



DeepHub Canvas

User's Manual



Foreword

General

This manual introduces the functions and operations of the DeepHub Canvas software. Read carefully before using the platform, and keep the manual safe for future reference.

Safety Instructions

The following signal words might appear in the manual.

Signal Words	Meaning
 DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
 WARNING	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
 CAUTION	Indicates a potential risk which, if not avoided, could result in property damage, data loss, reductions in performance, or unpredictable results.
 TIPS	Provides methods to help you solve a problem or save time.
 NOTE	Provides additional information as a supplement to the text.

Revision History

Version	Revision Content	Release Time
V1.0.0	First Release.	January 2024

Privacy Protection Notice

As the device user or data controller, you might collect the personal data of others such as their face, audio, fingerprints, and license plate number. You need to be in compliance with your local privacy protection laws and regulations to protect the legitimate rights and interests of other people by implementing measures which include but are not limited to: Providing clear and visible identification to inform people of the existence of the surveillance area and provide required contact information.

About the Manual

- The manual is for reference only. Slight differences might be found between the manual and the product.

- We are not liable for losses incurred due to operating the product in ways that are not in compliance with the manual.
- The manual will be updated according to the latest laws and regulations of related jurisdictions. For detailed information, see the paper user's manual, use our CD-ROM, scan the QR code or visit our official website. The manual is for reference only. Slight differences might be found between the electronic version and the paper version.
- All designs and software are subject to change without prior written notice. Product updates might result in some differences appearing between the actual product and the manual. Please contact customer service for the latest program and supplementary documentation.
- There might be errors in the print or deviations in the description of the functions, operations and technical data. If there is any doubt or dispute, we reserve the right of final explanation.
- Upgrade the reader software or try other mainstream reader software if the manual (in PDF format) cannot be opened.
- All trademarks, registered trademarks and company names in the manual are properties of their respective owners.
- Please visit our website, contact the supplier or customer service if any problems occur while using the device.
- If there is any uncertainty or controversy, we reserve the right of final explanation.

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1 Introduction

DeepHub Canvas harnesses the capabilities of AI-powered Chat GPT to facilitate interactive pedagogy. It is fortified by DRM content protection to safeguard an extensive array of resources, encompassing over 3,000 videos, 30,000 3D objects, and 1,000 simulations. The platform performs collaborative assessments, creates polls, records and archives videos, and recognizes over 197 languages. It also has a text-to-speech function, which creates an immersive reading experience. This smart whiteboard is poised to revolutionize the educational landscape by elevating engagement levels, providing data security and fostering inclusivity within a seamlessly integrated framework.

2 Features

2.1 Dashboard

- My Library:

If the user clicks here, then the user will be able to see all the content they created along with anything they have imported.

- My Presentations:

If the user clicks on this option, all the presentations created by the user will be displayed here.

- My Community:

If a user clicks on this option, all the presentations created under the user's community will be displayed here.

- Session's Joined History:

If the user clicks on this option, then they will be shown what collaborative sessions they have recently joined.

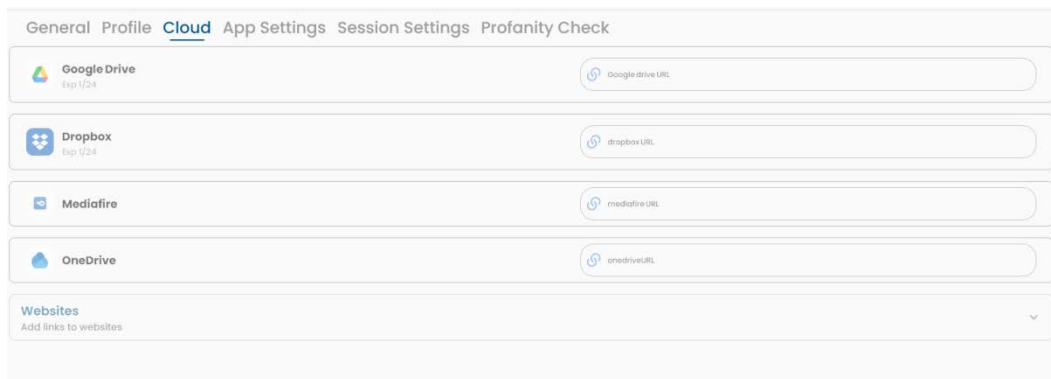
- Recordings:

If the user clicks this option, they will see all the screen recordings they have saved locally.

2.2 Settings

- Cloud:

User can adjust cloud settings here like linking cloud drives and accounts.



Service	Expiration	URL
Google Drive	Exp 1/28	google drive URL
Dropbox	Exp 1/28	dropbox URL
Mediafire		mediafire URL
OneDrive		onedrive URL
Websites		Add links to websites

- Profanity Check:

If the user selects this option, they can add new words into the profanity block list so that collaborators cannot use these words in any content created on the canvas.



- Profile:

General

Profile

Cloud

App Settings

Session Settings

Profanity Check



ullbbb

User

Name

ullbbb

Email

ull@m.com

Contact Number

Update

- App Settings:

DPR:

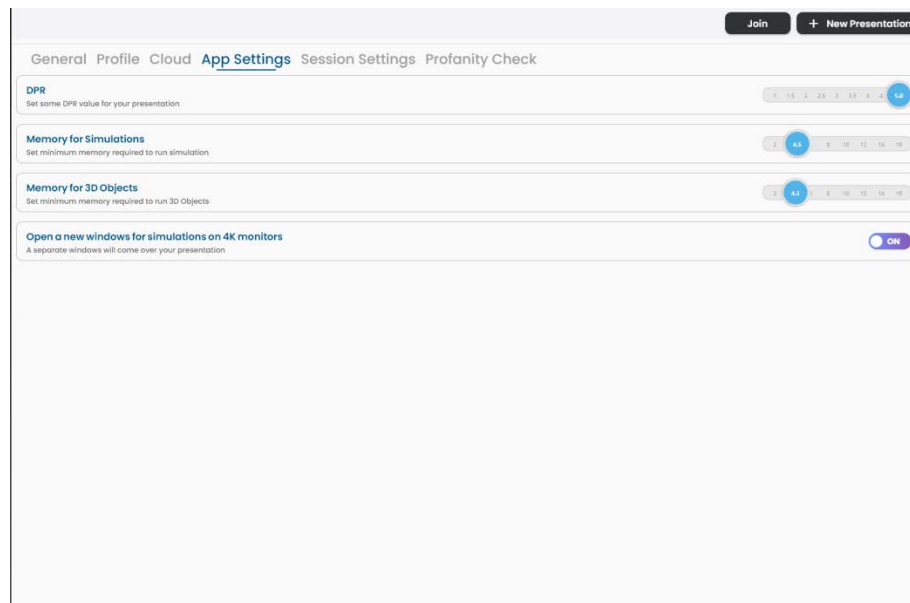
Here the user can adjust the DPR settings to best suit the panel that Canvas is installed on.

Memory for Simulations:

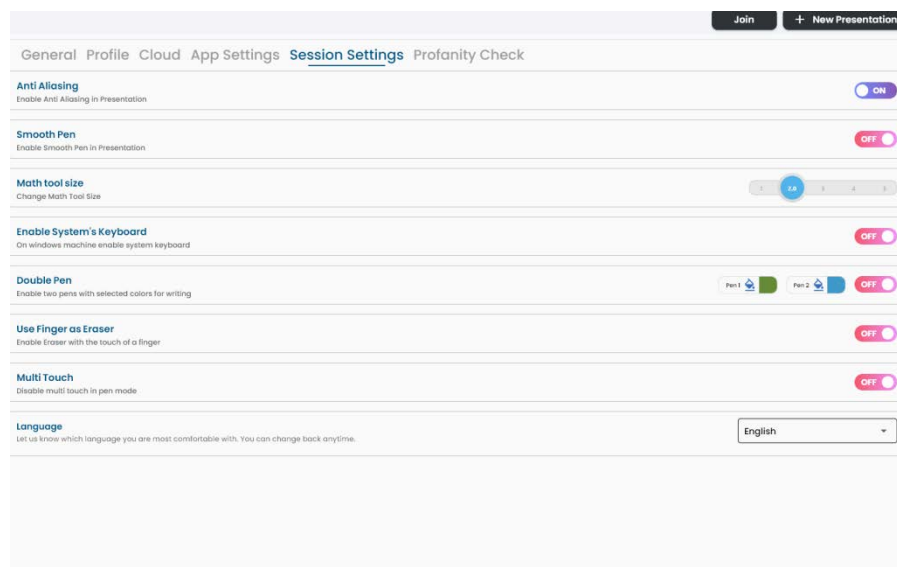
Here the user can set how much ram is allocated for simulations that can be added to the canvas.

Memory for 3d Objects:

Here the user can set how much ram is allocated for 3D objects that can be added to the canvas.



- Session Settings:



Anti-Aliasing:

Here the user can enable anti-aliasing which removes jagged edges and smoothens image on some displays.

Smooth Pen in presentation:

Here the user can enable smoothening of pen in presentation mode.

Math tool size:

Here the user can edit the size of math tools like the protractor. The default size which works well on panels is 50.

