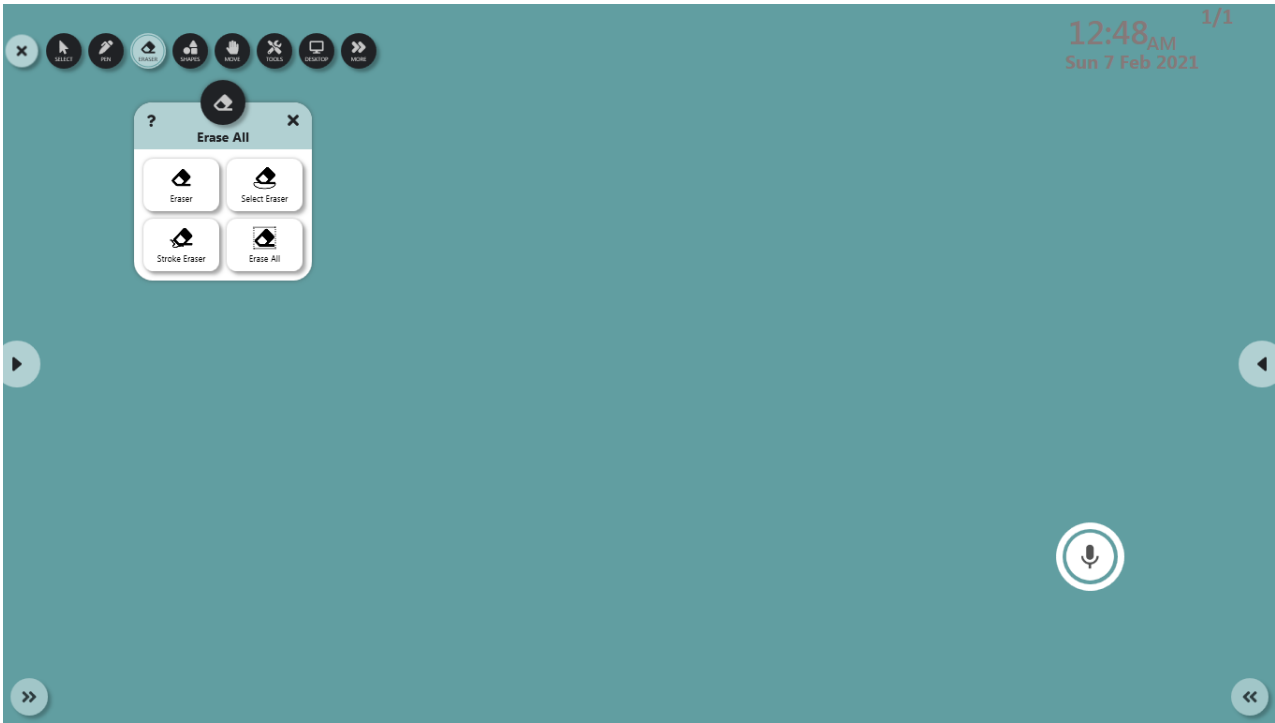


Figure 22: Canvas mode menu moved to corner shows horizontal alignment

Pen

Click on 'Pen' icon on the circular menu to show a pen popup menu to choose the type/ color and thickness of drawings.



- Click **PEN** on the circular menu to enable the pen option for writing purpose on the White Board System. This option has Hard Pen, Brush, Highlighter and Laser Pen which can be used as writing tool.
- When 2 color pen is enabled from 'Settings' menu, then you will see different tabs for 'Large' tip and 'Small' tip, where the user can set the color and thickness for large tip of the stylus and small tip of the stylus. Please note that the figure tip will be considered as large tip.

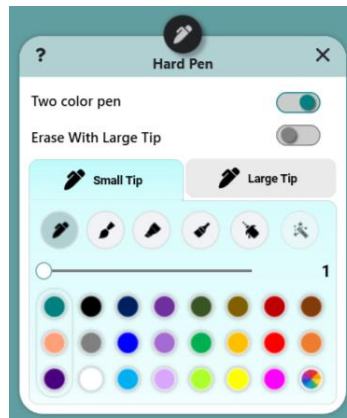


Figure 23: Small tip selected

In the figure above, small tip is selected.

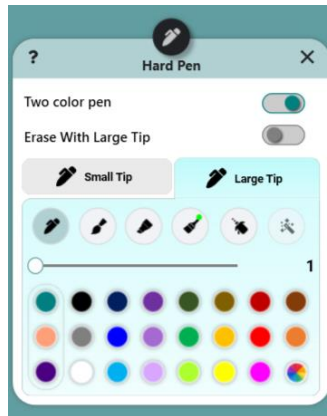








Figure 24: Large tip selected

In the figure above 'Large' tip is selected. All pens functionality is same as that of small tip. There is an additional function which can be set for 'Large' tip by selecting the 'Eraser' option. When 'Eraser' is selected from the pen type, the 'Large' tip of the stylus or your figure tip will act as an 'Eraser'.

Different types of pen available are defined below:

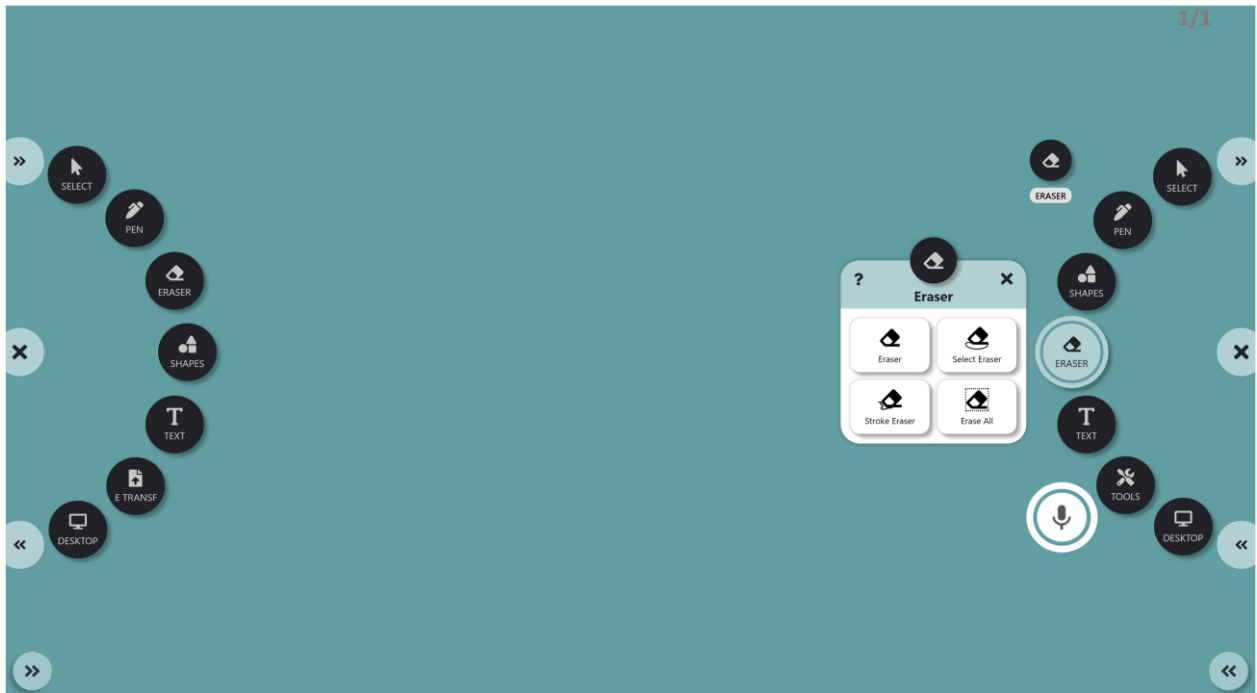
- Click  to enable hard-pen notation, the default color is black, and handwriting thickness is fine. User can adjust handwriting thickness according to need, at the same time, it can choose different colors according to need; there are 41 kinds of color that can be selected, with an additional custom color selection palette option available.
- Click  to enable fluorescence pen notation, the default color is yellow, and handwriting thickness is as defined in the pen popup.
- Click  to enable brush notation, the default color is black.
- Click  to enable Flat brush notation, the default color is black.
- Click  to enable magic pen notation, the default color is black.
- Click  to enable eraser for large tip. This option is available only for large tip.
- The thickness of the handwriting can be increased or decreased using the slider bar.



Eraser



Click on Eraser icon to select the eraser, default erase type is point wipe. The erase options are available in four different formats. Following different eraser formats are available for selection:



- Eraser → point eraser which will wipe the strokes in the area wiped.
- Select eraser → only the selected strokes/shapes/images/videos will be erased as per user selection.
- Stroke eraser → choose this eraser and select a stroke to erase. The entire stroke will be erased using this option.
- Erase All → Click this to clean the entire canvas in a single stroke by the user.

Select



Click **SELECT** to select any object on the White board canvas, by selection the user can get a number option to edit the object. The different options available on selection are defined under 'Context Menu' section later in this document.

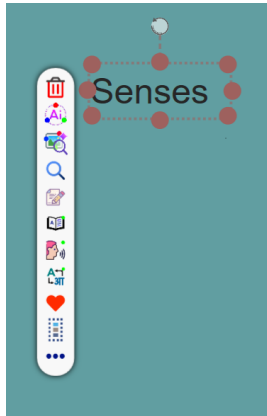



Figure 25: Select option to choose a stroke or element

Shapes



Click  icon from the circular menu to insert a shape on the canvas. System will pop up the dialog box as shown below:

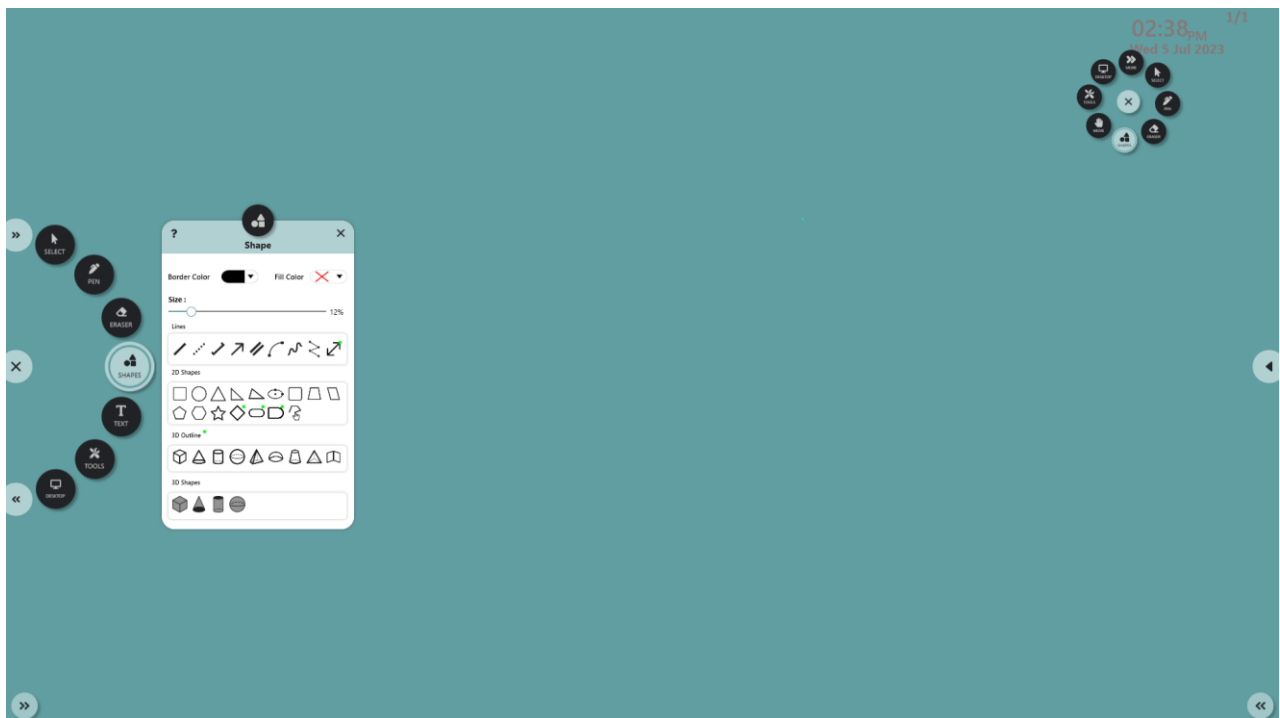


Figure 26: Shape selection tool


- **Border Color:** The border color of the shape can be selected by this option. The color options are available in 42 kinds for the change in the color.


- **Line Color:** The border color of the shape can be selected by this option. The color options are available in 42 kinds for the change in the color. After selecting line type, click color plate on the right, and select line color according to need.
- **Line thickness:** After selecting line type, slide line thickness sliding bar to change line thickness. Its thickness is in synchronization with image frame thickness;





- **Lines:** Click on the Shapes to use the line feature.





Straight line: Select  to draw straight lines on the page, and the default is selected state after drawing;


Dotted line: Select  to draw dotted lines on the page, and the default is selected state after drawing;


Line segment: Select  to draw line segments on the page, and the default is selected state after drawing;


Arrow: Select  to draw arrows on the page, and the default is selected state after drawing;

Double line: Select  to draw double lines on the page, and the default is selected state after drawing;

Arc line: Select  to draw arc lines on the page, and the default is selected state after drawing;


Curve: Select  to draw curves on the page, and the default is selected state after drawing.


Rubber Band: Select  and make points on the page, which will be automatically joined to form a shape.


Double Sided Arrow: Select  to draw a double sided arrow on the page.


- **2DShapes:** The 2Dshapes can be selected from the shapes, and just select and draw on the system to draw the selected shapes





Rectangle: Click  to draw rectangular on the page and the default is selected by drawing.


Circle: Click  to draw circular on the page and the default is selected state after drawing.


Isosceles triangle: Click  to draw isosceles triangle on the page, and the default is selected after drawing.

Right triangle: Click  to draw right triangle on the page.

Ellipsoid: Click  to draw ellipsoid on the page, and the default is selected state after drawing

Isosceles trapezium: Click  to draw isosceles trapezium on the page, and the default is selected state after drawing.

Pentagon: Click  to draw the desired shape. the default is selected state after drawing;

Hexagon: Click  to draw the desired shape. the default is selected state after drawing.





Five-pointed star: Click  to draw five-pointed star on the page, and the default is selected state after drawing;

Image recognition: Click  to open image recognition function, which can identify angle (including acute and obtuse angle), arrow, triangle, tetragon, ellipsoid, and circular; Image drawn on the page will be automatically identified.


Decision Symbol: Click  to draw Decision Symbol. This Symbol is used to represent decision in flowchart.


Terminal Symbol: Click  to draw Terminal Symbol. This Symbol is used to represent terminate the flow in a flowchart.


Delay Symbol: Click  to draw Delay Symbol. This Symbol is used to represent Delay the flow in a flowchart.


- **3D Outline: The user can also use 3D outline whenever it is required**





Cube: Click  to draw Cube or cuboids on the page, and the default is selected state after drawing;


Cone: Click  to draw Cone on the page, and the default is selected state after drawing;

Cylinder: Click  to draw Cylinder on the page, and the default is selected state after drawing;

Sphere: Click  to draw sphere on the page, and the default is selected state after drawing;

Pyramid: Click  to draw pyramid on the page, and the default is selected state after drawing;


Hemisphere: Click  to draw hemisphere on the page, and the default is selected state after drawing;


Prism: Click  to draw prism on the page, and the default is selected state after drawing;


Dihedral: Click  to draw the dihedral shape: the default is selected state after drawing.


- **3D Shapes: The user can also use 3D Shapes whenever it is required**



Cube: Click  to draw Cube or Cuboide on the page.

Cone: Click  to draw Cone on the page.

Cylinder: Click  to draw Cylinder on the page.

Sphere: Click  to draw Sphere on the page.

Math





Click  Math subject tool in circular menu, and user can choose and use corresponding auxiliary teaching tools according to current teaching scene.



Figure 27: Math tool

The various tools available with the 'Math' menu option are as follows:

- **Ruler:**

Click  to open ruler tool, which can draw lines. The user can select the ruler and draw a line of desired measurement on the system. The user can stretch and change the measurement. It can be rotate as well.

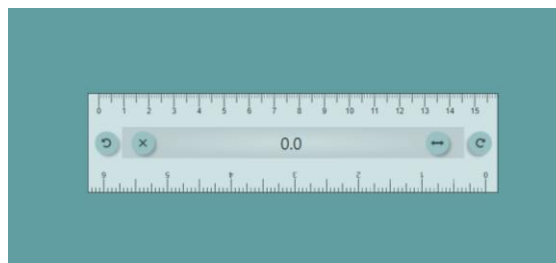









Figure 28: Ruler in Math tools

- **Protractor:** Click  to open protractor tool, which can rotate, and measure angle with the cursor. Pull the two cursors to align with the angle edge, and the angle can be measured using the protractor scale.
- **360° Protractor:** Click  to open protractor tool, which can rotate, and measure angle with the cursor. Pull the two cursors to align with the angle edge, and the angle can be measured using the protractor scale.
- **30°set square:** Click  to open 30°set square tool, which can draw lines, stretch, and rotate.
- **45°set square:** Click  to open 45°set square tool, which can draw lines, stretch, and rotate. Click scale and drag along increase or decrease scale direction to draw lines.
- **Compass:** Click  to open compass tool, which can move, rotate, adjust radius, and draw circle, arc lines and sector. The flip icon in the compass can be used to flip the compass tool with respect to a particular point.
- **Calculator:** Click  to open the calculator mini tool that can perform simple mathematical calculations.
- **Mathematical function graph:** Click  to open mathematical function graph drawing tool, which can draw mathematical function graph as shown below:

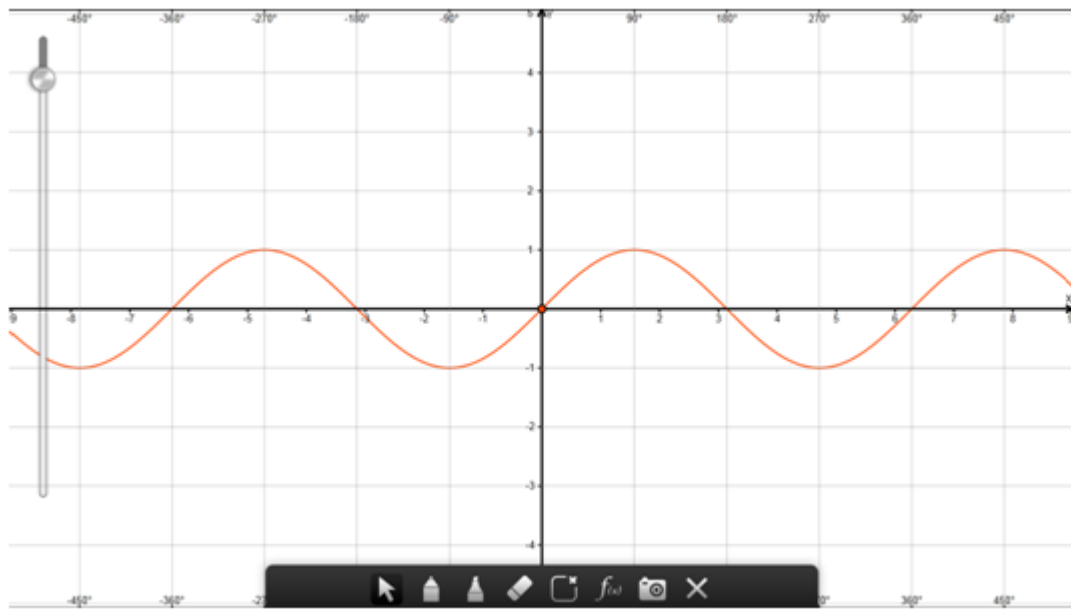


Figure 29: Math Functional Graph


- **Coordinate systems:**

The user can choose 2D coordinate system or 3D coordinate system according to need

- ✓ **Scale interval** - The user can fill scale interval in the x, y, z axis
- ✓ **Coordinate axis direction** - Check the Reverse to switch the direction of the coordinate axis
- ✓ **Interval size** - Drag the interval size button to change the width of the gap between the scale
- ✓ **Show grid** - Check the Show grid to show coordinate grid

After setting completion, it can insert mathematical coordinates into whiteboard page, as shown in below Figure.

Figure 31 : Math recognition window

Click  to open setting window as shown in below fig. Settings window for Math Recognition which helps to set:

- a. Automatically show answer or manually
- b. Fraction Mode Settings:
 - i. Fraction Mode
 - Decimal
 - Rational
 - Mixed
 - ii. Digits are 1 to 5.
- c. Angle Unit Settings
 - Degrees
 - Radians

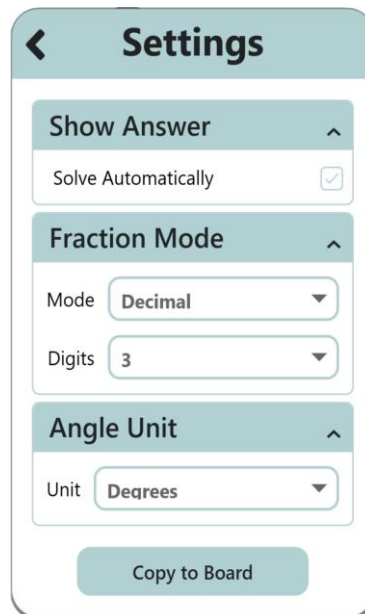





Figure 32 : Math recognition setting

Click  to copy recognizes math expression to canvas page.

Click  to close the math recognition window.

- **Table Control:**

Click  to open the table control in this, select the number of rows and columns and click on insert to insert the table.

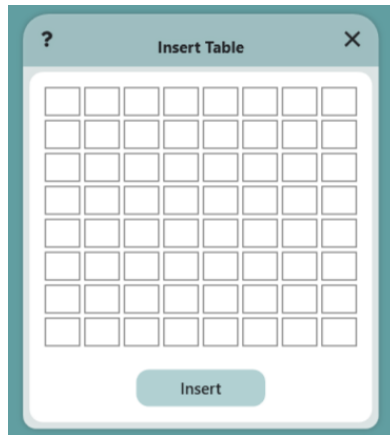


Figure 33 : Table control

you can add (+) rows and columns also you can remove (-) rows and columns, you can change the width of column as well as height ($\leftarrow\rightarrow$) by dragging this.

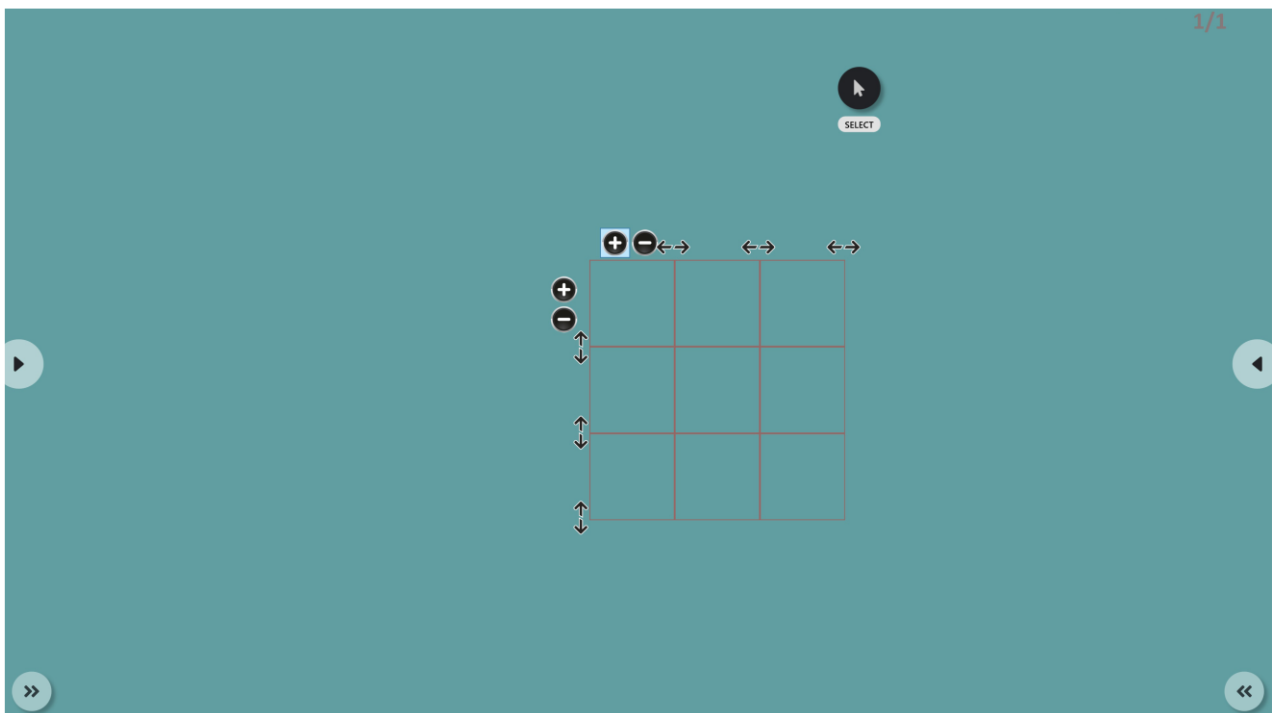


Figure 34 : Table control

- **Math Solver**

This new feature added to Math Subject tool will help teachers teaching the concepts of polynomials and geometry.

Math Solver

Polynomials (expanded)

- Quadratic Formula
- Factoring
- Synthetic Division
- Rational Root Test
- Vertex

Geometry (collapsed)

Quadratic Formula

Enter the coefficient of the equation below:

$$ax^2 + bx + c$$

2 x² 7 x 5

Calculate Clear CopyToBoard

Equation: $2x^2 + 7x + 5$
x = -1 and x = -2.5

Equation : $2x^2 + 7x + 5$
 Answer :
 The Quadratic Formula is :

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

 Substitute the values into the equation :

$$\frac{(-7 \pm \sqrt{7^2 - 4(2)(5)})}{2(2)}$$

 Multiply :

$$\frac{-7 \pm \sqrt{49 - 40}}{4}$$

 Combine the values under the radical :

$$\frac{-7 \pm \sqrt{9}}{4}$$

 Simplify radical :


This is an under construction module where we are planning to implement the following modules, of which Polynomials and Geometry is completed in this version.

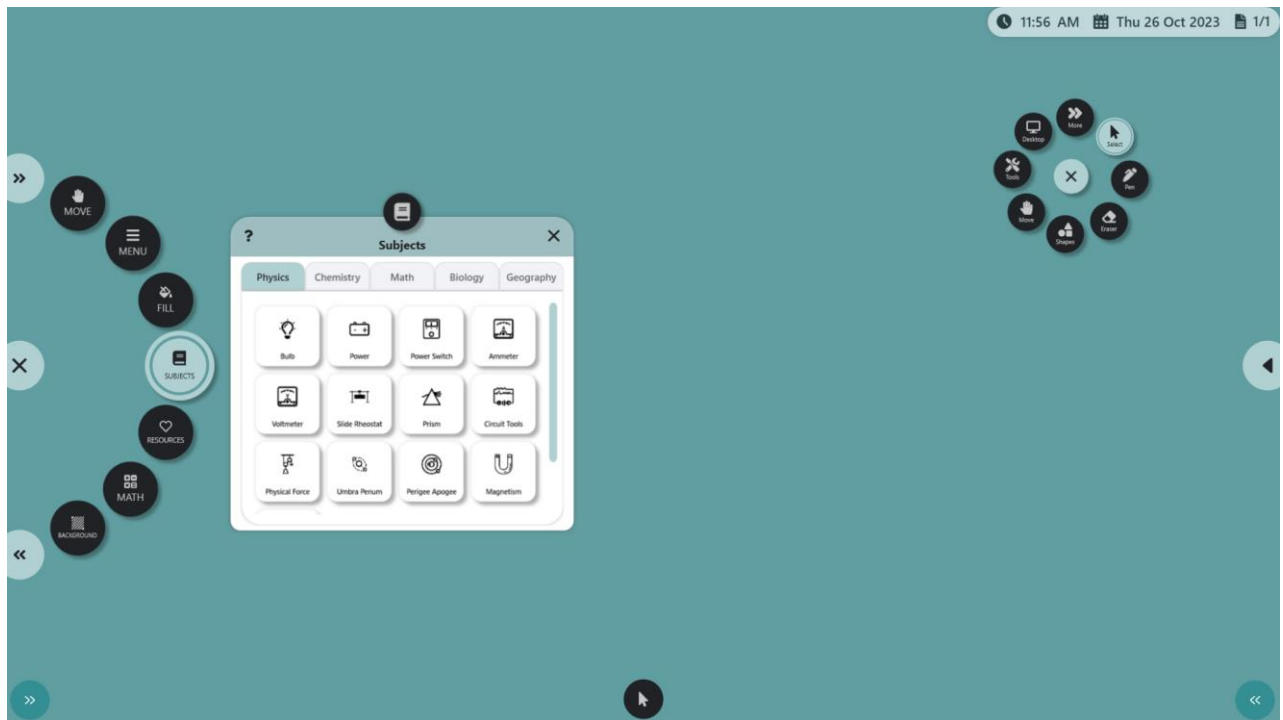
1. Polynomials
 - a. Quadratic Formula
 - b. Factoring
 - c. Vertex
 - d. Rational Roots
 - e. Synthetic Division
2. Fractions
 - a. Fraction Simplifier
 - b. Combining Fractions
 - c. Decimal to Fraction
3. Linear Equations
 - a. Slope of a Line
 - b. Equation of a Line
 - c. Distance Formula
4. Geometry
 - a. Triangles
 - b. Circles
 - c. Rectangular Prism
 - d. Cone
 - e. Sphere
 - f. Cylinder
 - g. Pyramid
5. Conversions
 - a. Unit Conversion

- b. Radical Simplifier
- c. Percentage
- d. Prime Factors

Subjects





Click  Subject tool in the circular menu, and user can choose different subject like Physics, Chemistry, Biology and Geography.



Physics



Click  icon on the circular menu or opens  and just select the tool and tap on the system for further use. In the physics tools, we provide the basic tools like bulb, power supply, switch, Ammeter, Voltammeter, Rheostat, Prism, Circuit tools & Physical force. More tools will be added in future releases.

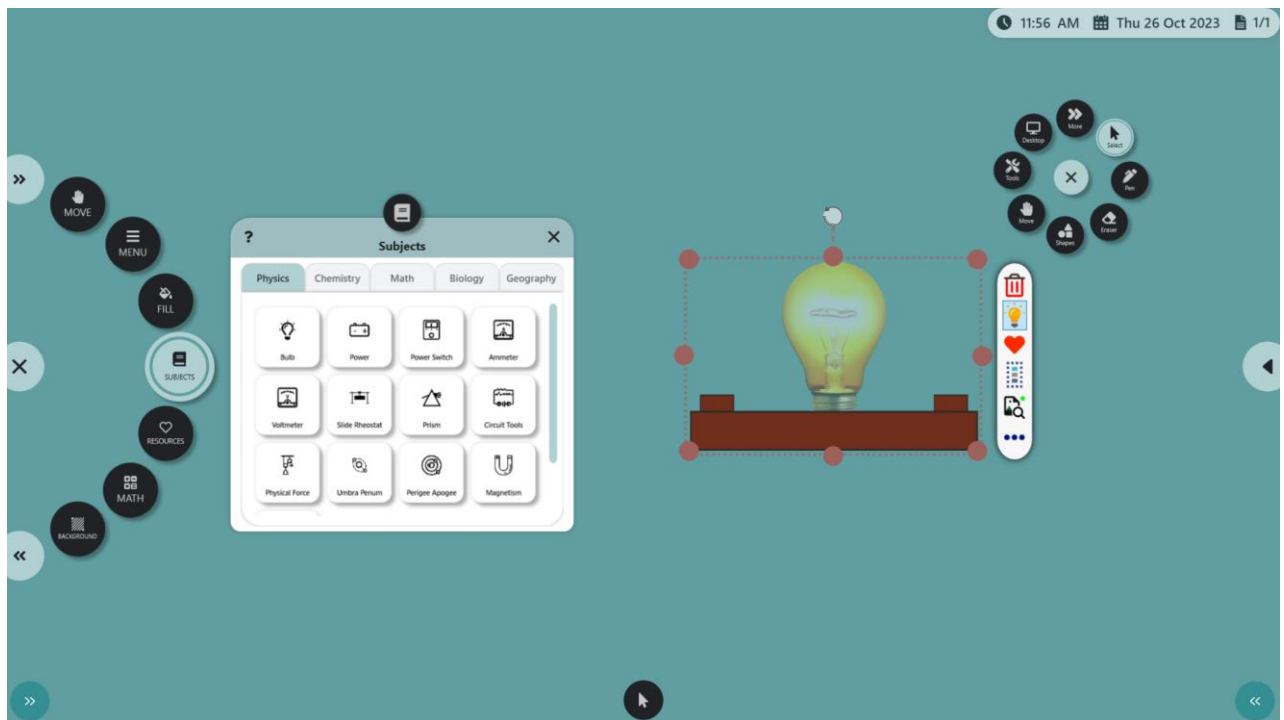










Figure 35: Physics Tools - bulb

- **Bulb:** Select  icon and click on canvas to draw the bulb on the canvas.
- **Power:** Click  to use battery in a circuit demonstration experiments,
- **Power switch:** Click  to put on the power switch which helps to explain any concept.
- **Ammeter:** Click  for demonstration of measuring current in circuit.
- **Voltmeter:** Click  demonstrates used for measuring electrical potential difference between two points in an electric circuit.
- **Slide Rheostat:** Click  demonstrate adjustable resistor used in applications that require the adjustment of current or the varying of resistance in an electric circuit.
- **Prism:** Click  to demonstrate light dispersion using prisms in experiments that help them study the reaction of the human eye to light.
- **Circuit tools:** Click  to open a popup with circuit tool components and use the components to create a circuit on the canvas page.

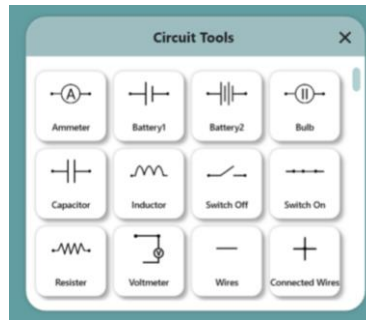






Figure 36: Circuit tools

- 
Physical Force: Click  Demonstrate physical force can cause an object with mass to change its velocity

Chemistry



Click  icon on the circular menu or open Chemistry tools  and just select the tool and tap on the system for further use. In the tools, we provide the basic chemistry tools, more tools will be added in future releases.

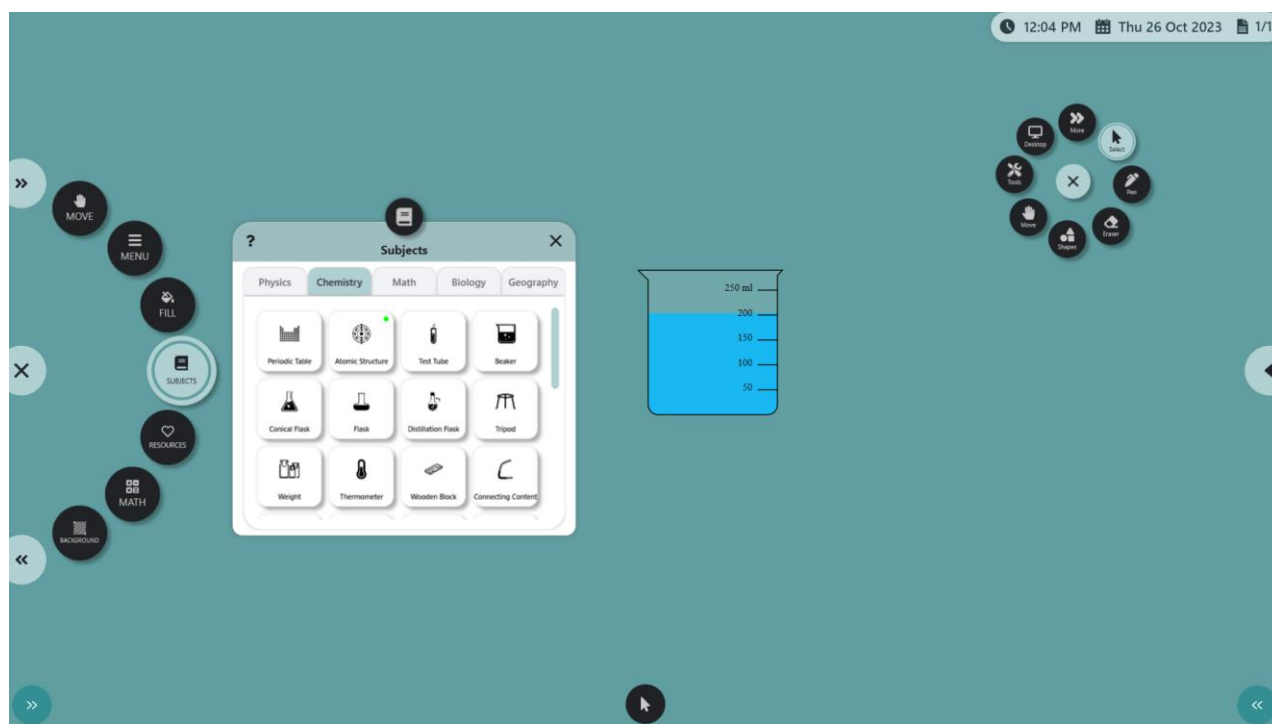






























Figure 37: Chemistry tool - Beaker


- **Periodic Table:** Click  icon to show periodic table on canvas.
- **Atomic Structure:** Click  icon to show atomic structure with orbits you can increase by clicking on (+) and decrease by clicking on (-).
- **Test tube:** Click  icon to show test tube with measurements and cap. used to hold, mix, and heat chemical experiments.
- **Beaker:** Click  icon to show beaker with measurements, demonstrate chemical experiments.
- **Conical Flask:** Click  icon to add on canvas, conical flask can be used for heating (or cooling) liquids without much risk of cracking for demonstrates chemical experiments.
- **Flask:** Click  used for making solutions or for holding, containing, collecting, or sometimes volumetrically measuring chemicals, samples, solutions.
- **Distillation Flask:**  used to separate mixtures of two liquids with different boiling points.