Enable System's Keyboard:

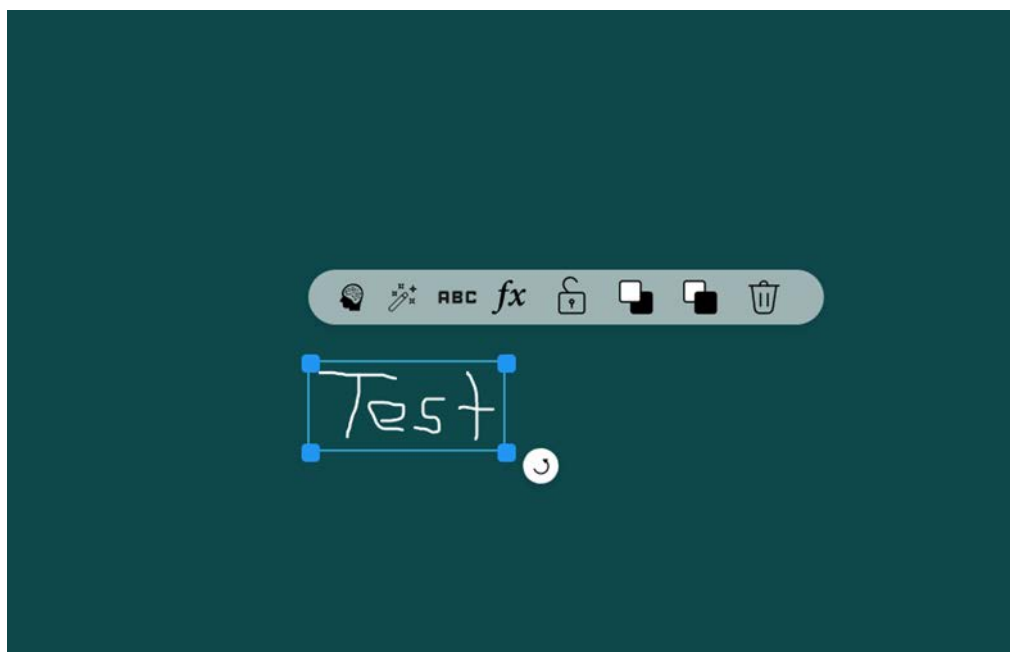
Here the user can toggle the system keyboard on or off.

Double Pen:

Here the user can toggle the use of multiple pens on the canvas.

2.3 Presentation

- Lasso Tool

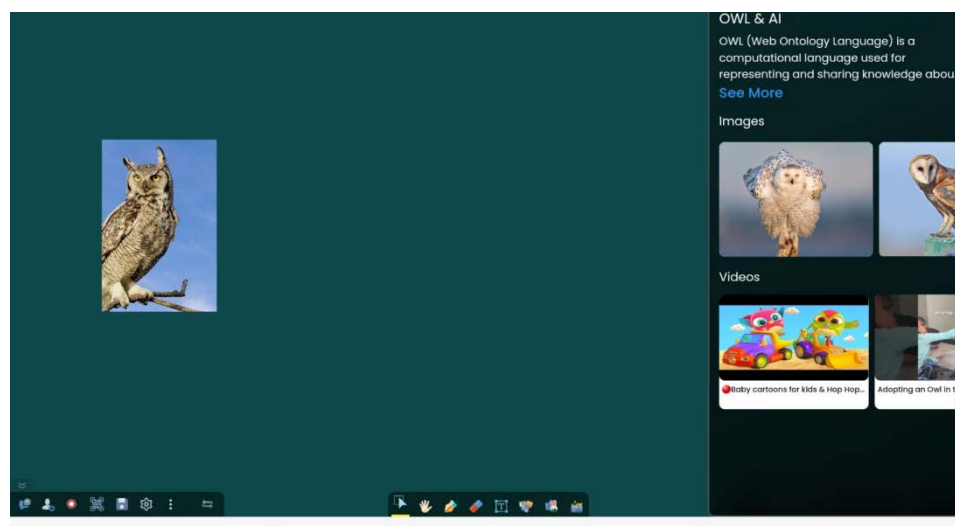


- Generative AI

If the user clicks this, it is used as a classifier tool which recognizes writing, drawing and all kinds of formulae separately and displays results accordingly.

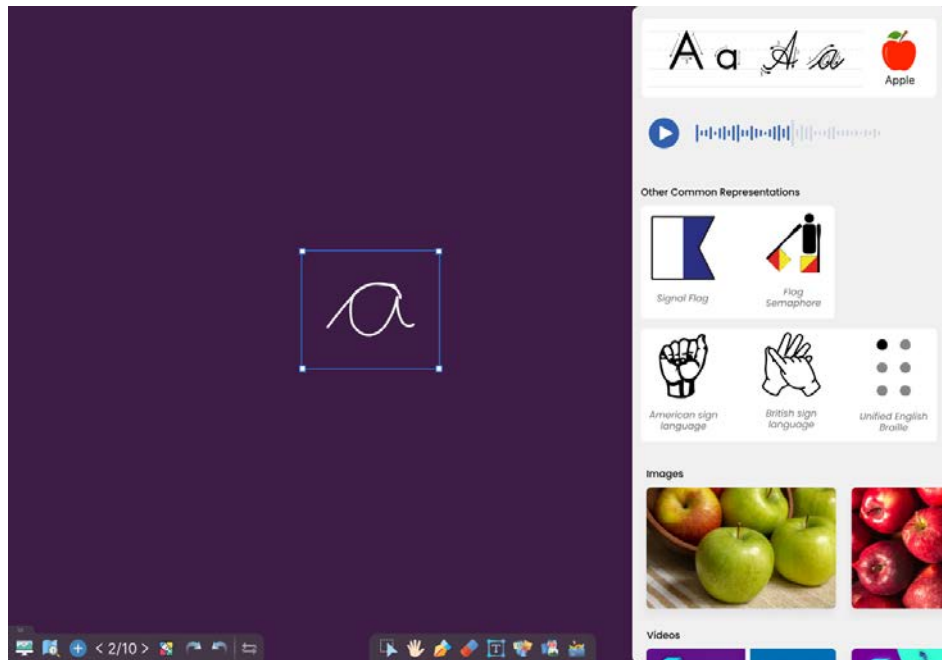
- Scanning an Image:

The user is able to scan an image and the generative AI gives a write up about the image scan.



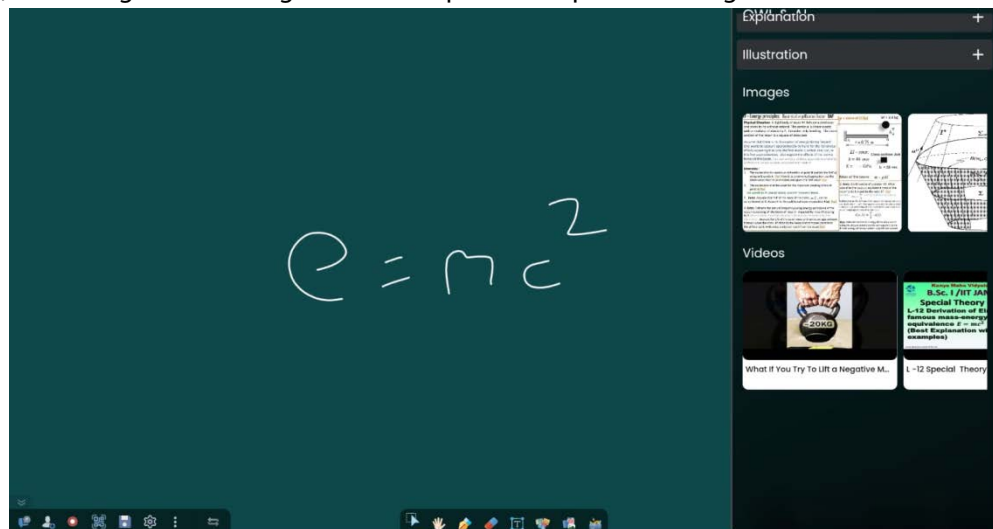
- Scanning handwriting:

The user is able to scan any writing done on the canvas and the generative AI gives a write up about the handwriting scan.



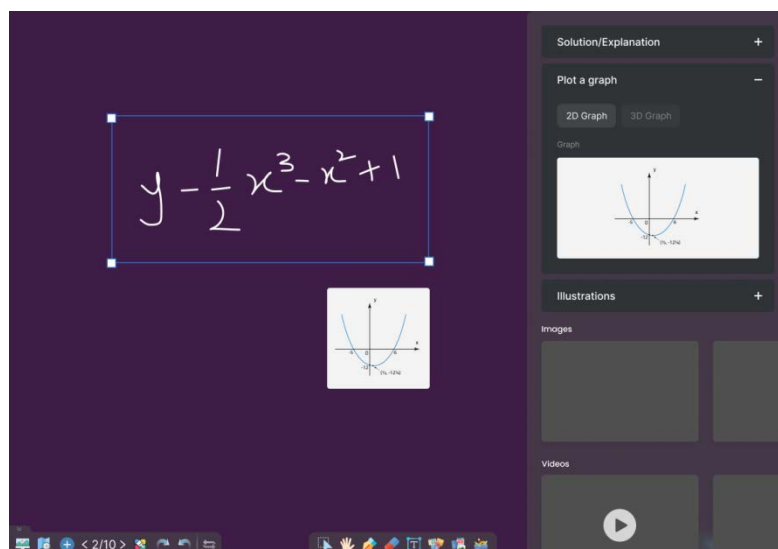
- Scanning General Equations:

The user is able to scan written or image formulas. If it is a general equation from physics or chemistry, then the generative AI gives a write up on the equations along with an illustration.



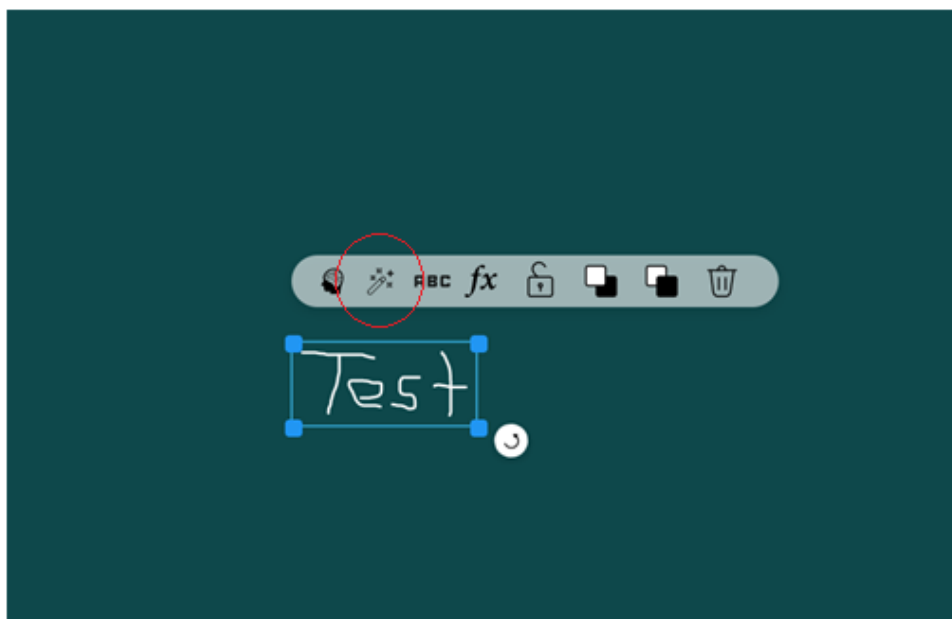
- Scanning Algebraic and Graphable equations:

The user is able to scan written or image formulas. If it is an Algebraic equation from math then the generative AI gives the option to solve for individual variables in equations along with an illustration. If the equation is a graphable one then the user gets the option to plot a graph based on the equation. This gives a graph that can be used on the canvas. This graph can be further edited and there is also an option to pull up a CAS calculator to further process the equation.



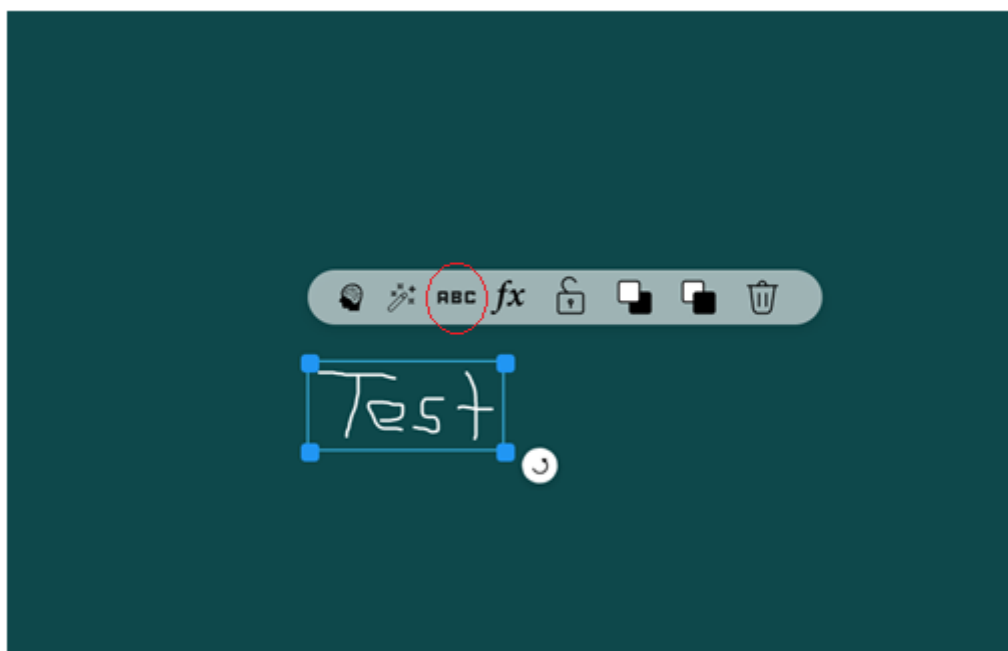
- Magic Pen

If user clicks the magic pen, it displays a list of all the related AI images. If user clicks on any image from the list, it generates a description, images, videos and Immersive reader related to that selected AI image.



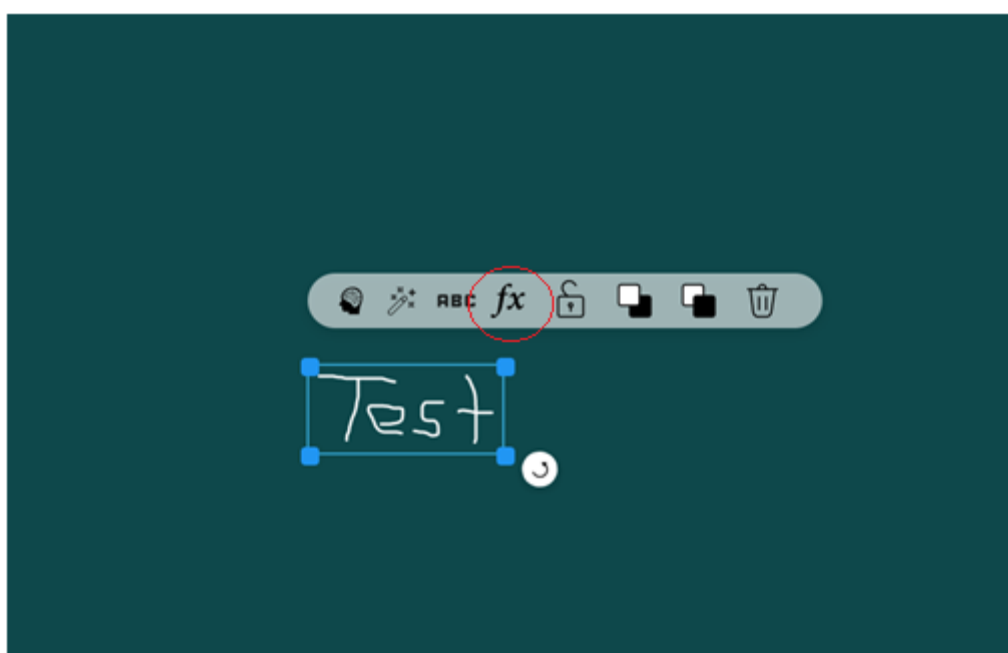
- Text Recognition

If user clicks on Text recognition option after writing anything, it converts that writing to text.



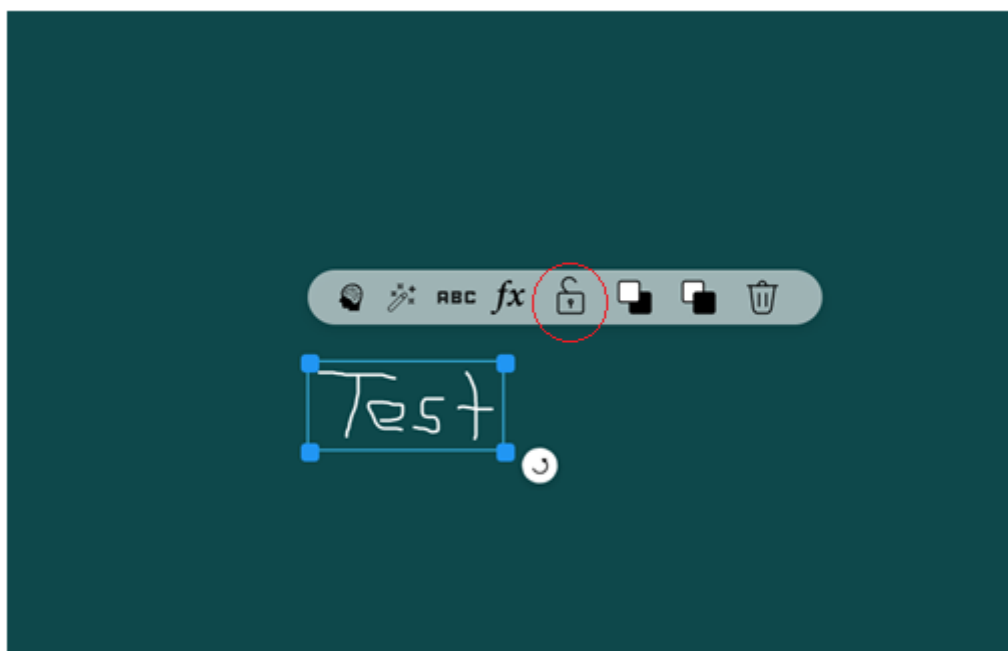
- Formula Recognition

If the user clicks on the Formula recognition option after writing any formula, it converts that writing to formula and also provides an option to edit that formula.