- **Tripod:**  used to support flasks and beakers.
- **Weight:**  for checking chemical balancing and in scaling for measuring.
- **Thermometer:**  Measuring the temperature.
- **Wooden Block:**  used for demonstrating lab experiments.
- **Connecting content:**  used for connecting the contents used in lab.
- **Rubber tube:**  used in the process of distillation.
- **Glass tube:**  used to connect other pieces of lab equipment.
- **Vacuum tube:**  used a high electrical potential between the anode and the cathode to ionize the residual gas in the tube.
- **Condenser tube:**  used in the laboratory to cool hot gases into liquids.
- **Drying tube:**  use in connecting the drying tube to a reaction vessel, for the purpose of keeping the vessel free of moisture.
- **Sink:**  showing measurement and demonstrating experiments.
- **Utube:**  used to measure gas pressure.
- **Alkaline burette:**  used for adding solution is beneficial for use in titration.
- **Acid Burette:**  used to add drops of liquid to a test solution.
- **Spherical funnel:**  pour the solution without spilling.
- **Funnel:**  funnel is a pipe with a wide mouth that helps to pour substances into a container without spilling.
- **Gas collector:**  used to capture and measure gas bubbling up through a liquid.
- **Test tube rack:** Click  icon to hold test tubes.
- **Beaker rack:** Click  icon to add in canvas and to hold a beaker for demonstrating chemistry experiments.

- **Scales:** Click  scales to demonstrate scaling of two weights.
- **Alcoholic burner:**  used for flame sterilization of certain lab equipment.

Biology



Click  icon on the circular menu or open Biology tools and just select the tool and tap on the system for further use. In the tools, we provide the basic chemistry tools, more tools will be added in future releases.

- **Animal Cell:**  3D representation of Animal cell.
- **Bacteria Cell:**  3D representation of Bacteria cell.
- **Plant Cell:**  3D representation of Plant cell.
- **Hand Bone:**  3D representation of Hand Bone.
- **Leg Bone:**  3D representation of Leg Bone.
- **Skull:**  3D representation of Skull.
- **Skeleton:**  3D representation of Skeleton.
- **Brain:**  3D representation of Brain.
- **Nervous system:**  3D representation of Nervous system.

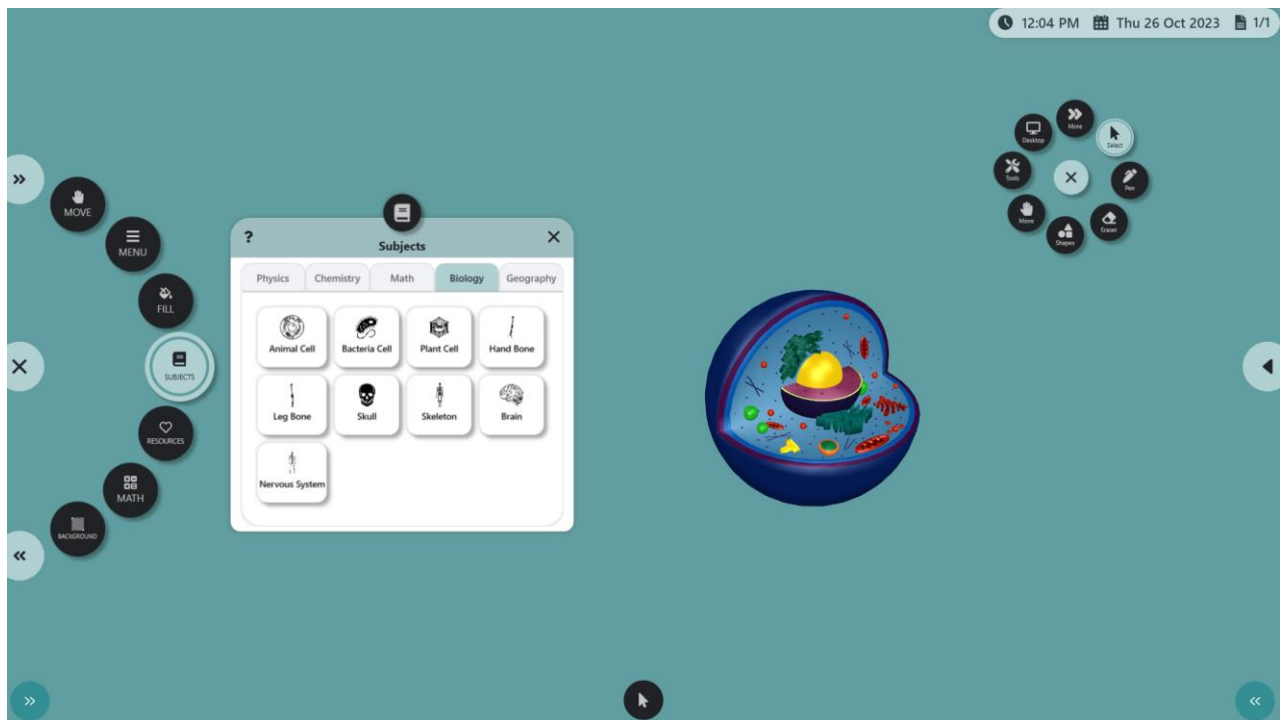



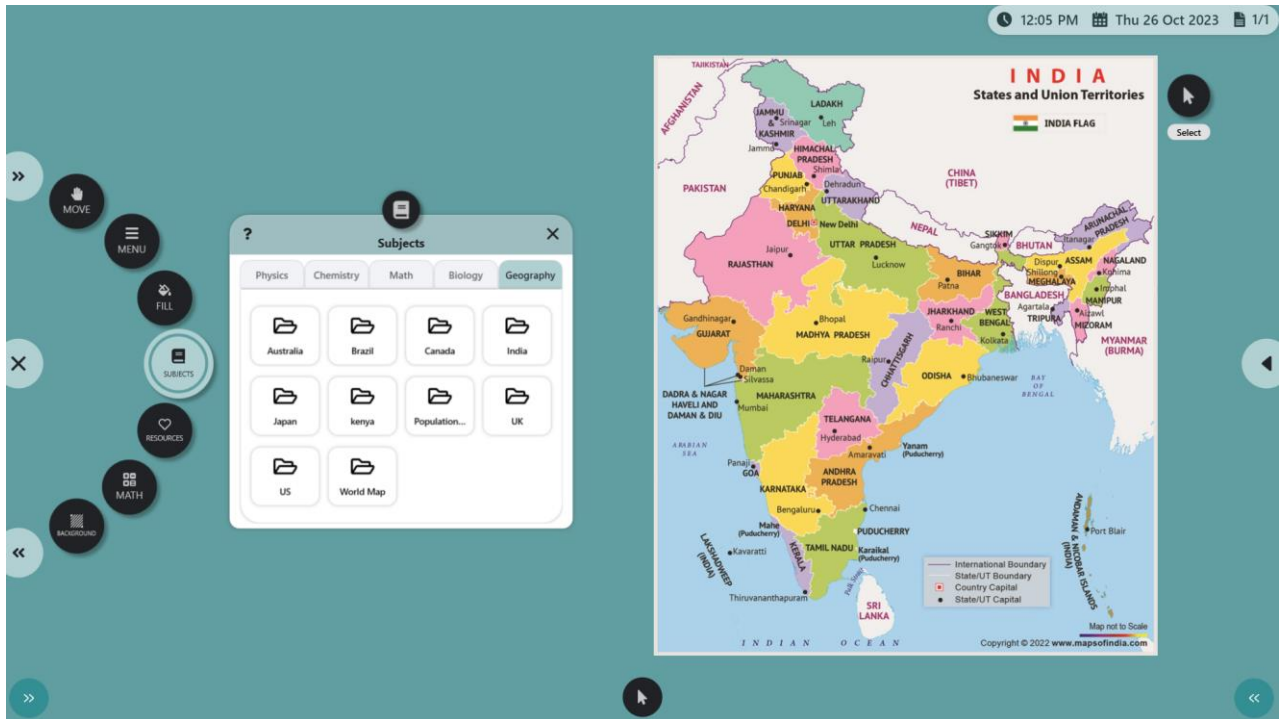
Figure 38.1: Biology 3D Shapes- Animal Cell

Geography




Click  icon on the circular menu or open Geography tools and just select the tool and tap on the system for further use. In the tools, we provide the basic Geography maps, more maps will be added in future releases.

- **Australia:** Contains Maps of Australia.
- **Canada:** Contains Maps of Canada.
- **India:** Contains Maps of India.
- **Japan:** Contains Maps of Japan.
- **Kenya:** Contains Maps of Kenya.
- **Population:** Contains Population Density Maps of different countries.
- **UK:** Contains Maps of United Kingdom.
- **US:** Contains Maps of United States of America.
- **World Map:** Contains World Maps.



Background



Click  background theme icon of the circular menu to edit the background setting of the canvas as per the user.

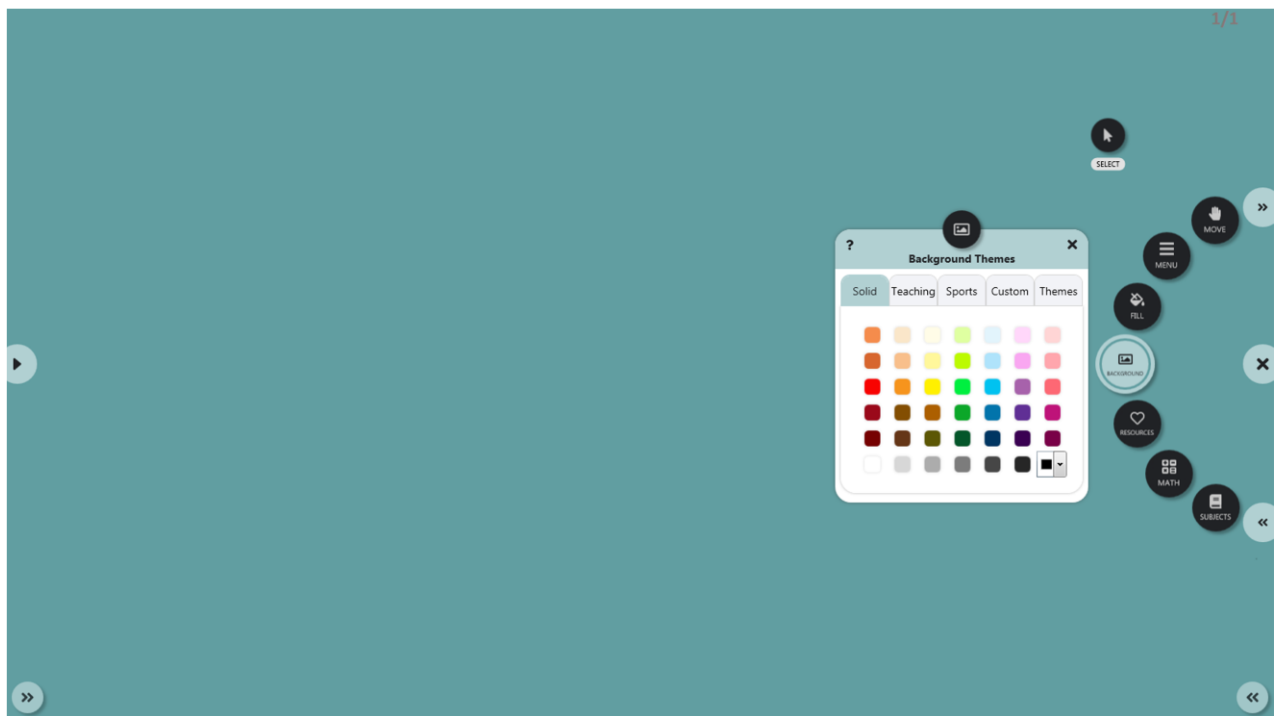
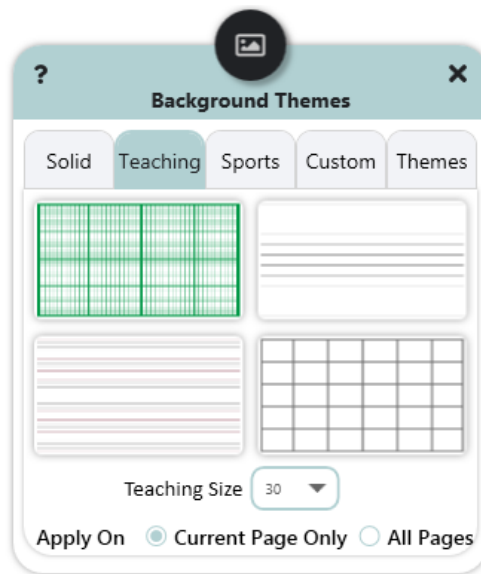


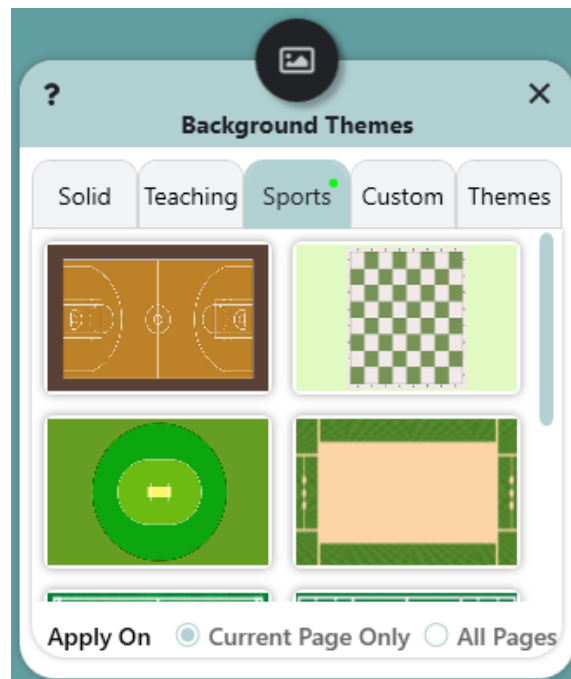
Figure 39: Background themes

There are different tabs in the background themes popup which segregates the different type of backgrounds each canvas page can have.

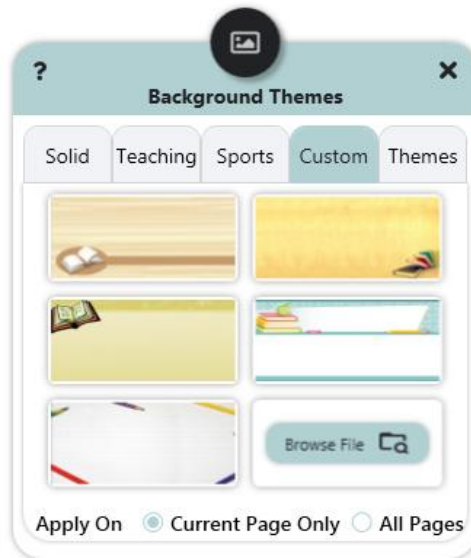
- **Solid:** Click to show the background window that includes solid colors which has 36 kinds of colors. User can apply for any background as per requirement. A custom color selection palette is provided to choose any color as shown in above picture.
- **Teaching:** Click on the teaching option to check out the availability of different teaching methods. This includes graph, two, four lines & grids. User can choose to set the background on current page only or on all pages.



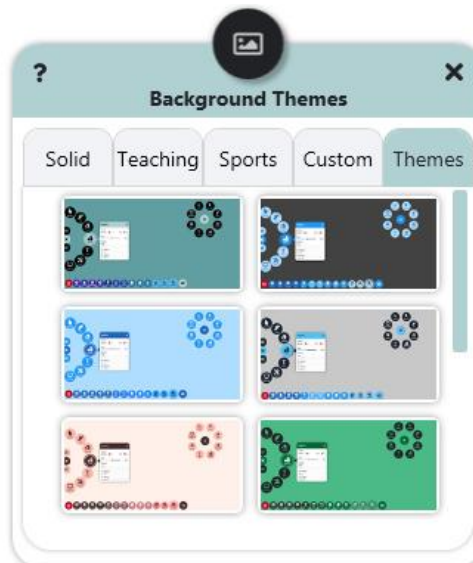
- **Sports:** Click on Sports options to see the background theme of various sports.




- **Custom:** The background can be customized with the Custom background image option. User can also browse an image file which he/she wants to use as canvas background. User can choose to set the background on current page only or on all pages.

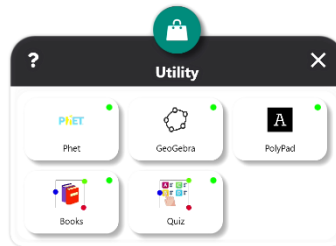



- **Themes:** From this tab user can choose a color theme to apply for the current session. The selected theme will be saved for any further session until updated. The selected theme will be applied to current page as well as all pages newly added.

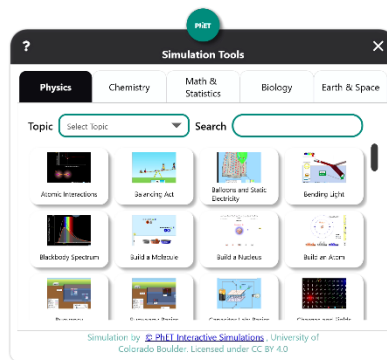



Utility

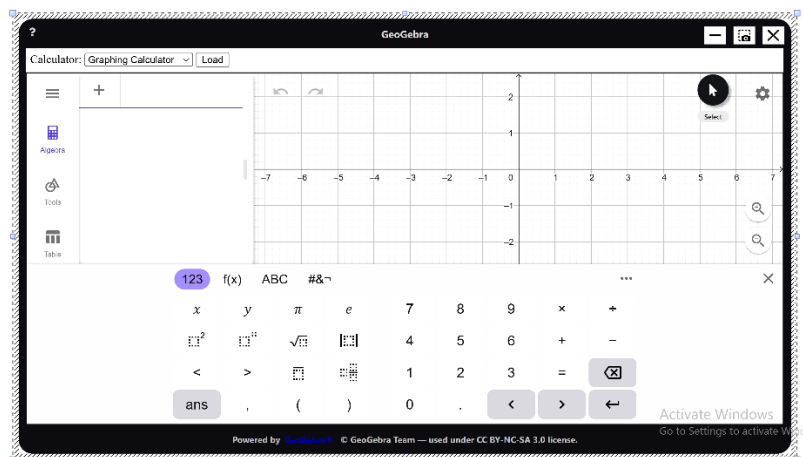
Click on  text tool from circular menu to use the different kind of text inputs supported in the canvas.