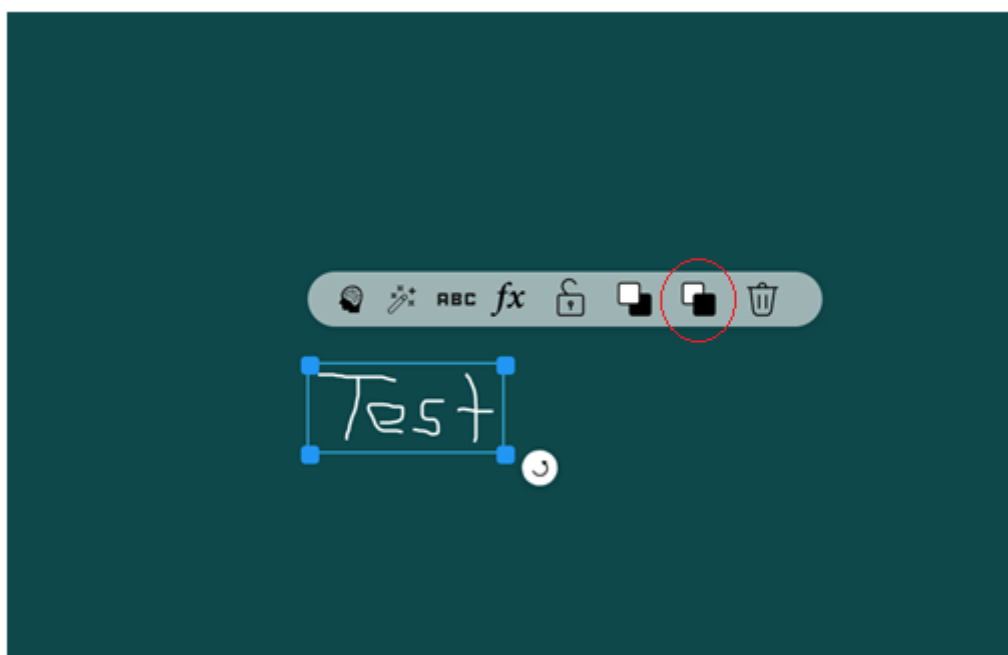
- Lock icon

If the user clicks on the Lock icon, interaction options will be locked until we unlock it in Lasso menu.



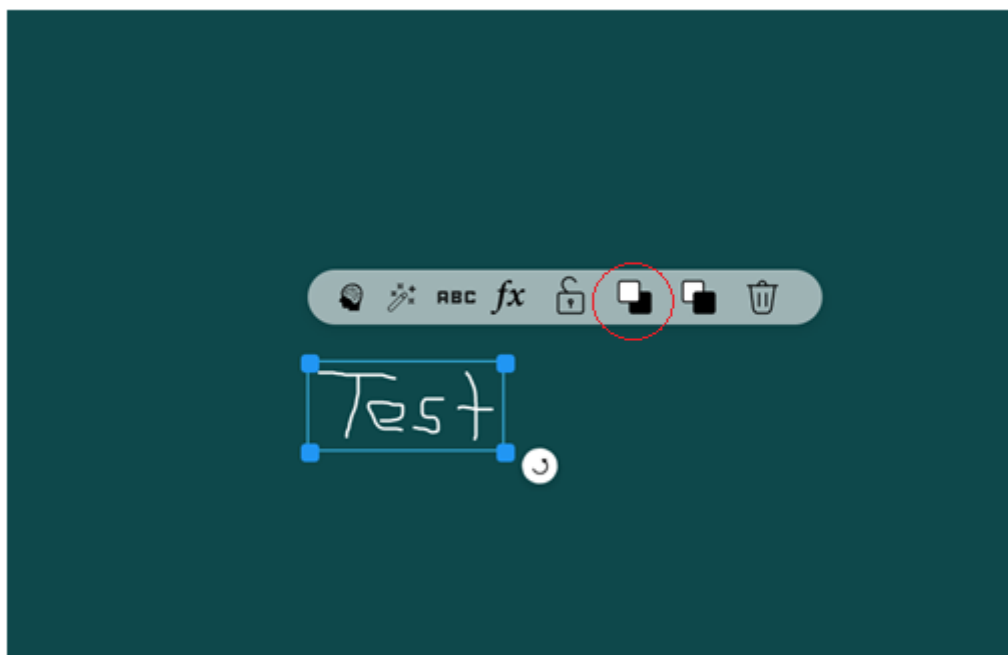
- Bring front and Bring all Front

If a user clicks on this option after placing multiple content on a single slide, it enables them to Bring selected content to the top for easy viewing.



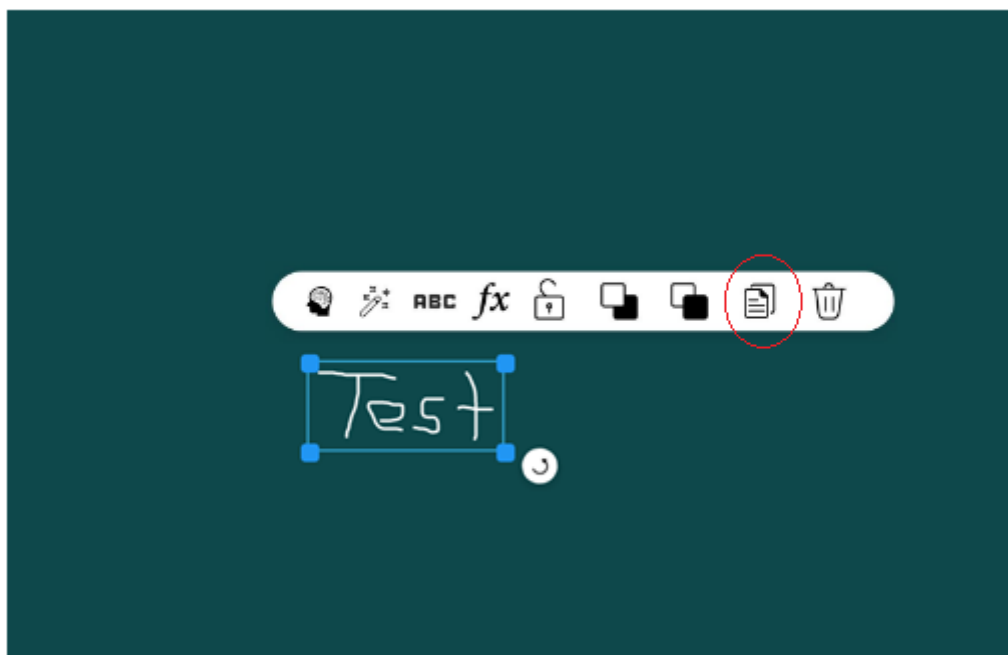
- Send Back and Send all Back

If a user clicks on this option after placing multiple content on a single slide, it enables them to Send selected content underneath the required content.



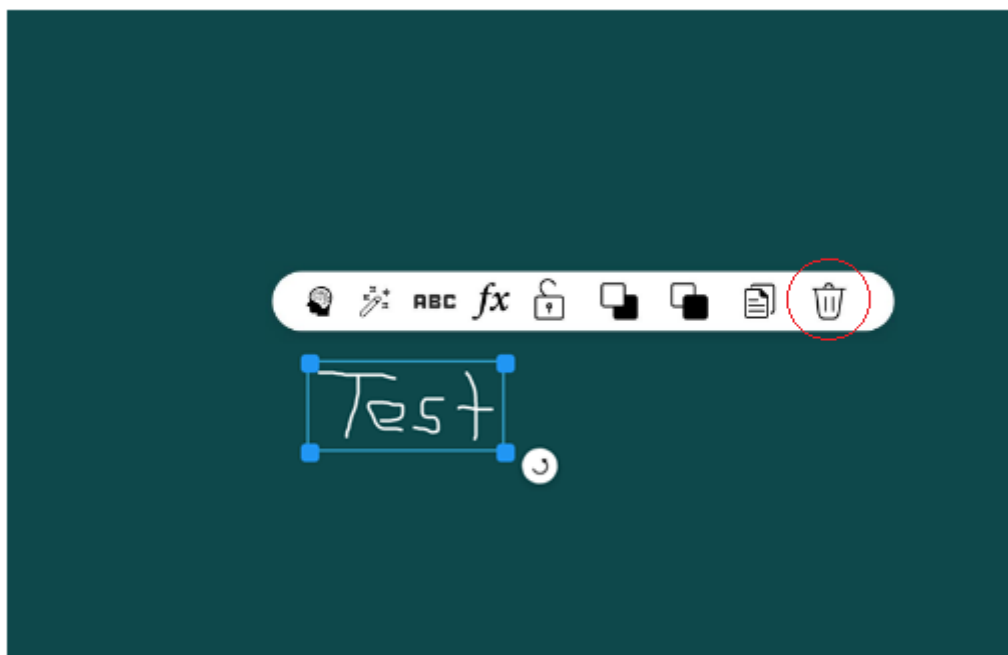
- Copy icon

If the user clicks on this Copy icon, a copy of the selected content will be displayed on the slide.



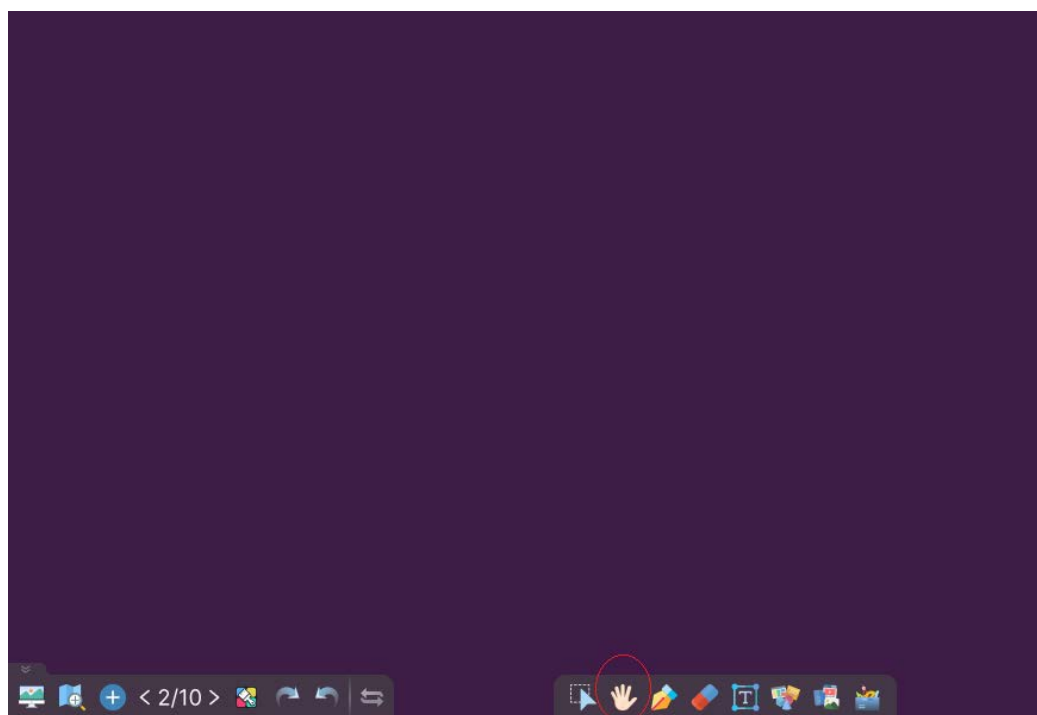
- Delete icon

If the user clicks on this Delete icon, selected content will be deleted from the slide.

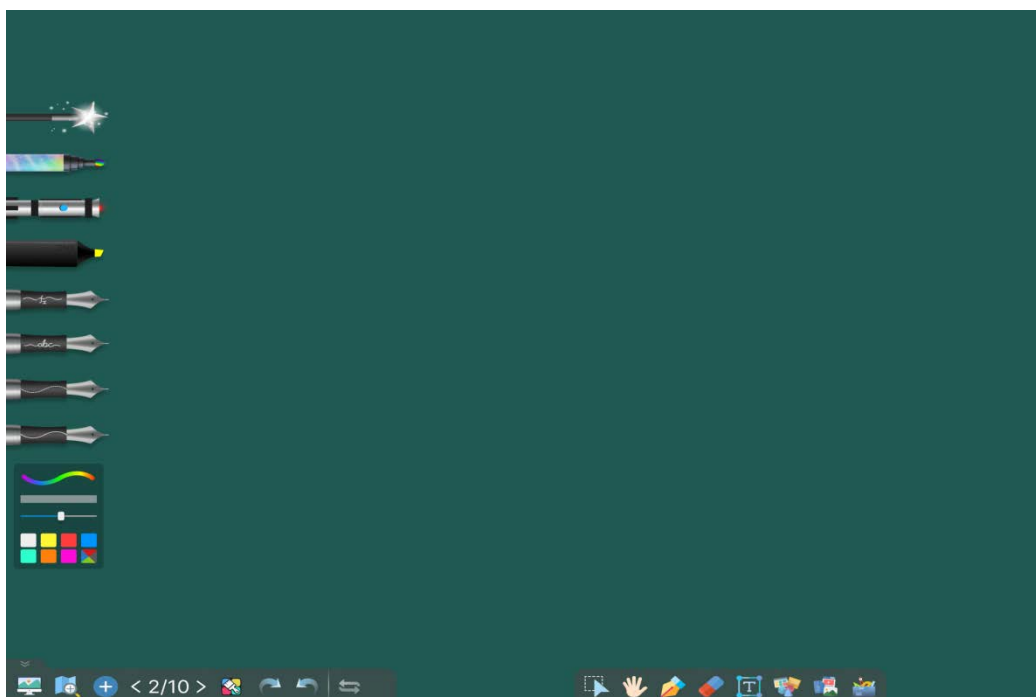


- Infinity Canvas

If the user enabled this feature, the slide can be used as an infinite board to add on their content without any break.



- Pens:



- Normal Pen:

If the user clicks on a normal pen, it allows the user to write on the slide with different colors and thickness.

- Highlighter:

If the user clicks on highlighter pen, it allows the user to highlight any content on the slide with different colors and thickness.

- Magic Pen:

If user writes with the magic pen, it displays a list of all the related AI images. If user clicks on any image from the list, it generates a Description, Images, Videos and Immersive reader related to that selected AI image

- Laser Pen:

If the user clicks on a Laser pen, it allows the user to just highlight or select around required content on the slide just for a fraction of seconds to clear the clutter over the board.

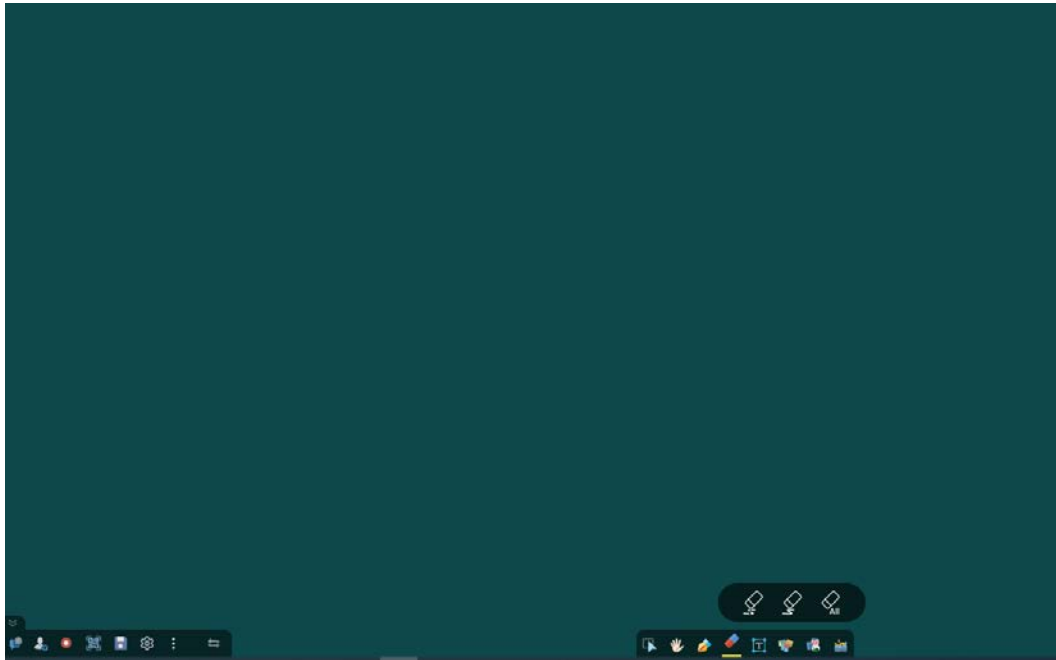
- Dashed Pen:

If the user clicks on a dashed pen, it allows the user to write dashed lines with different colors and thickness.

- Thickness and Colors picker:

If the user clicks on thickness and color picker, it enables various sizes and colors for the pens respectively.

- Erasers:



- Pixel Eraser:

If the user clicks on the Pixel eraser, it allows the user to erase any writing pixel by pixel.

- Element Eraser:

If the user clicks on Element eraser, it allows the user to erase the entire stroke.

- Clear All:

If the user clicks on Clear All, it allows the user to erase the entire content on the slide.

- Text tools:



- Undo

If the user clicks on Undo, the user's action on the slide can be undone.

- Redo

If a user clicks on Redo, the user's action on the slide can be redone.

- Bold

If the user clicks on the Bold option, selected text will be converted to Bold.

- Italic

If the user clicks on the Italic option, selected text will be converted to Italic.

- Underline

If the user clicks on the Underline option, selected text will be underlined.

- Strike through

If the user clicks on the Strikethrough option, selected text will be stricken.

- Font Selection

If the user clicks on the Font selection option, the font will be applied to selected text.

- Font Sizes

If the user clicks on the Font Size option, the font size of the selected text can be changed.

- Font Colors

If the user clicks on the Font colors option, font color will be applied to selected text.

- Alignment or Bullet points option

If the user clicks on the Alignment or bullet points option, selected text will be displayed point wise.