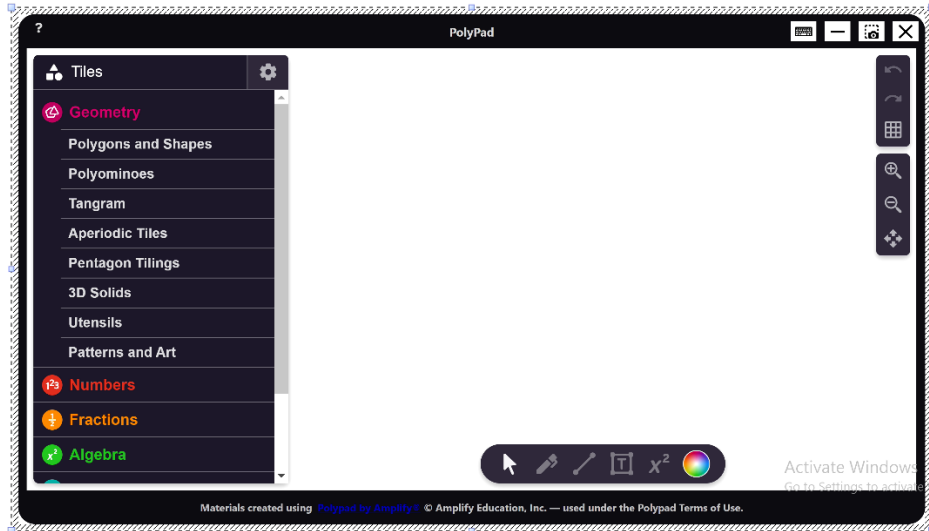
Phet: Click on  tool. You can access the Phet simulations for teaching STEM topics, including physics, chemistry, biology, and math.




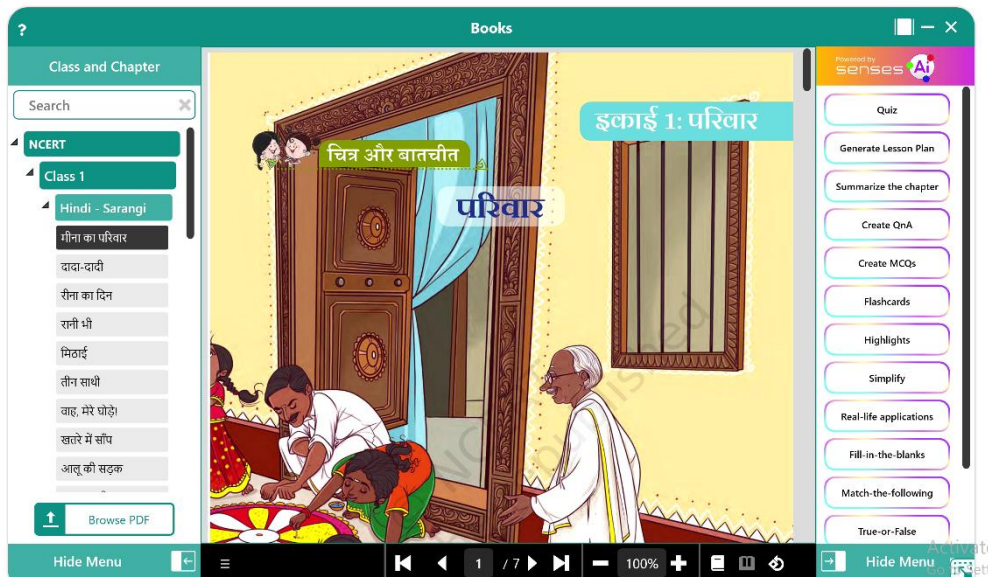
GeoGebra: Click on  tool. You can access interactive tools for mathematics and science, including algebra, geometry, calculus, and graphing.




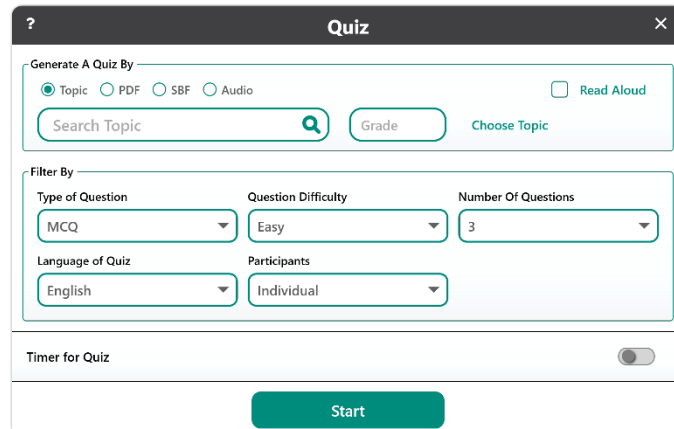
PolyPad: Click on  tool. You can access interactive manipulatives to explore math concepts through visual and hands-on activities.



Books: Click on  tool. You can access NCERT syllabus digital books and learning materials for reading, reference, and study.



Quiz: Click on  tool. You can create, attempt, and review quizzes to assess understanding and track learning progress.



The image shows a 'Quiz' generation window. At the top, it says 'Generate A Quiz By' with radio buttons for 'Topic' (selected), 'PDF', 'SBF', and 'Audio'. There is a 'Read Aloud' checkbox. Below this is a 'Search Topic' input field with a magnifying glass icon, a 'Grade' input field, and a 'Choose Topic' button. The 'Filter By' section contains four dropdown menus: 'Type of Question' (set to 'MCQ'), 'Question Difficulty' (set to 'Easy'), 'Number Of Questions' (set to '3'), 'Language of Quiz' (set to 'English'), and 'Participants' (set to 'Individual'). At the bottom, there is a 'Timer for Quiz' toggle switch and a green 'Start' button.

Text

Click on **T** text tool from circular menu to use the different kind of text inputs supported in the canvas.

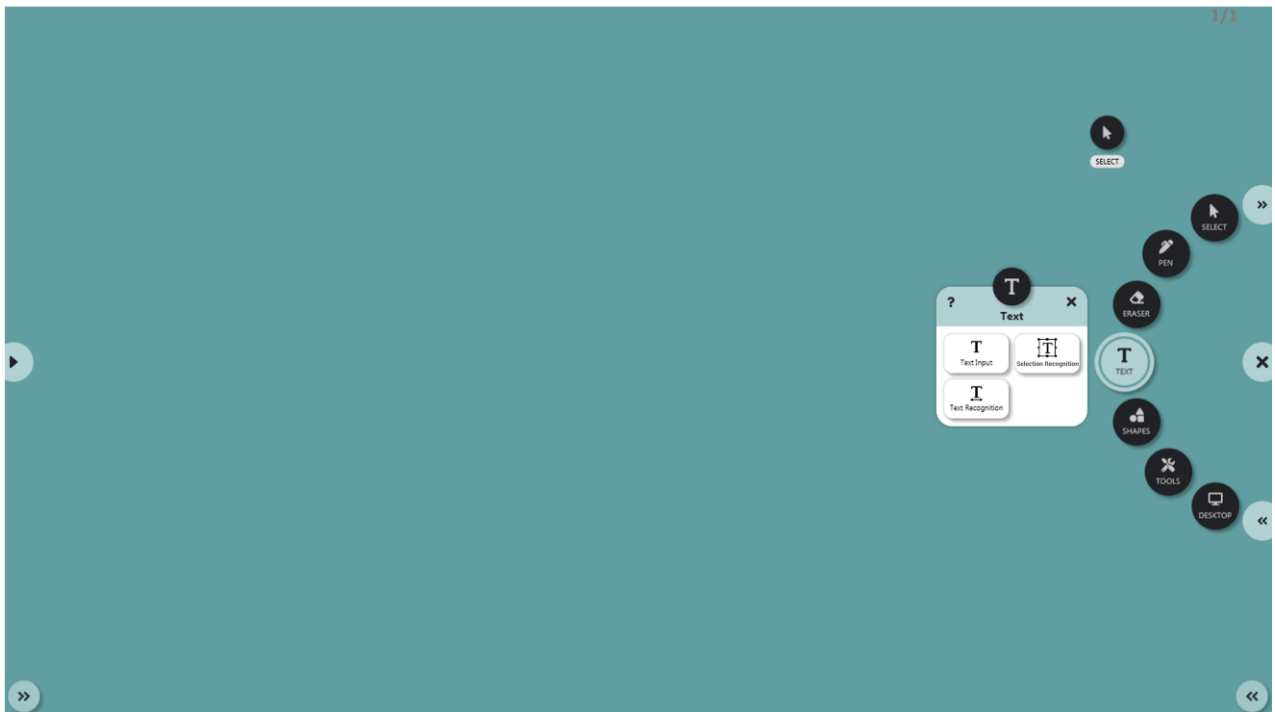




Figure 40: Text tool


- **Text Input:**

Click  to open text entry/editing function. Click location for inputting text on the page, and input text (input by text toolbar keyboard or PC external keyboard, maximum height by default is 200 lines), the default text font is 'Arial', size is 40, and color is black. The text style can be changed using the style bar that comes along with the text input box. The last modified values in the style bar will be saved for later.

- **Select Recognition:**


Click  to open handwriting recognition function. There are two types of text recognition in SenseBoard. Selection recognition and Text recognition. In selection recognition, user can select any free hand written text already written on the canvas to recognize as text in less than 3 secs.

- **Text Recognition:**

In text recognition mode, select  first and then input free hand, handwriting will be identified automatically and displayed on the page in less than 3 secs. User can choose the text input mode and select the recognized text to edit or change styles.

Tools



Click  to pop up tools page. Here we have a collection of commonly used tools like Splitter, Timer, Screen Wrap, Screenshots, Clock, Calendar, Dictation, Physical show, Page Reply, Board in Board, Browser etc. as shown in Figure.

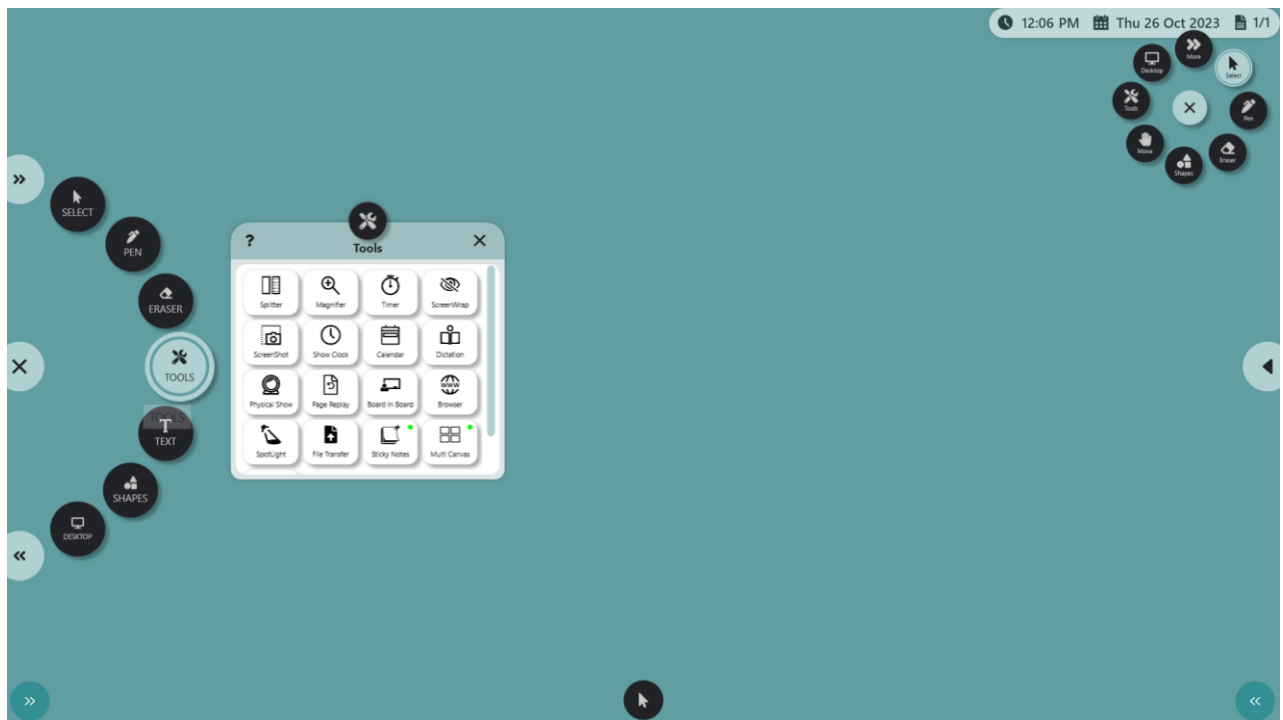








Figure 41: Tools page

Each tool in the tools page is explained in details below:

- Screen Wrap:** Click  icon to show screen wrap. This tool can be used for covering page contents that are temporarily not displayed, and the user can adjust blocking position by dragging veil layer. In the screen wrap, click on  icon to choose the area to cover. Use this  icon to set the screen cover to full screen. Click  to customize veil and change current inserted image for veil with a local file.
- Timer:** Click  button to open the timer as shown below. By default, the timer number starts from 00:00:00, and click  to set countdown time. After setting up, click again to save and exit the setting. Once the time is set, click on play button to start the timer.

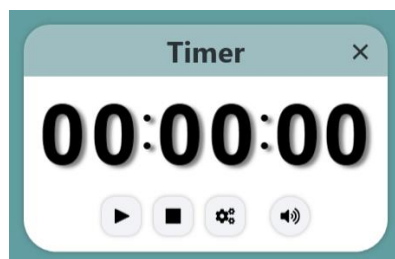



Figure 42: Timer tool

- **Physical Show:** Click  to open physical show window, which can display webcam captured video at real-time, lock screen, rotate 90° left and right, full screen, return to actual size, screenshot, scaling, movement, notation, return, and shut down operations.

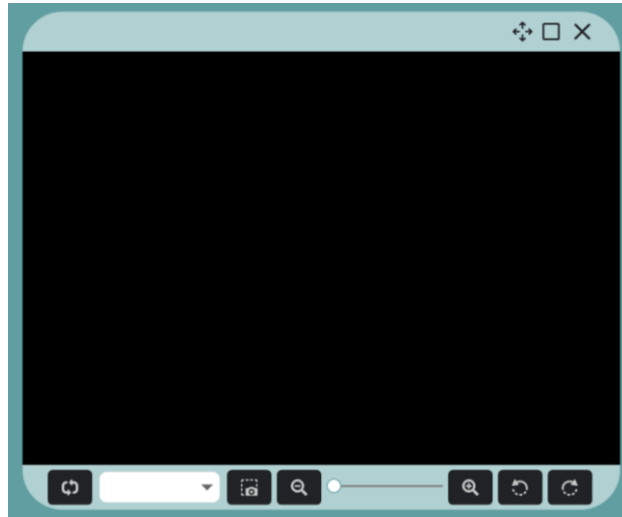


Figure 43: Physical Show



- **Calendar:** Click  to open calendar. It displays current date and week by default, as shown in Figure. Click button to view calendar view as shown in Figure.3-1-1-3-10-1. Click left and right buttons to view date up and down. Click year and month position to quickly view other year, month and date.



Figure 44: Show calendar

- **Show Clock:** Click  to open the clock, as shown in Figure.

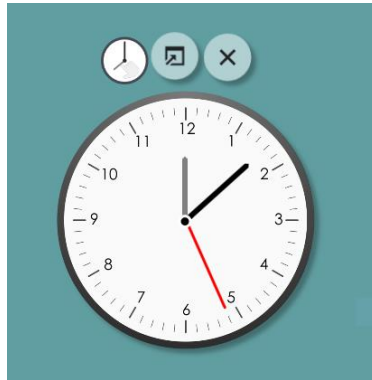


Figure 45 : Show Clock








- Page Replay:** Click  button to conduct page playback. After this blank page display then click on  button to start page replay, if you want to stop page replay click on  or  button. For repeat automatically click on , for increasing speed click on this . Whatever you have done on page will be displayed in video format step by step. Eg. If you add 2 images, shapes and click on page replay then it shows step by step what is inserted. We can save page replay in file in .ebf format.



Figure 46: Page replay window

- **Board in Board:** Click  button to black belt in bottom, dragging down white board. If the whiteboard is dragged half distance of page, the white board can fix to the current position; If the whiteboard is dragged to a distance of less than half page, whiteboard will retract automatically, but will not close, as shown in Figure. Using pencil and eraser in the bottom corner, user can write and erase on it.

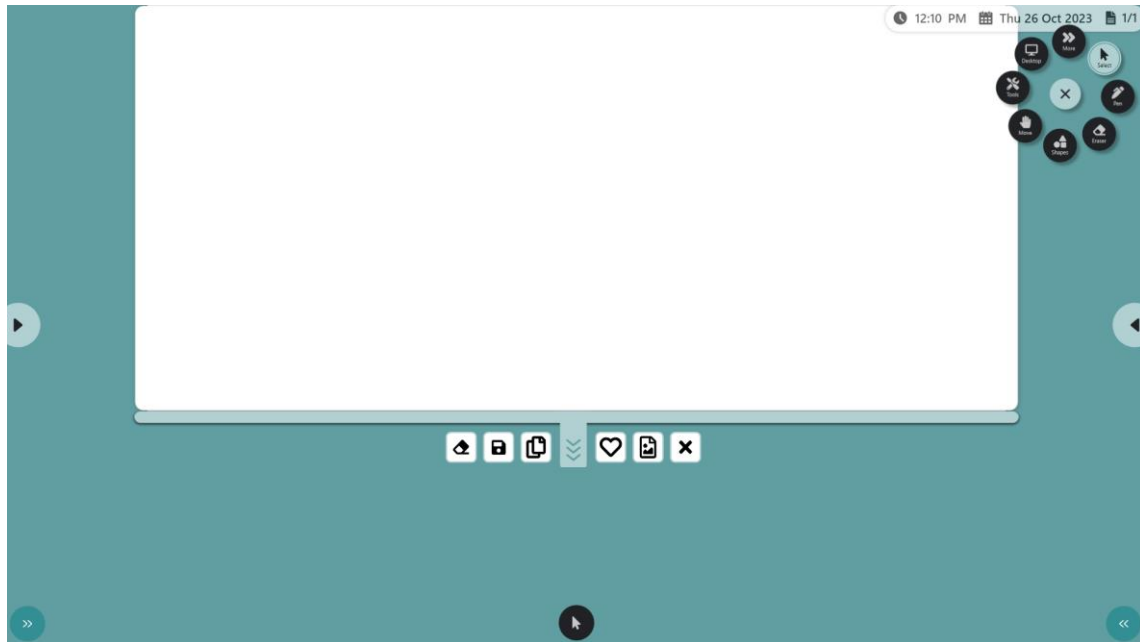



Figure 47: Board in board

- **Screenshots:** Click  on this to open screen shot options. The screen shot can be taken by three different ways.