- Heading / Body size presets

If the user clicks on Heading options, selected text will be converted to heading types.

- Copy option

If the user clicks on the Copy option, selected text will be copied.

- Insert:

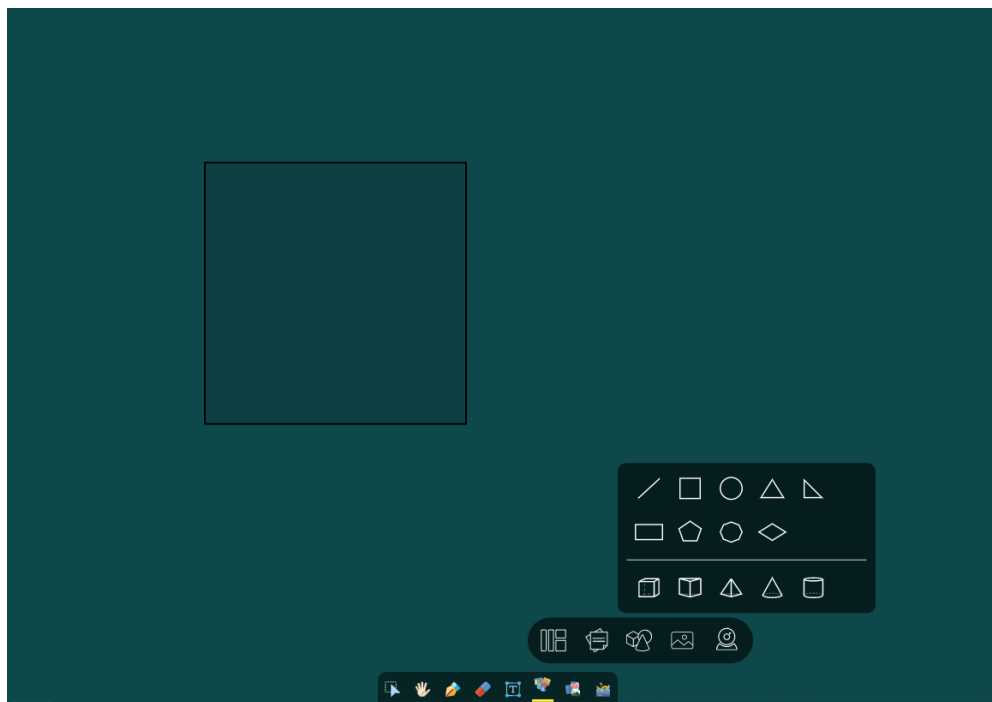


- Templates

If the user clicks on the Templates module, selecting any type of template in the list will be added to the slide.

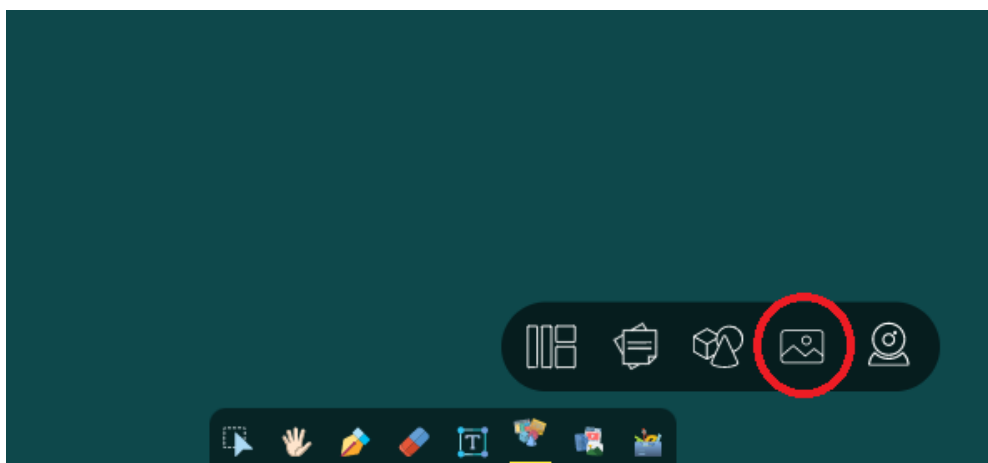


- If the user clicks on 2D, 3D Shapes, the user will be able to add selected shapes to the slide.



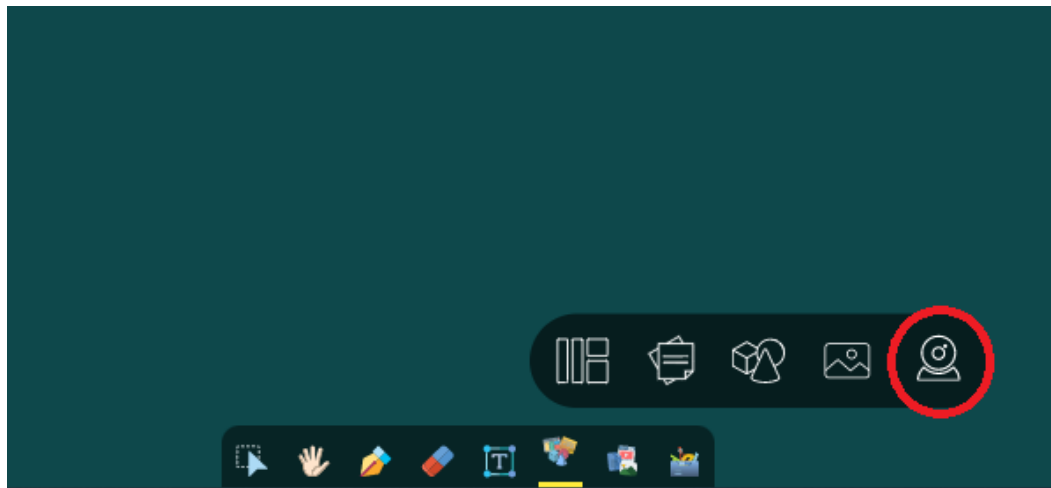
- Local Images

If the user clicks on the Local images icon, the user will be able to add selected images from the local directory to the slide.



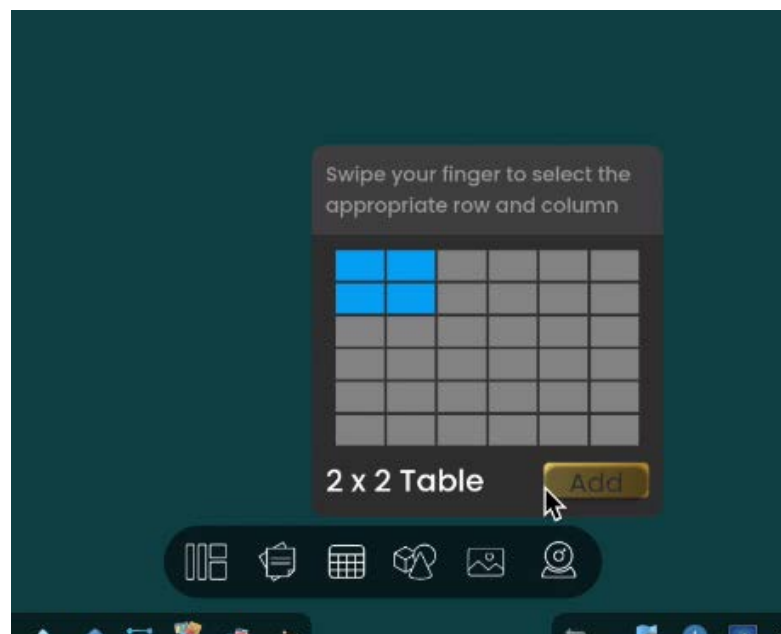
- Camera

If the user clicks on the Camera icon, it enables the device camera.



- Table:

User can select this option to create a table and adjust it to their liking to explain what they need.