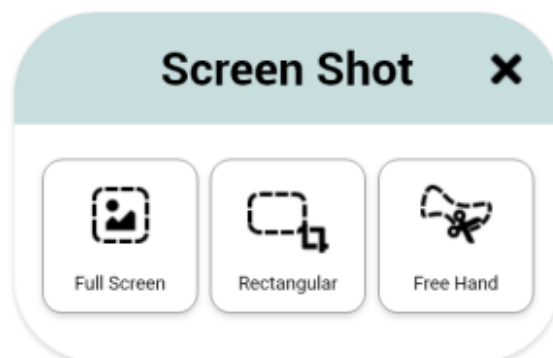



Figure 48: Screenshot options

- ✓ **Full Screen:** Click  to have the screen shot of the full canvas.




- ✓ **Rectangular:** Click  to have the screen shot of the canvas on rectangular basis.
- ✓ **Free Hand:** Click  to have the screen shot of the canvas on free hand mode.



Figure 49 : Full screen, rectangular , free hand screen shot

- **Browser:** Click  button to open the browser, by default the page opened is <http://www.google.com>. The user can use this browser to search and browse the resource.

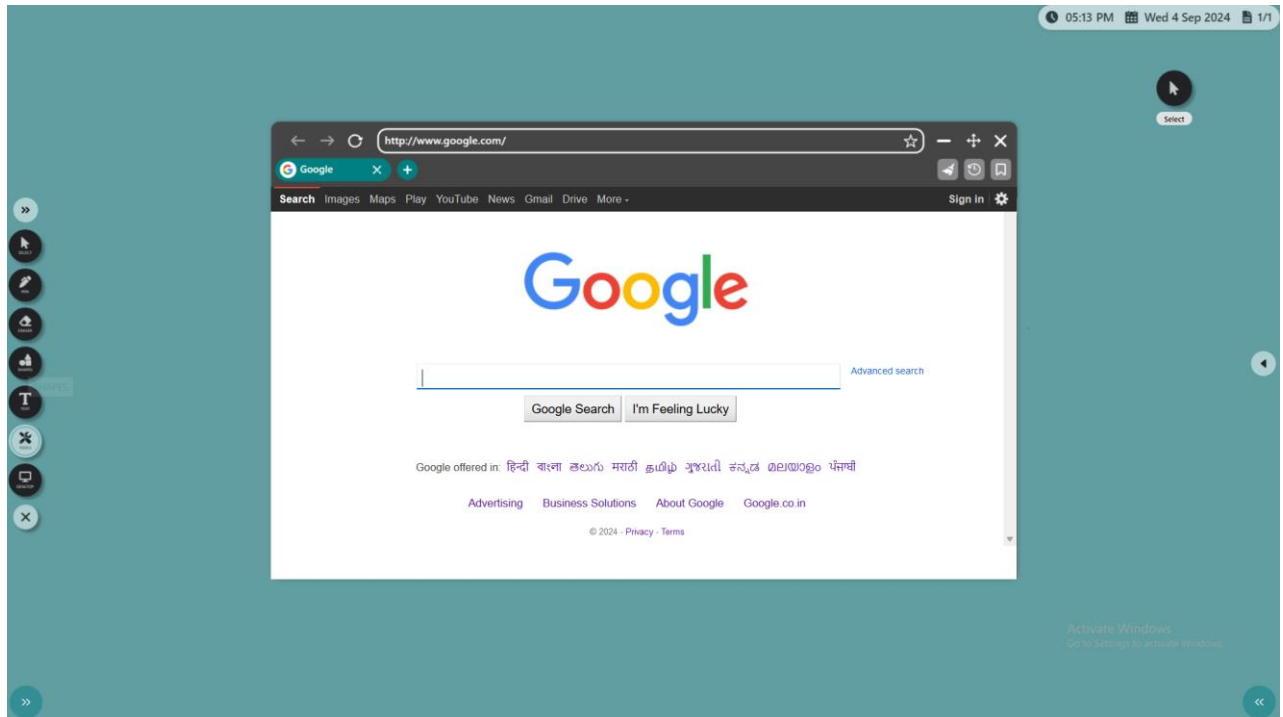


Figure 50: SB browser window

Fill



Click  to pop-up palette, as shown in Figure. Users can switch to filling color selection, and select filling color according to need. It can fill with any closed shape.



Figure 51 : Fill color

Splitter

Click  splitter on the circular/vertical menu to split the screen which enables to work on SenseBoard and any other file on windows simultaneously.

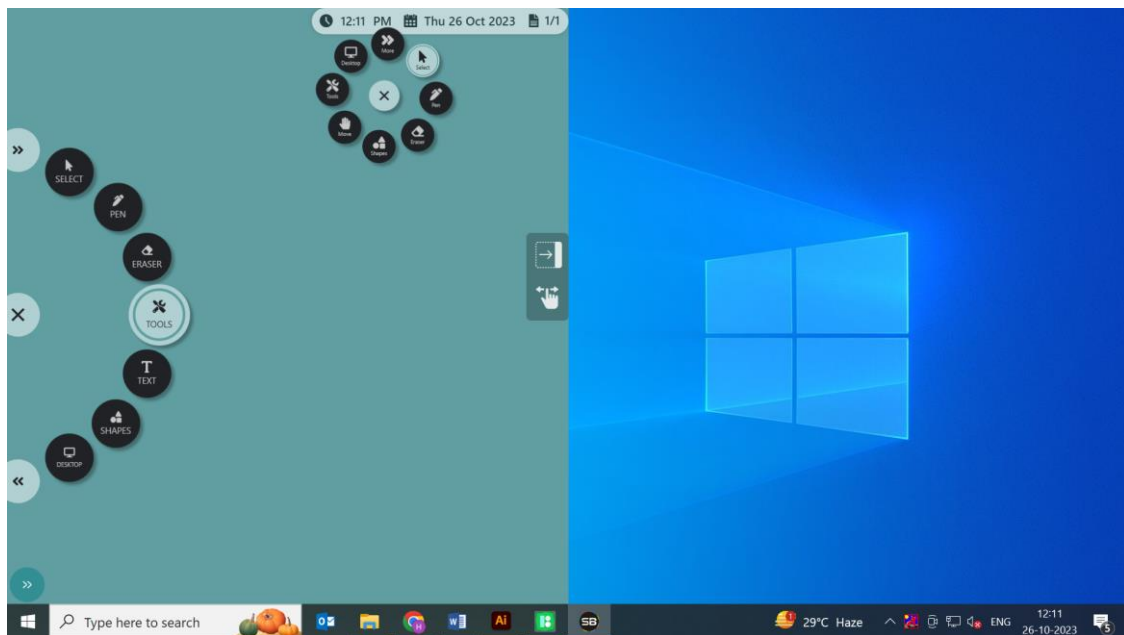



Figure 52: Split screen window

File Transfer From Mobile

Click  to transfer the object from the mobile phone to straight away on the canvas using this tool. Scan the QR code using your smart phone, browse the URL displayed, and upload the image/video which you want to show on canvas. **Note: File transfer works only if both panel and mobile are on the same network. Internet is not required.**

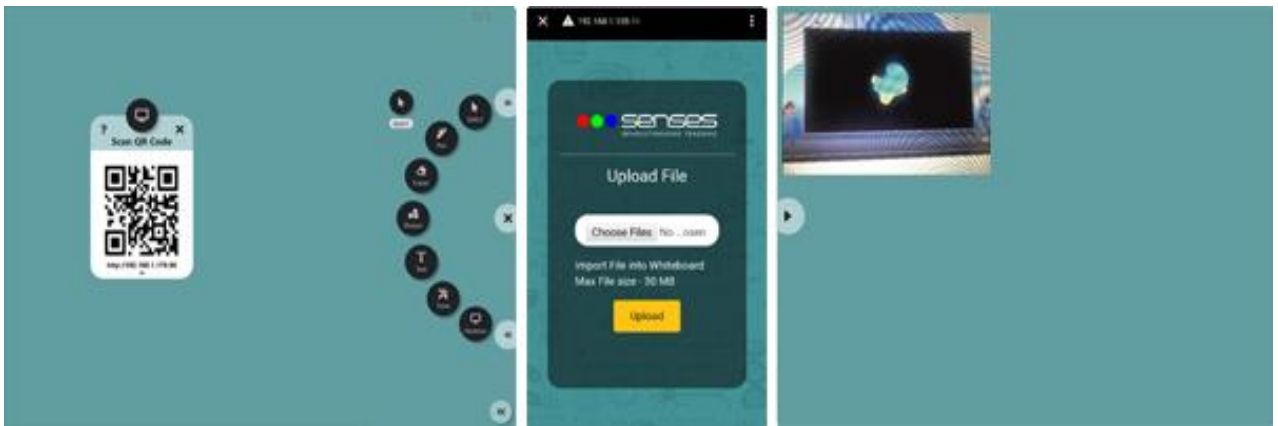
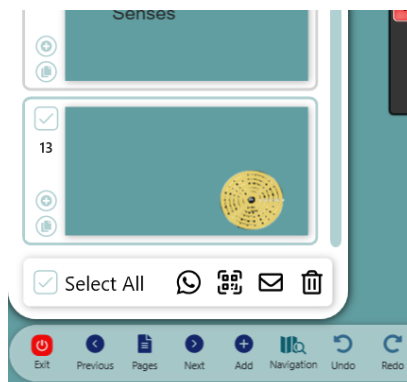



Figure 53: File transfer QR Code & web page to upload files

File Transfer to WhatsApp



Click Pages button  and select the pages you want to share.

Click on  WhatsApp button to Share files on WhatsApp.

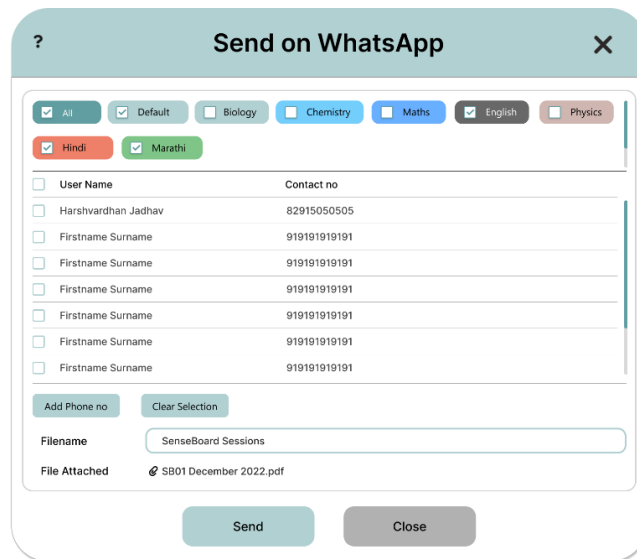



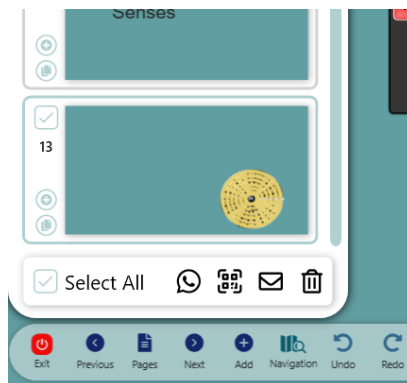
Figure 54.2: File transfer on WhatsApp

Select contacts you want to send. You can select contact groups also.

You can add a new phone no to the list. Click Send after selecting the contants.

File Transfer to device

Click Pages button  and select the pages you want to share.



Click on  QR Symbol button to Share files to device.




Figure 55.3: File transfer to Device

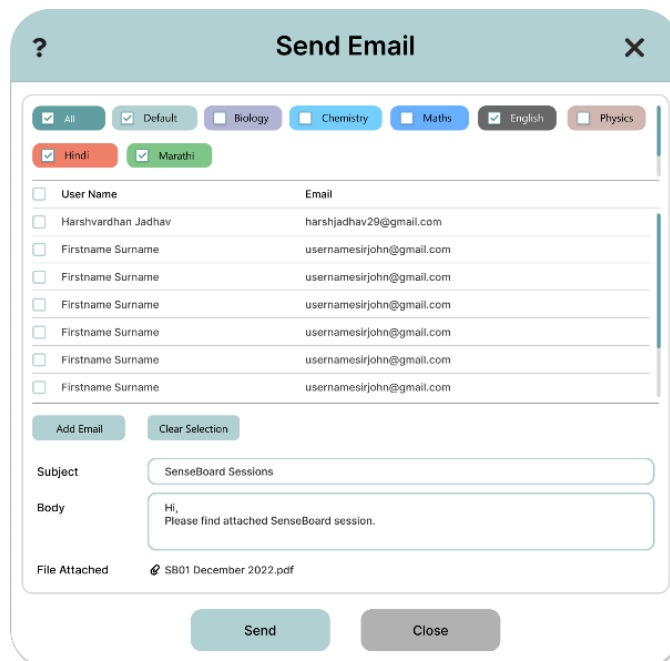
Scan the QR code from your mobile device to download the file.

File Transfer via Email

Click Pages button  and select the pages you want to share.

Select the pages you want to share and click  button.

Select all the users you want to send email to. You can select via group by selecting the groups. Add a subject and body and click Send.



File transfer via Email

Desktop


Click  on the main menu to switch to desktop mode from windows mode. In desktop mode as shown below, the options of write, erase, screenshot, splitter options could be enabled, thereby using these options to annotate directly on the files/videos for clear understanding. The Desktop mode is used when the user is interested in using other application on this IIP.



Figure 56: Desktop shortcuts

The desktop mode has the following shortcut options available with it.

Pen: With the help of this mode we can annotate on the screen using the Pen functionality. The user can write on the screen as well on any third-party applications using the desktop mode. The user can choose from the color choices available. On clicking on the icon, the Pen can be converted into Highlighter as well which will help the user to highlight the important thing on the Panel.

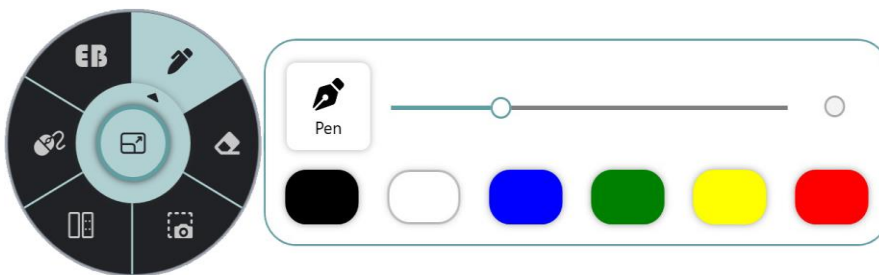


Figure 57: Desktop pen mode

Eraser: The eraser tool can be used to erase the annotated part on the desktop mode. As described in Windows mode the eraser performs all the functions in Desktop mode as well.

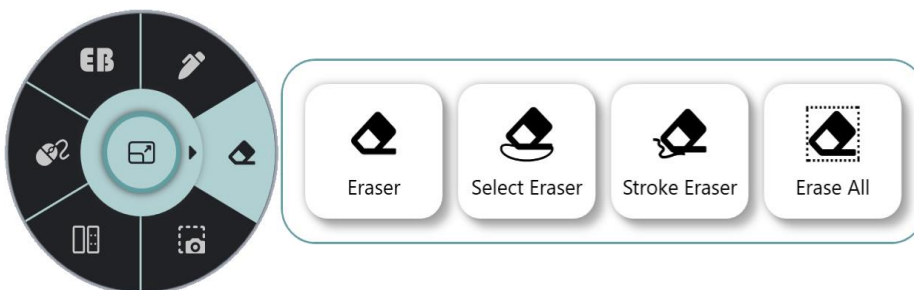


Figure 58: Eraser mode on desktop

Screen Shots: The screen shots mode will let the user take screen shot of any objects from the desktop or any screen. The user can take the screen shots in all the three formats as used in

SenseBoard. After selecting the screenshot area, the user is automatically redirected to the SenseBoard canvas with the screenshot of the area selected. It can be done on Images, texts and Videos as well.

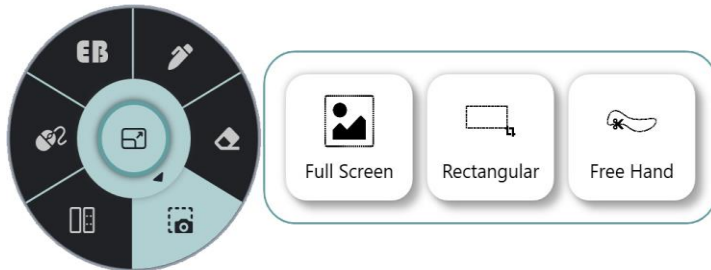


Figure 59: Screenshot mode on desktop

Splitter Tool: The screen of the Desktop can be split into two parts using the splitter tool. The user can explain the things simultaneously using the splitter to the audiences which will help to combine the content from two different applications together.

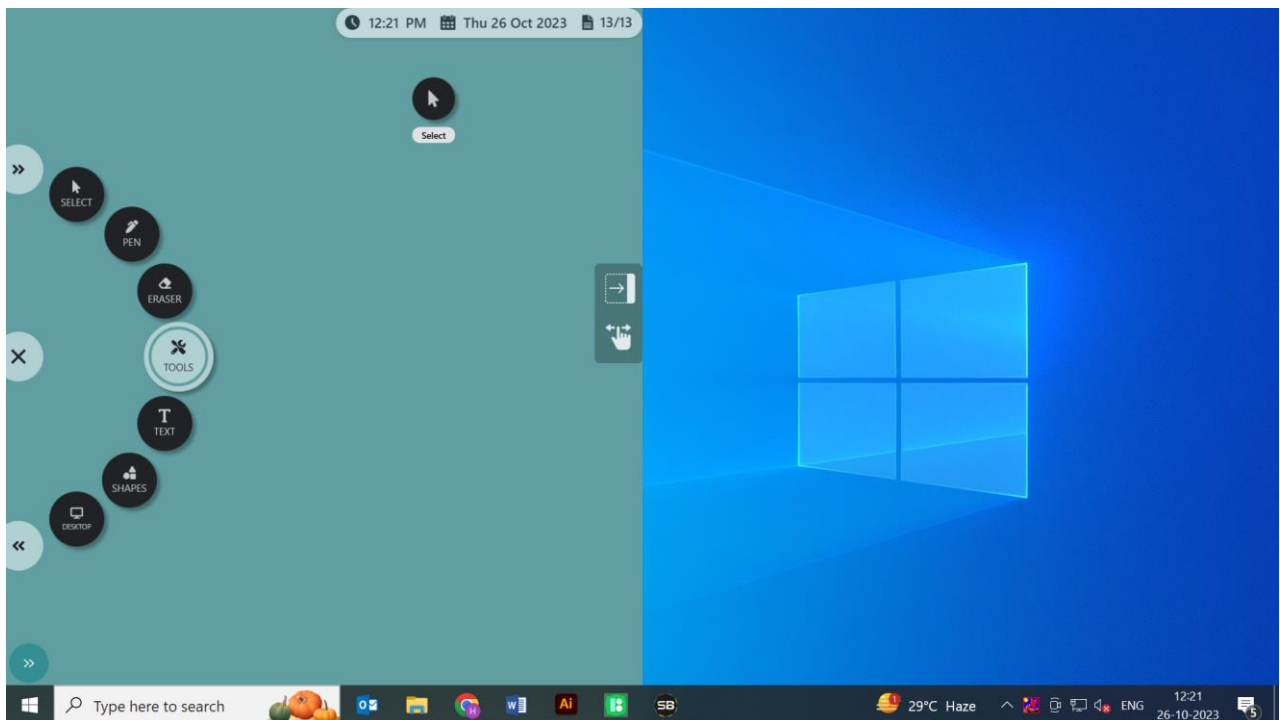



Figure 60: Split mode

Resource Bank

Click on  icon in circular menu to open the resource bank. The user can keep the important and mostly used objects in the Resource bank which can be used whenever it is necessary. The user needs to drag or double tap on the image to make it available in the canvas selected.

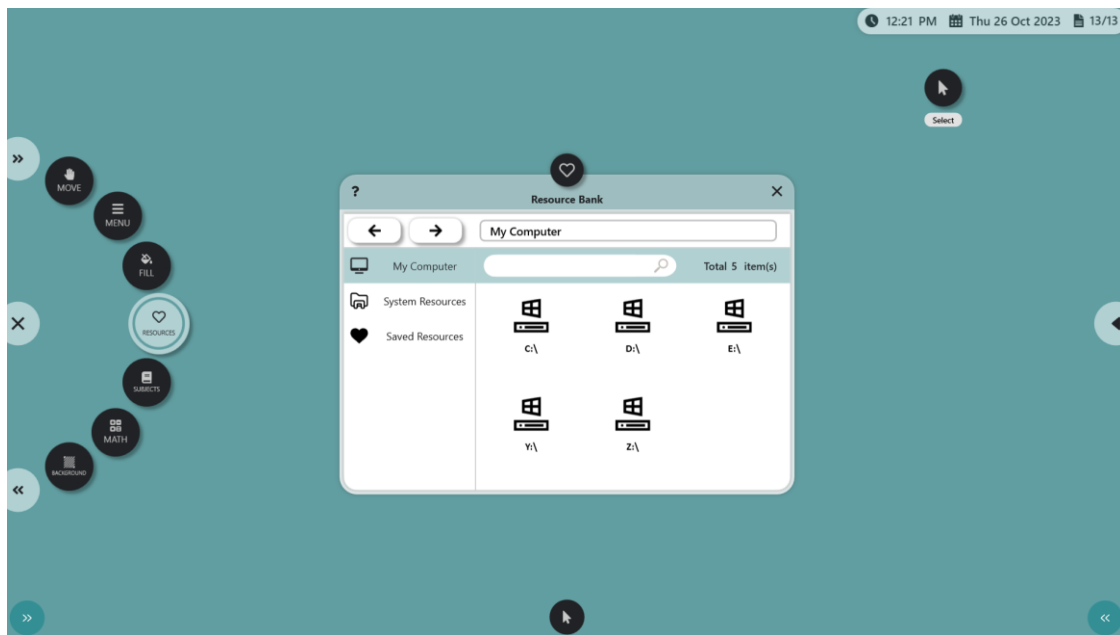


Figure 61:

Resource bank

Three different tabs are available in resource bank, namely:

My Computer – user can choose any image or video files from the local drives to display the same in SB.


System resources – Here we have a list of system resources which comes along with SB which can be copied to SB canvas for teaching purposes.

Saved resources – This tab will contain all the user specific resources which were saved in the specific IIP machine. Any object in the SB canvas can be saved into the resource bank and reused any time.

How to save an object in Resource Bank?



Figure 62: How to add an object in resource bank

After selecting the image/object, click on  icon in the context menu to add that object into the resource bank.

In the 'Save to Resource Bank' popup, user can give the file name and sub-directory to which he wants to save the object.

Once added user can choose the object again in a different session from the "Saved resource" option of resource bank as follows. User may double click on the object which he wants to copy to make a copy of that object in the current session. Select the respective sub-folder to see that objects saved in that folder and click on it to add to canvas.

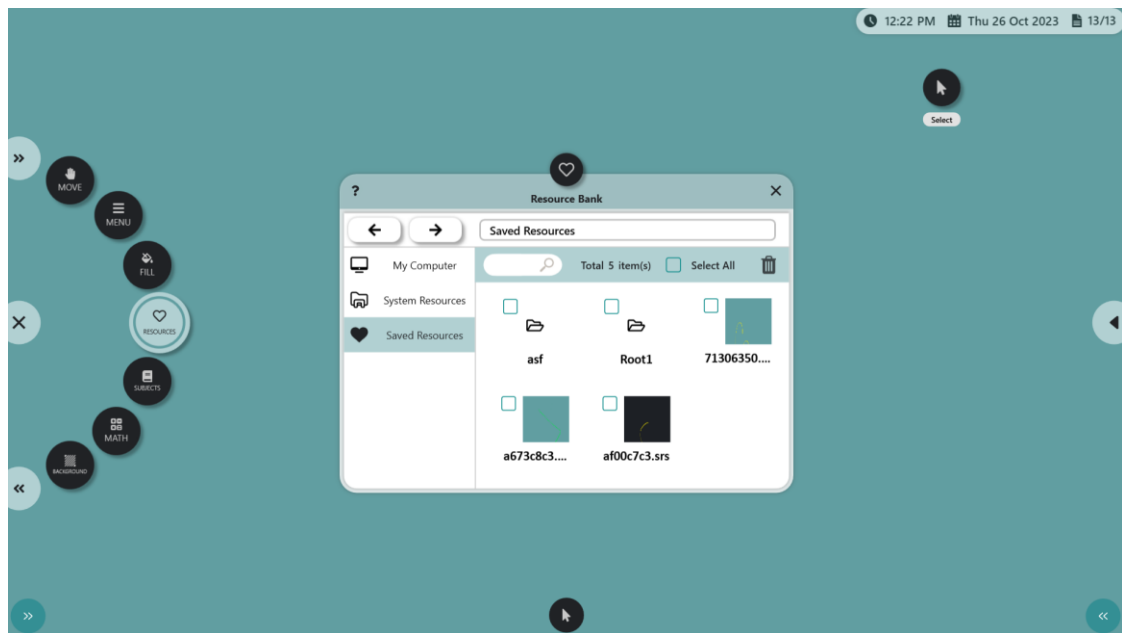



Figure 63: Saved resource in Resource bank

Move

Click  icon from the circular menu to start moving the current canvas endlessly. In this mode you can also move objects such as picture, image, audio and video individually.










Bottom Thumbnails

This is another set of navigation menu available in SB 2.0 which can be used to perform some specific user actions. It is available on the bottom both sides of the canvas which user can open as per requirement.



Figure 64: Bottom thumbnails

Following user actions can be done from this menu:

- 1) **Zoom In:** Click  button to perform one operation of zooming in to all the objects on the current page.
- 2) **Zoom Out:** Click  button to perform one operation of zooming out to all the objects on the current page.
- 3) **Reset:** Click  button to reset the zoomed page back to the original size.
- 4) **Cut:** Click on  to cut a particular object and use paste button to paste it on any canvas pages.
- 5) **Copy:** Click on  to copy a particular object and use paste button to paste it on any canvas pages.
- 6) **Paste:** Click on  to paste any cut/copied objects to the selected page. Cut/copy/paste is supported using keyboard shortcuts also. E.g.: Ctrl+X, Ctrl+C, Ctrl+V. An object/text/image copied from an external file can also be pasted into the SB pages. You can cut/copy an object in the SB page from the context menu also.
- 7) **Undo:** Click  to undo previous operation. This button is in a hidden state when there is no currently selected handwriting drawing operation.
- 8) **Redo:** Click  to restore previous undo operation. This button is in a hidden state before undoing currently selected handwriting.
- 9) **Navigation:** Click  button and navigation can quickly position and browse region information of adjacent areas of current page, with ratio adjustments available. This is very useful in case user have used endless canvas while teaching.

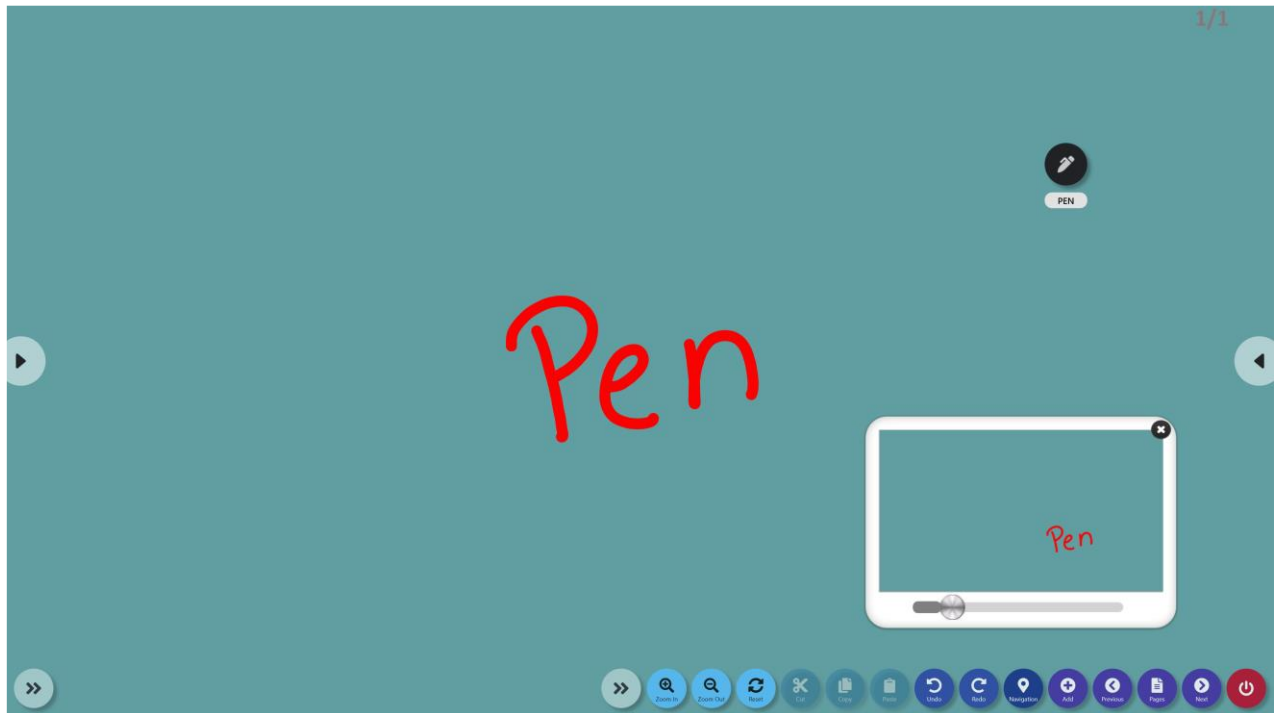


Figure 65: Navigation






- 10) **Add Page:** Click  to add new page.
- 11) **Previous Page:** When current page is not the first page, click  button to switch to previous page of current page.
- 12) **Page Thumbnail:** Click  button to view all pages in the current session as shown below.
- 13) **Next Page:** Click  button for switching 1st page to 2nd page.
- 14) **Exit:** Click  button to Exit the application.

Figure 66: Page thumbnail

Context menu

Context menu are those options available with each object added on to the SB canvas. Select any element draw on the SB canvas to display the different context menu options available for that

object. There are different context menu options which are available with different elements added. E.g.: Context menu items for drawing might be different from context menu items for a physics tool added.

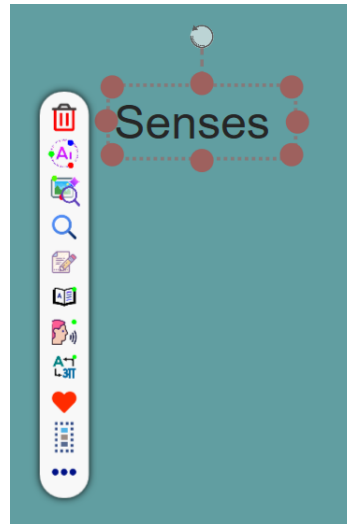




































Figure 67: Context menu

Following are the different context menu items available with different objects in SenseBoard:

- 1) **Delete:** Click on  icon on context menu to delete the selected object from page.
- 2) **AI:** Click on  icon on context menu to see AI features.
- 3) **AI Image Search:** Click on  icon on context menu to see AI Image search options.
- 4) **Stroke thickness:** Click on  icon to increase or decrease the thickness of the selected stroke or shape.
- 5) **Color Palette:** Click on  icon to change the color of the selected stroke or shape.
- 6) **Bring to Front:** Click on  icon to bring the selected object to the front of other objects in the selected area.
- 7) **Send to Back:** Click on  to send the select object to back of other objects.
- 8) **Add to resource bank:** Click on  icon to save the selected object into resource bank.
- 9) **Cut:** Click on  to cut a selected object
- 10) **Copy directly:** Click on  to copy a selected object and paste it directly to the selected page
- 11) **Mirror:** Click on  icon to start mirroring the selected object.
- 12) **Reverse:** Click on  icon to reverse the selected image/video/object.

- 13) **Lock:** Click on  icon to lock a selected object. A locked object cannot be moved or perform any action on it.
- 14) **Replay:** Click on  to replay the selected object or objects. This will replay all the actions performed on the selected object(s) in a timely fashion.
- 15) **Group:** Click on  to group a selected set of objects into one. After grouping, you can perform all action on the group instead of single elements.
- 16) **Ungroup:** Click on  to un-group a previously selected grouped object.
- 17) **Measurements:** Click this  to show measurement on shapes drawn on the canvas.
- 18) **Radius:** Click on  to show the center point and radius of the selected circle.
- 19) **Show Center:** Click on  to show the center point of circle.
- 20) **Copy stroke:** Click on  to copy stroke.
- 21) **Select all :** Click on  to select all elements on canvas.
- 22) **Edit:** Click on  to start editing an already entered text input.
- 23) **Speak aloud:** Click on  to start reading the selected text aloud.
- 24) **Fill color:** Click on  to fill a selected color on the select shape.
- 25) **Flame:** Click on  icon to ON/OFF flame of alcohol burner.
- 26) **Cap:** Click on  icon to add or remove cap from chemistry components.
- 27) **Bulb:** Click on  icon to ON/OFF bulb light.
- 28) **Switch:** Click on  icon to ON/OFF switch in physics tool.
- 29) **Previous orbit :** Click on  icon to select previous orbit in atomic structure.
- 30) **Next orbit :** Click on  icon to select next orbit in atomic structure.
- 31) **Settings:** Click on  icon to open periodic table.
- 32) **Prism:** Click on  icon to show light rays.
- 33) **Search:** click on this  icon to search a particular text in Google, wiki or YouTube.
- 34) **Set as background:** Click on  to set the selected image as page background.

Voice Commands

After activating the voice commands from setting menu, you can see the voice icon available in the screen as shown below:

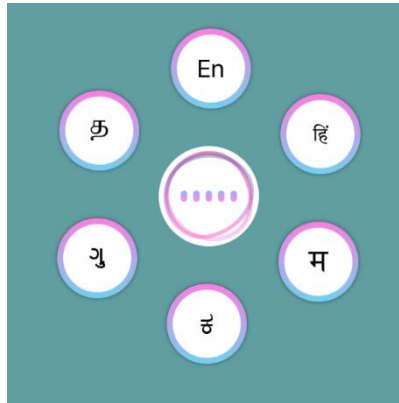



Figure 68: Voice command icon

Click on the  icon on the screen to start using voice commands, now we are using 8 languages to support voice commands which are English , Marathi ,Hindi ,Telugu, Tamil, Malyalam , kannada, Gujarati. Note: Voice commands will work only if the system is connected to internet. In case of any issues with the internet connection, the same will be informed as a message on screen. Use a microphone or the remote that comes along with Senses IIP to start giving voice commands to SB.

Following are the list of Voice commands supported by SB:

English :-

1. Show Menu
2. Hide Menu
3. Select eraser/scroll to eraser
4. Select select/scroll to select
5. Select menu/scroll to menu
6. Select screen capture /scroll to screen capture
7. Select gestures / scroll to gestures
8. Select Background themes/ scroll to background themes
9. Select text input /scroll to text input
10. Select Mini tools /scroll to Mini tools
11. Select move Canvas /scroll to move Canvas
12. Select shapes /scroll to shapes
13. Select Pen/scroll to Pen
14. Select desktop/ scroll to desktop (Use when you want to minimize SenseBoard application)
15. show clock, open clock
16. hide clock, close clock, remove clock
17. show calendar
18. hide calendar, close calendar
19. open calculator, show calculator
20. hide calculator close calculator

21. draw ellipse.
22. draw trapezoid, draw a trapezoid
23. draw parallelogram
24. draw pentagon,
25. draw right angle triangle
26. draw circle, draw a circle
27. draw star, draw a star
28. draw square, draw a square
29. draw a rounded square
30. draw rectangle, draw a rectangle
31. draw rounded rectangle
32. draw a line
33. draw dashed line, draw a dashed line
34. draw triangle, draw a triangle
35. draw hexagon, draw a hexagon
36. draw scalene triangle
37. draw dash dot line
38. draw arrow line, draw a arrow line
39. draw parallel line, draw a parallel line
40. draw line segment, draw a line segment
41. draw an arc
42. draw wave line, draw a wave line
43. draw cube
44. draw cone, draw a cone
45. draw cylinder, draw a cylinder
46. draw sphere, draw a sphere
47. draw pyramid, draw a pyramid
48. draw round table, draw a round table
49. draw hemisphere, draw a hemisphere
50. draw a triangle pyramid
51. clear canvas
52. start dictation
53. stop dictation
54. search Google for
55. open Google search for ...
56. search Wiki for...
57. search Wikipedia for...
58. show map of.....
59. show map for
60. open map of.....
61. add new canvas,
62. add a new canvas
63. previous page, previous canvas
64. next page, next canvas
65. Zoom In
66. Zoom Out
67. Undo

68. Redo
69. show screen wrapper
70. close screen rapper,
71. hide screen wrapper
72. insert image.... from Desktop
73. move page left
74. move page right
75. move page up
76. move page down
77. take screenshot
78. open word pad
79. Close WordPad
80. Go to (page number)
81. Go to first page
82. Go to last page.