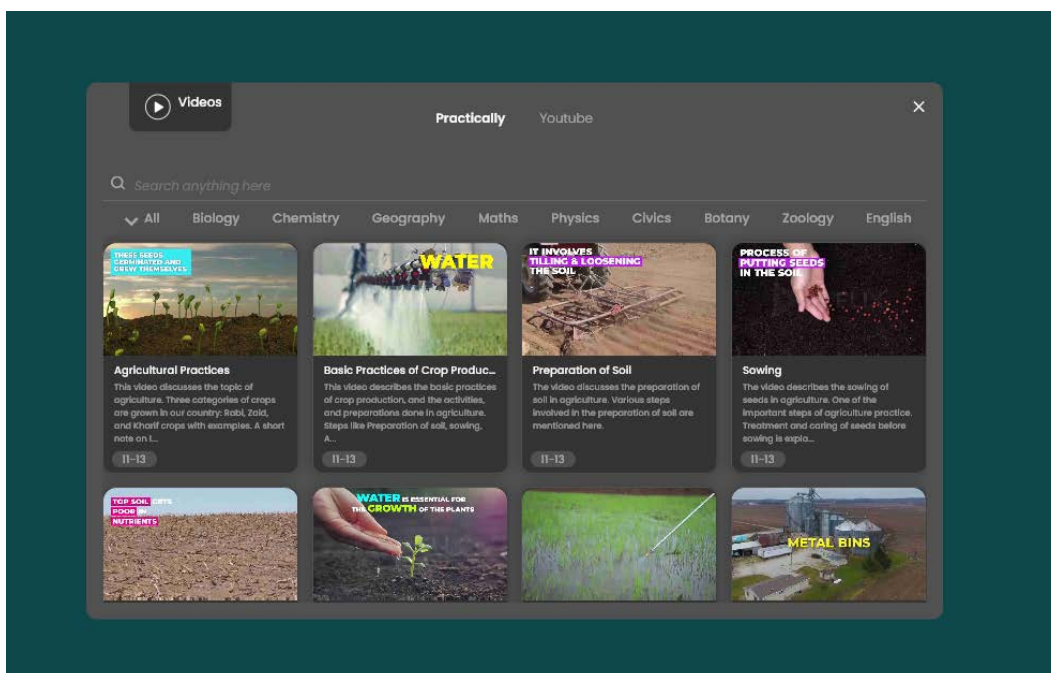


- Insert DRM



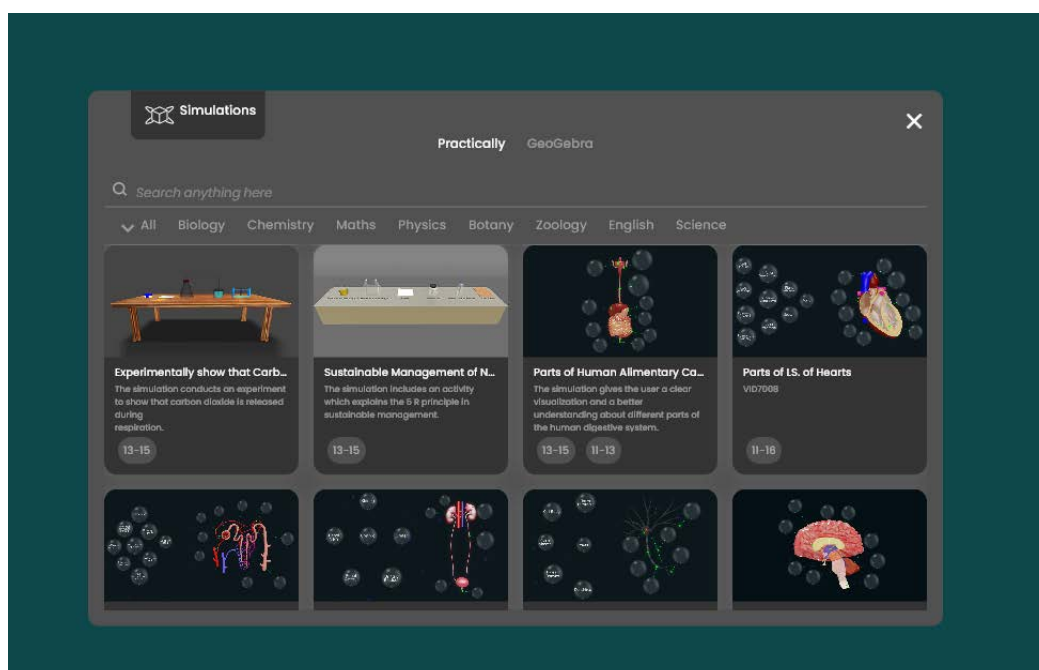
- DRM Content:

Video (practically, YouTube). If the user clicks on Videos icon, it enables the user to add both practically as well as YouTube videos to the slide.



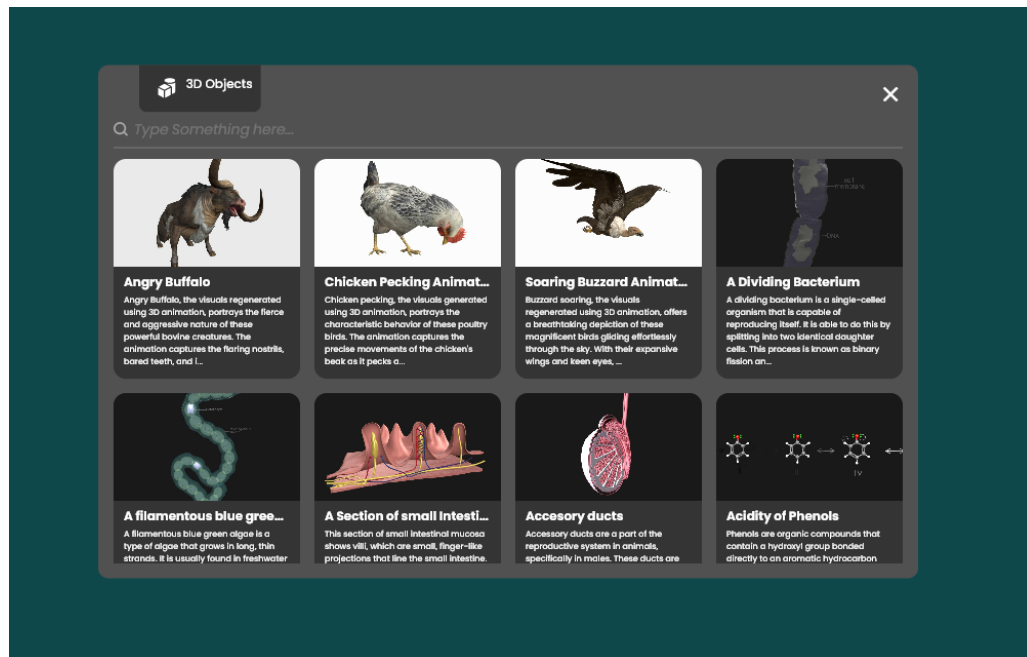
- Simulation (practically, Geogebra)

If user clicks on Simulations icon, it enables the user to add both practically as well as Geogebra simulations to the slide.



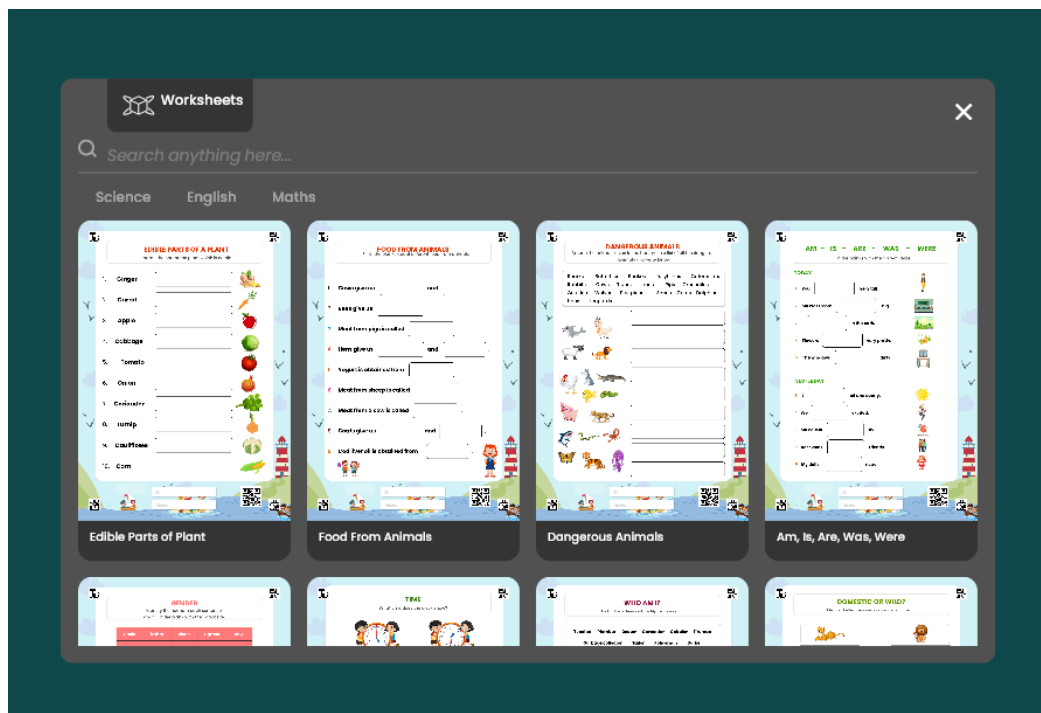
- 3D Objects

If user clicks on 3D Objects icon, it enables the user to add 3D Objects to the slide