Hindi:-

1. वृत्त बनाएं
2. त्रिकोण बनाएं
3. तारा बनाएं
4. रेखा बनाएं
5. षट्भुज बनाएं
6. कैनवास साफ करें
7. डिक्टेसन शुरू करें
8. डिक्टेसन बंद करें

Marathi:-

1. वर्तुळ काढा
2. त्रिकोण काढा
3. तारा काढा
4. षटकोन काढा
5. रेखा काढा
6. चौरस काढा
7. कॅनव्हास साफ करा
8. डिक्टेसन प्रारंभ करा
9. डिक्टेसन थांबवा

Kannada :-

1. ವೃತ್ತವನ್ನು ಸೆಳೆಯಿರಿ
2. ತ್ರಿಕೋನವನ್ನು ಸೆಳೆಯಿರಿ

3. నక్షత్ర సేళియిరి
4. రేఖియన్న ఎళియిరి |
5. జౌకవన్న సేళియిరి
6. స్పష్ట క్యానాస్
7. డిక్టేషన్ ప్రారంభిసి
8. టీప్ మాడలా ప్రారంభిసి |

Malyalam:-

1. వృతం వరయ్కుక
2. త్రికోణం వరయ్కుక
3. త్రికోణం వరయ్కుక
4. నక్షత్రం వరయ్కుక
5. షబ్దజం వరయ్కుక
6. వర వరయ్కుక
7. క్యూబ్ వరయ్కుక
8. అక్షరం అక్షరం
9. డిక్టేషన్ ప్రారంభిసి

Tamil:-

1. వడ్డం వరయవమ్
2. ముక్కోణత్తై వరయవమ్
3. న్డత్తీరత్తై వరయవమ్
4. అక్షరం వరయవమ్
5. కోణం వరయవమ్
6. పల్ప పల్ప

7. తెగివాణ కేణ్వాం
8. డిక్టేషన్ ప్రారంభిసి
9. డిక్టేషన్ ప్రారంభిసి

Telugu:-



1. వృత్తం వృత్తం
2. త్రిభుజం త్రిభుజం
3. షబ్దజం షబ్దజం
4. బల్ బల్
5. కాన్వర్షన్ ప్రారంభిసి
6. డిక్టేషన్ ప్రారంభిసి
7. డిక్టేషన్ ప్రారంభిసి
8. డిక్టేషన్ ప్రారంభిసి

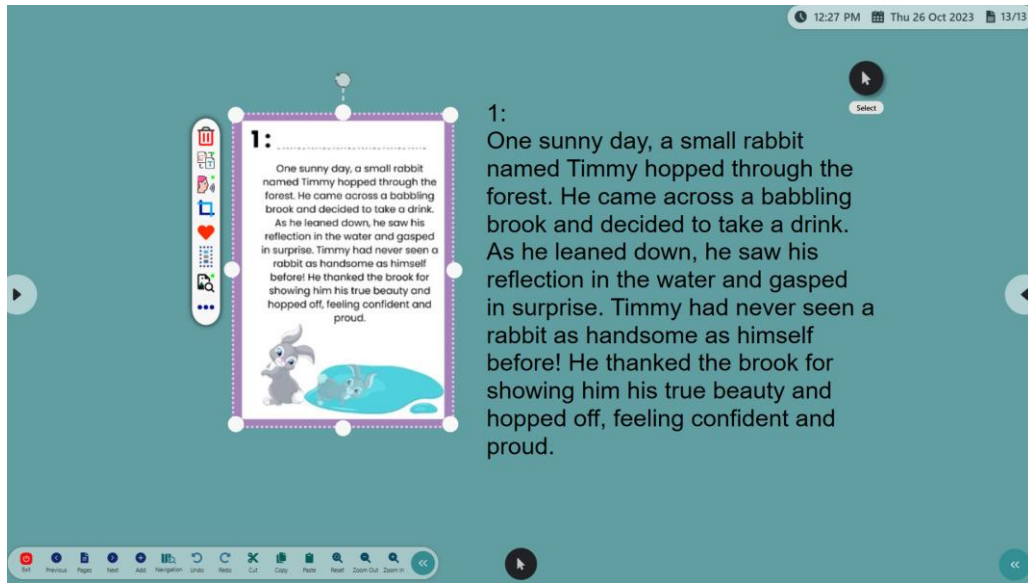
Gujarati:-

1. વર્તુળ દીરી
2. ત્રિકોણ દીરી
3. તારી તારી
4. ષટ્કોણ ષટ્કોણ
5. રેખા દીરી
6. કોણ વાસ સાફ કરો
7. ડિક્ટેશન પ્રારંભ કરો
8. ડિક્ટેશન બંધ કરો


Image to text




SenseBoard enables you to convert an Image to text. To use this feature, click on  Select tool and select the image. From the selection options click  button. The text from the image will be extracted and converted to text.



Text translate

SenseBoard enables you to translate the text into different language. To use this feature, click on  SELECT


Select tool and select the text. From the selection options click  Text Translate to translate the text.




You can translate the text in different regional languages as well.



Image to speech

SenseBoard enables you to convert an Image to speech. To use this feature, click on  SELECT

Select tool and select the image. From the menu click on  read aloud button to read aloud the content from the image to speech. You can control the reading of text with the following buttons:

-  Button allows you to decrease the speed of reading.
-  Button allows you to increase the speed of reading.
-  Button allows you to pause the reading.


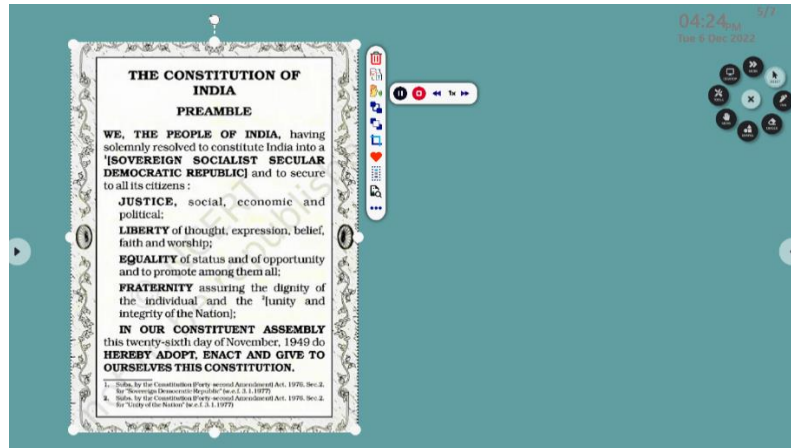






-  Button allows you to stop the reading.

Image to speech supports multiple regional languages as well.



Text to speech

SenseBoard enables you to convert an Image to speech. To use this feature, click on  Select tool and select the text. From the menu click on  read aloud button to read the content of the text. You can control the reading of text with the following buttons:

-  Button allows you to decrease the speed of reading.
-  Button allows you to increase the speed of reading.
-  Button allows you to pause the reading.
-  Button allows you to stop the reading.

Text to speech supports multiple regional languages as well.

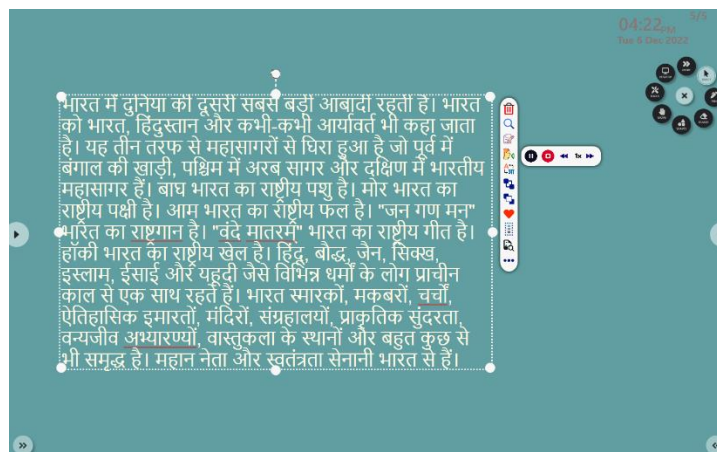


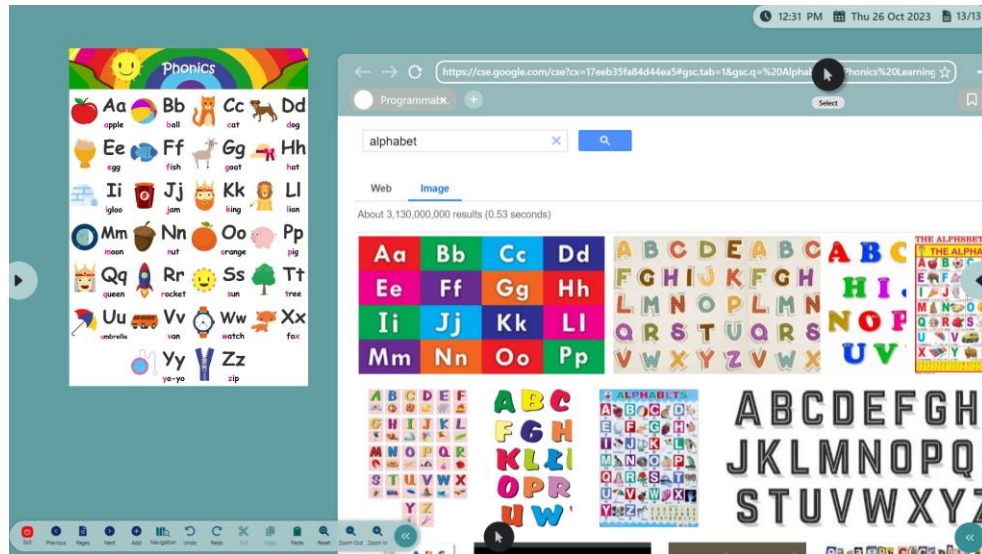




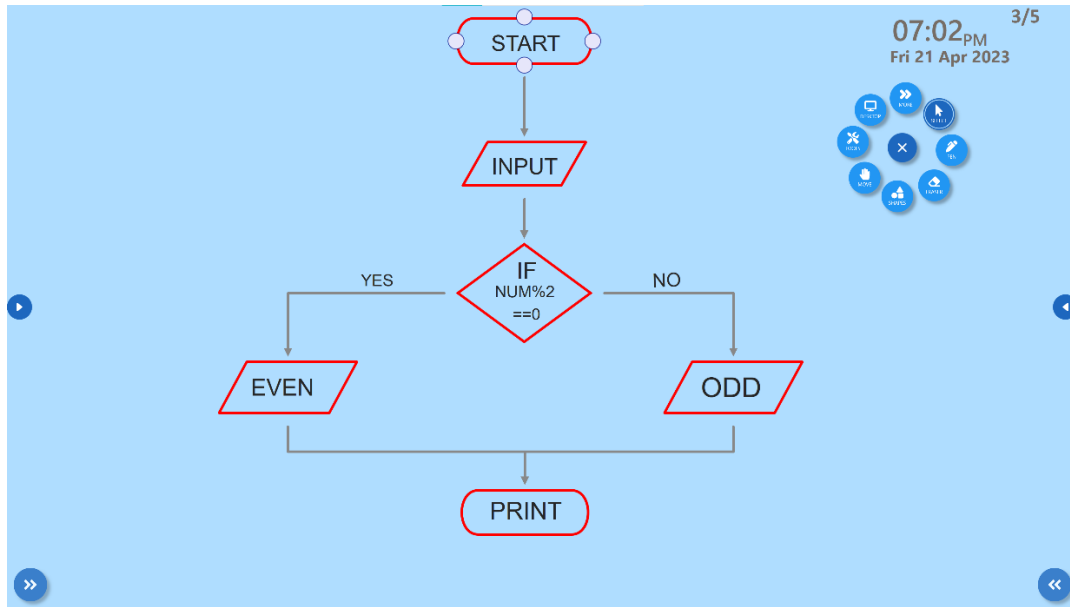
Image Search

SenseBoard enables you to convert an Image to text. To use this feature, click on  Select tool and select the image. From the menu click on  image search button to search the image on the web.





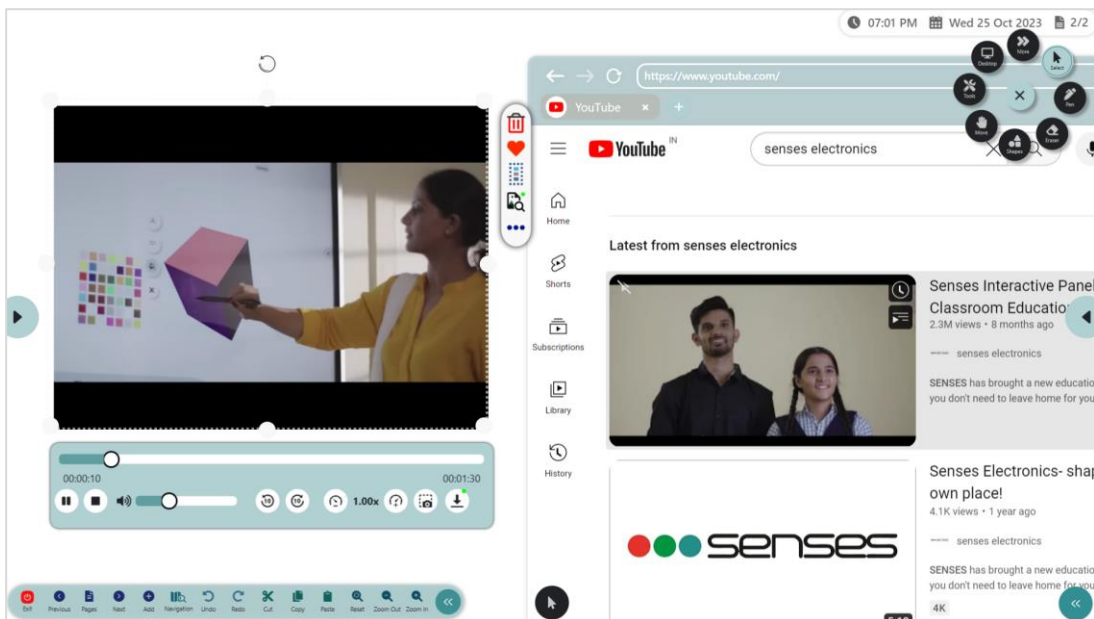
Mind Map

You can convert shapes into Mind Map or Flow Diagrams. To use this feature, click on  Select tool and select the Mind Map. From the menu click on  Mind Map button to convert Shapes into Mind Map diagrams. You can add different shapes and connect them via Mind Map. You can also add text or draw inside the shape.





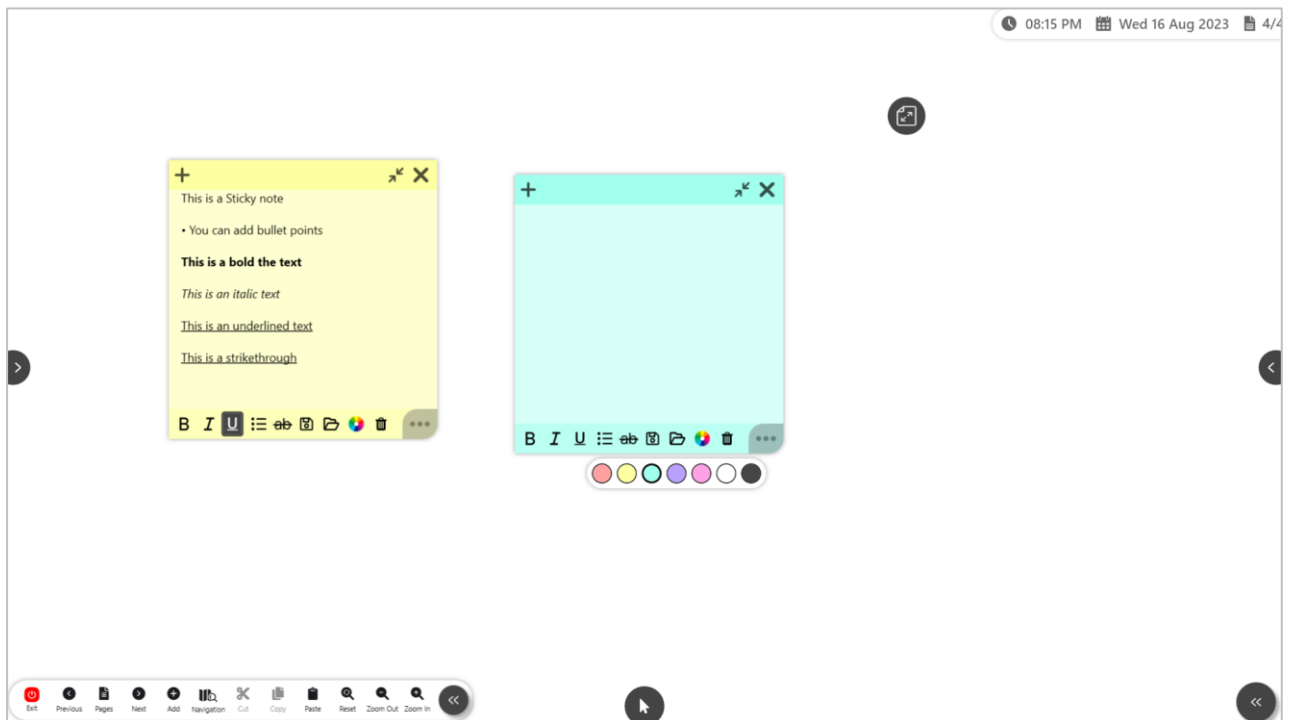
YouTube Video

SenseBoard enables you to add YouTube Videos to the canvas. To add, click on  tools and select  Browser. Once you open the browser go to Youtube.com. You can drag and drop any YouTube video to the canvas.




Sticky Notes

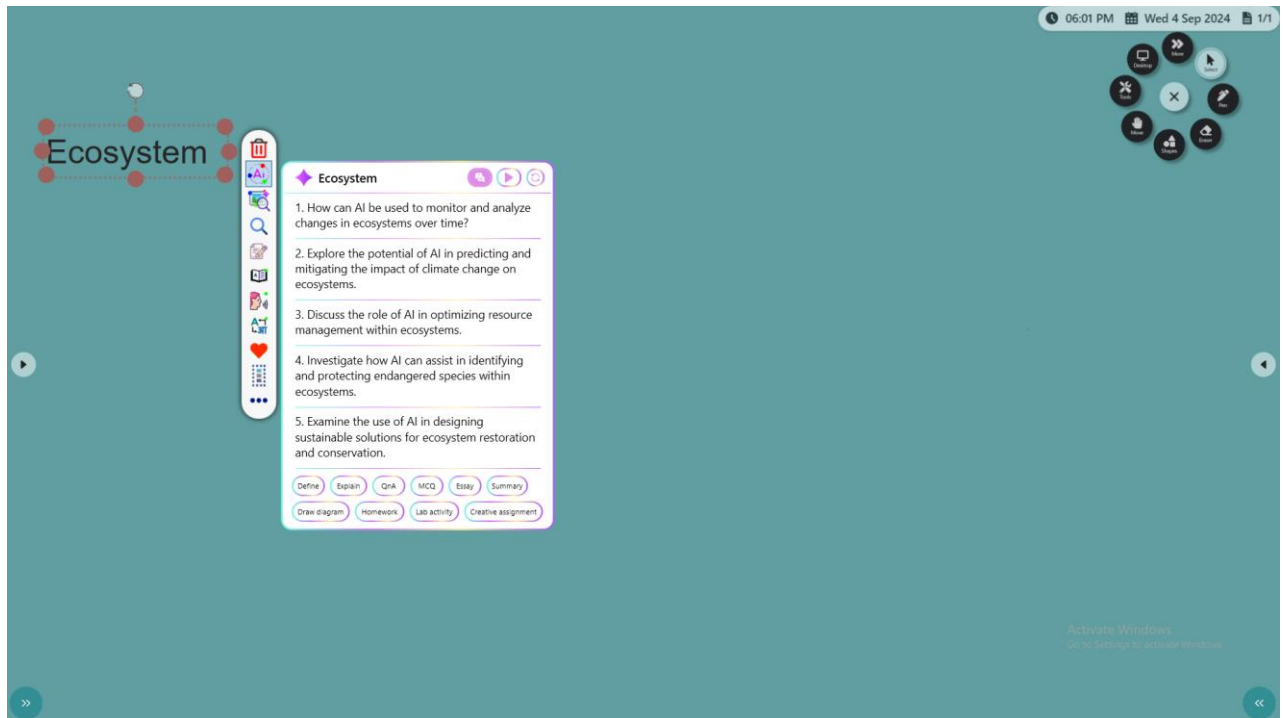
User can add a Sticky note while working on a SenseBoard. To add a sticky note, click on  Tools tools and select  File Transfer button. You can add content to sticky note, move the sticky note and place it anywhere on the Canvas. User can modify the font style and add Bold, Italic, Underline and Strikethrough to the text. User can also change the color of the sticky note and collapse it.



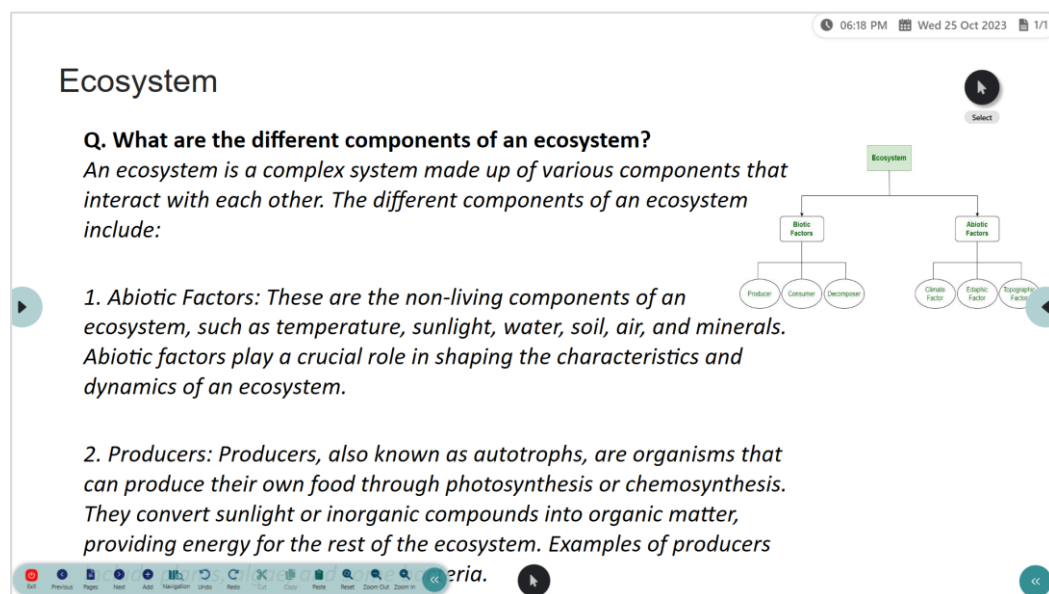
Artificial Intelligence

Senses AI


With the help of Artificial Intelligence, user can ask questions to the AI and can get customized generated response from AI. To ask AI, select a word or a sentence on Canvas and click on  AI button.



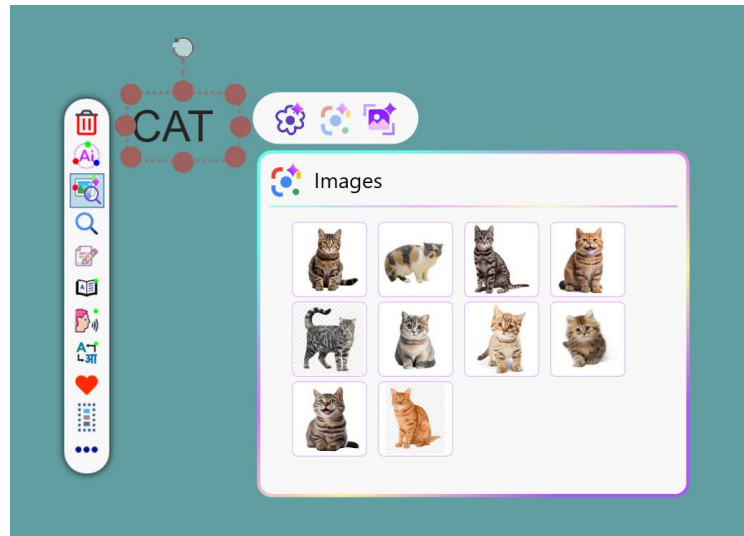
User can then click on any of the prompts suggested by AI and it'll generate a response on the canvas.



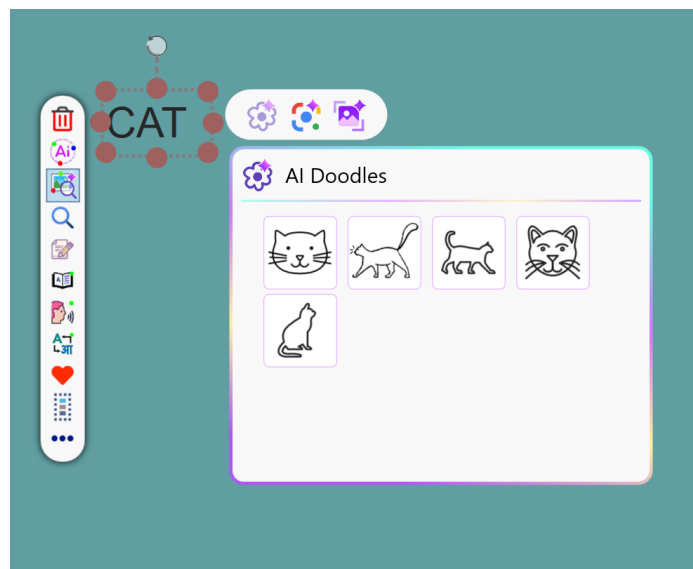
AI Image Search

User can search the AI generated Doodles, Images and AI generated Images for a text, Image or and written stroke. Select any text, image or stroke and click on  icon in context menu.

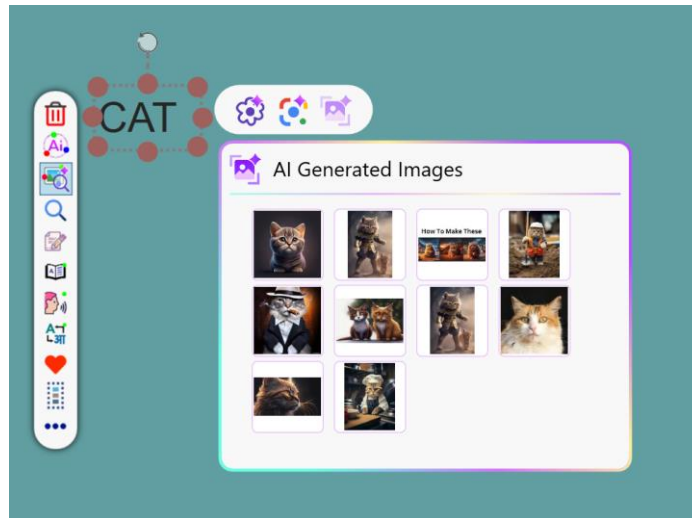
When you click on AI Image search you get 3 options in AI tabs, they are: Image search, Doodles and AI generated Image.



a. Image Search




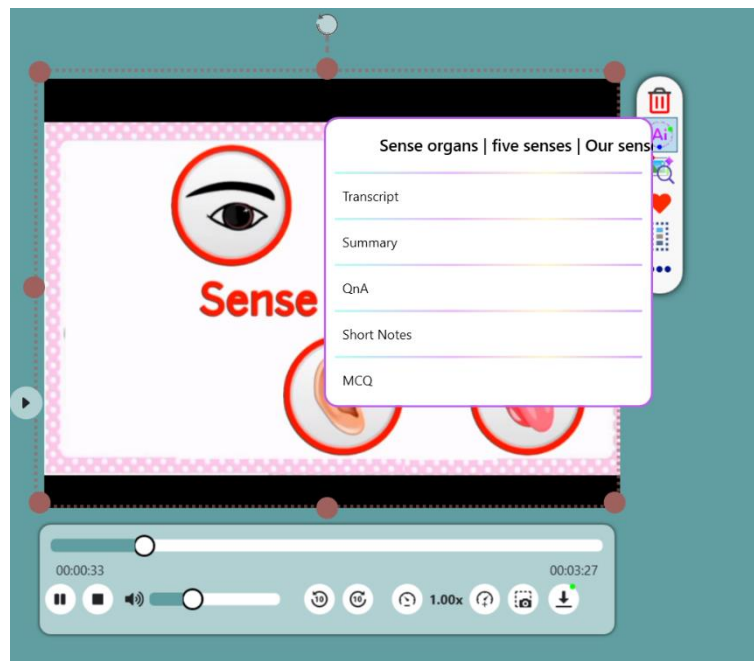
b. AI Doodles



c. AI Generated Images


AI Video

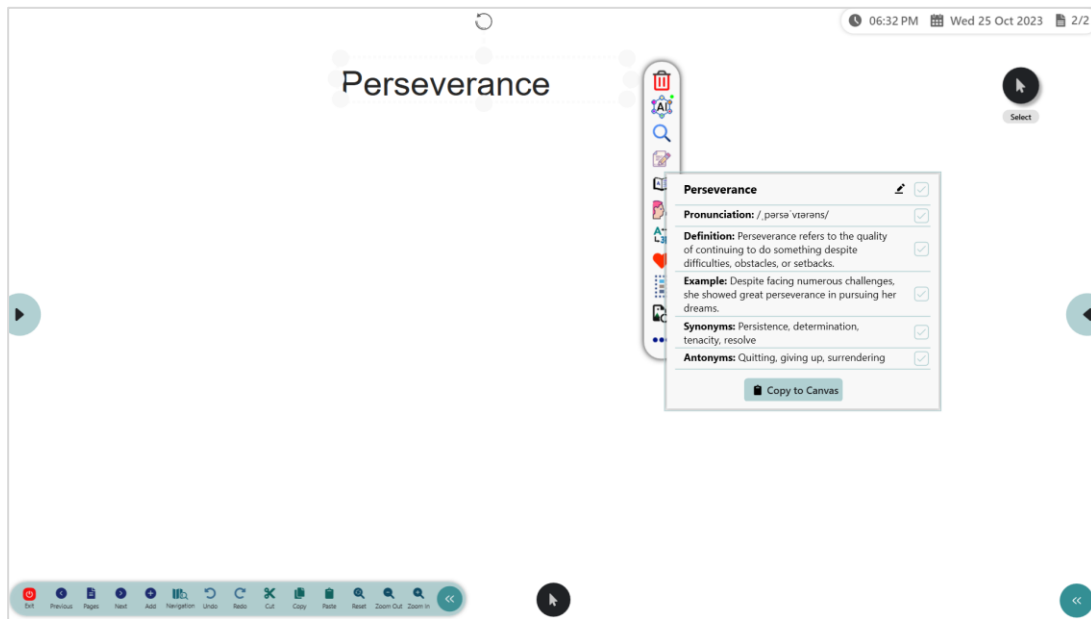
User can fetch summary of a YouTube video from the video. Click on video and then click on  button to fetch summary . click on the options given to fetch the Transcript, Summary, QnA, Short Notes and MCQs



Dictionary


User can find a pronunciation, definition, antonym and synonym of a text with the help of dictionary.

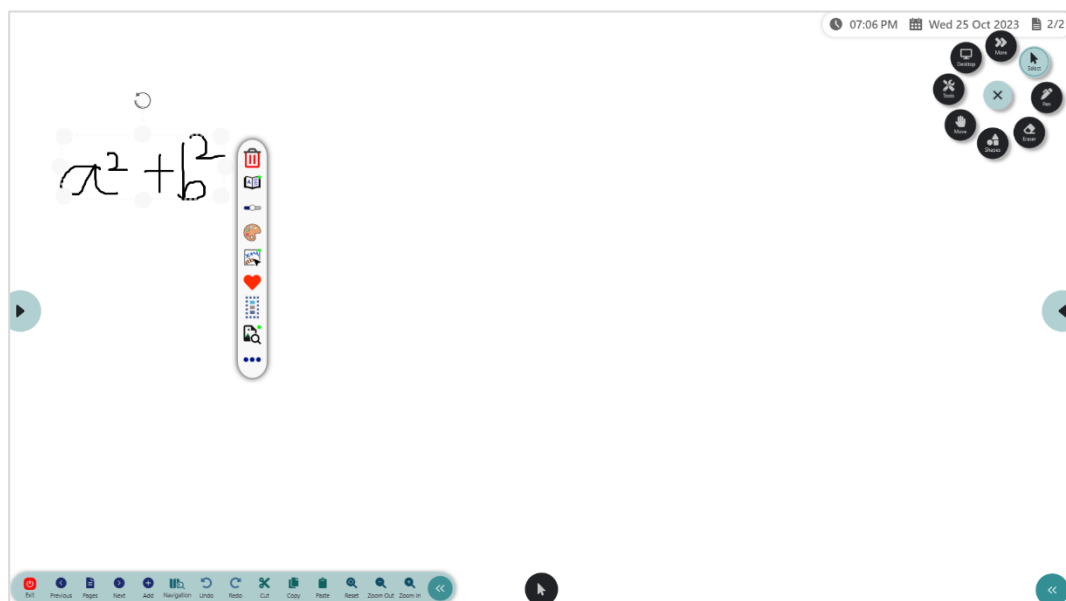
Select a word and click on  icon from the context menu. You can copy pronunciation, definition, antonym and synonym on to the canvas by selecting the check-boxes and copy to canvas.ss




Expression Recognition

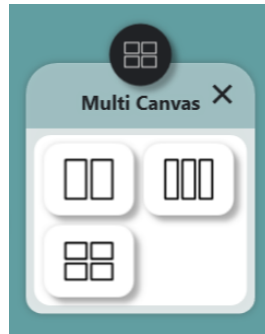
User can find a now convert strokes or handwritten expressions into text. Select a stroke or a handwritten

expression and click on  icon from the context menu. After clicking on the icon the handwritten expression will be converted into text

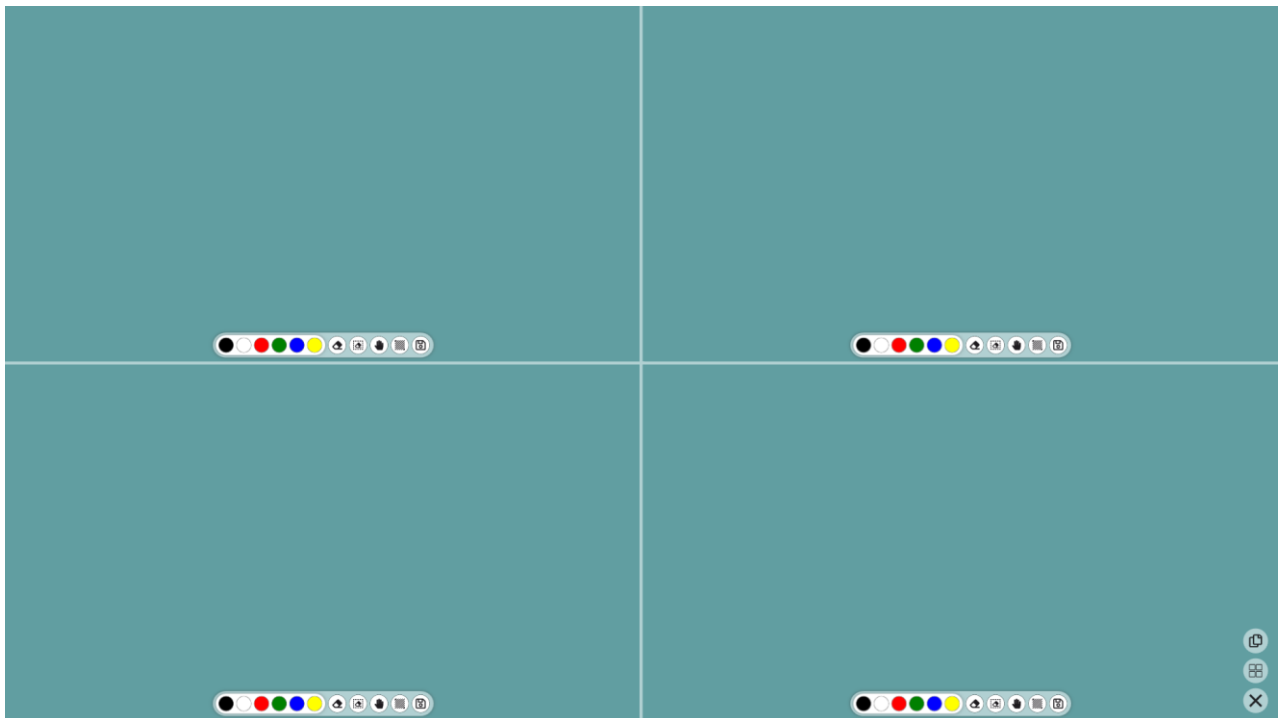


Multi Canvas

User can now add multiple canvas in SenseBoard. To Add Multiple Canvas – go to tools and  Select multi canvas. You can select up to 3 types of multi canvas.



Click on the desired number of canvas. You can now use each canvas separately. User can change the background of each canvas and can copy the content of Canvas onto the Main Canvas



Above contents of instruction manual are for SenseBoard application software.

Any updates on software version are made without prior notice.

Thanks again for choosing our products !



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