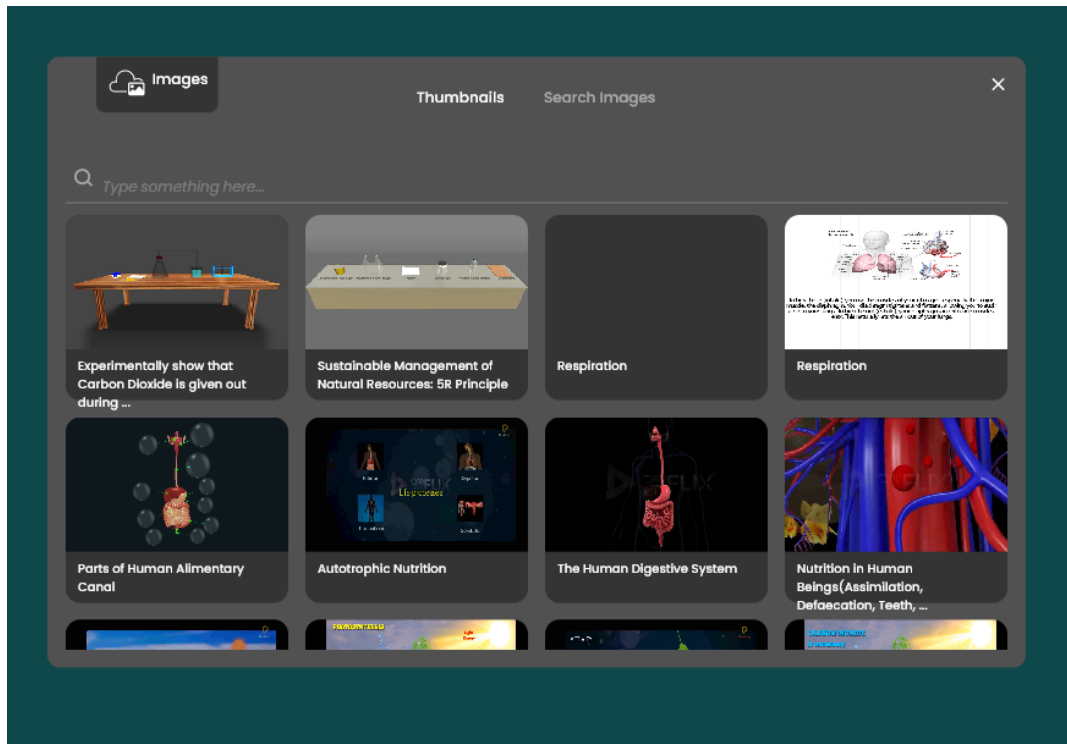
- Worksheets

If the user clicks on Worksheets icon, it enables the user to add Worksheets to the slide.



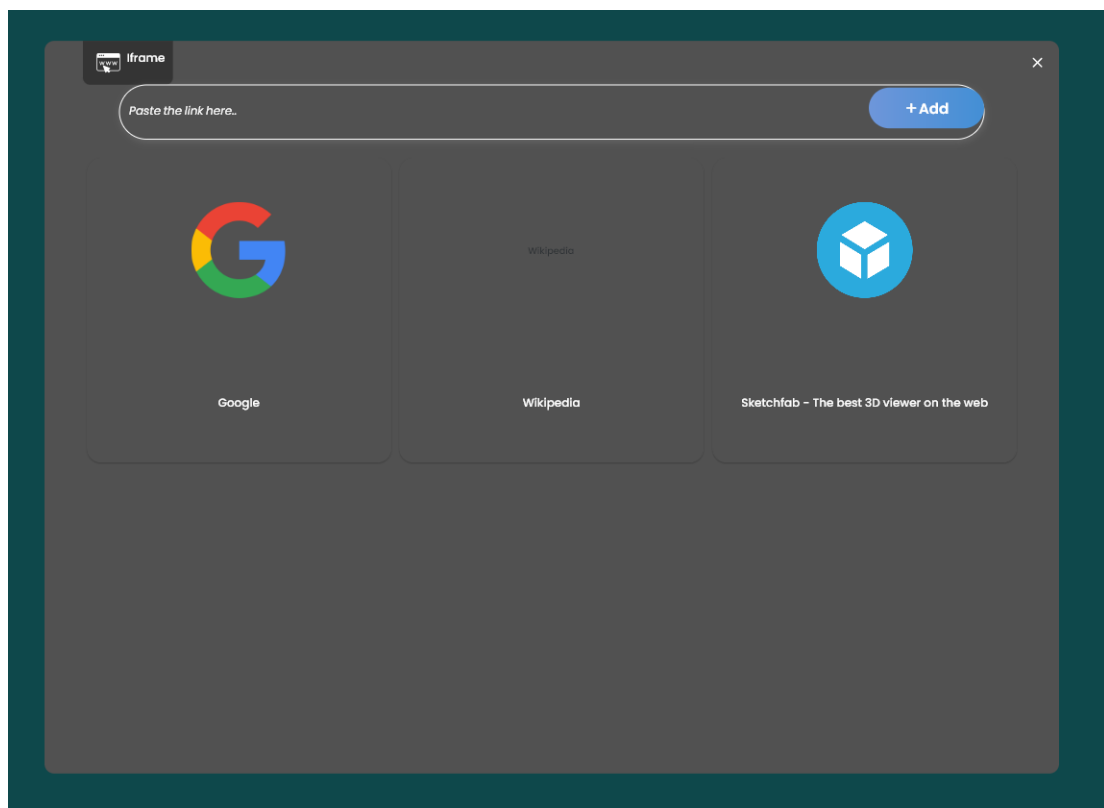
- Images (thumbnails, Google Images)

If the user clicks on the Images icon, it enables the user to add both practically as well as Google images to the slide.

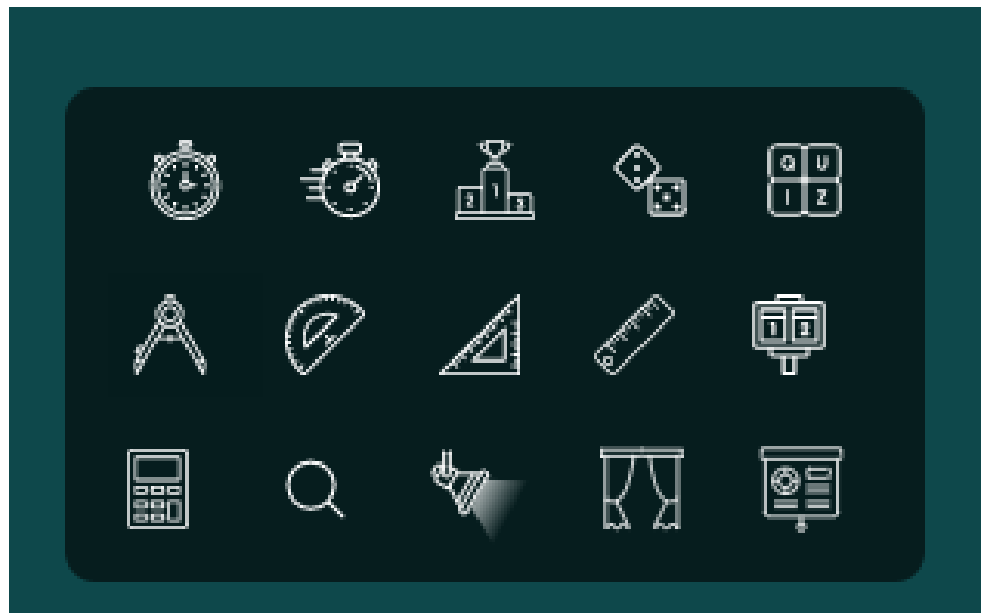


- Iframe / Browser –

If the user clicks on the Iframe option, it enables the user to interact with various browsers.

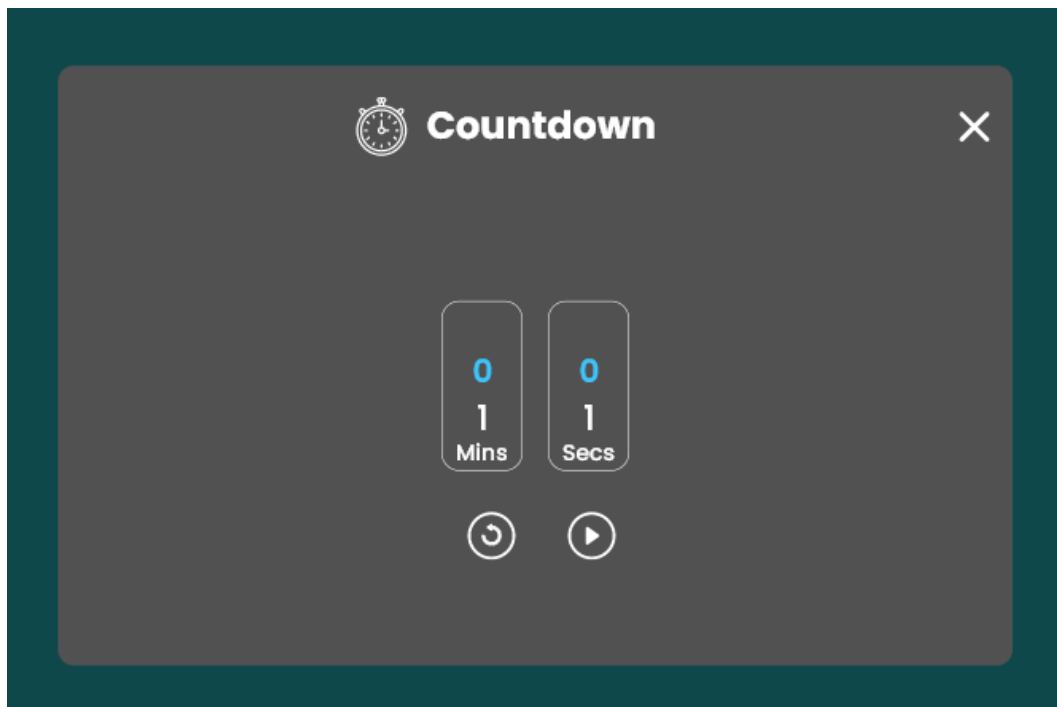


- Toolbox:



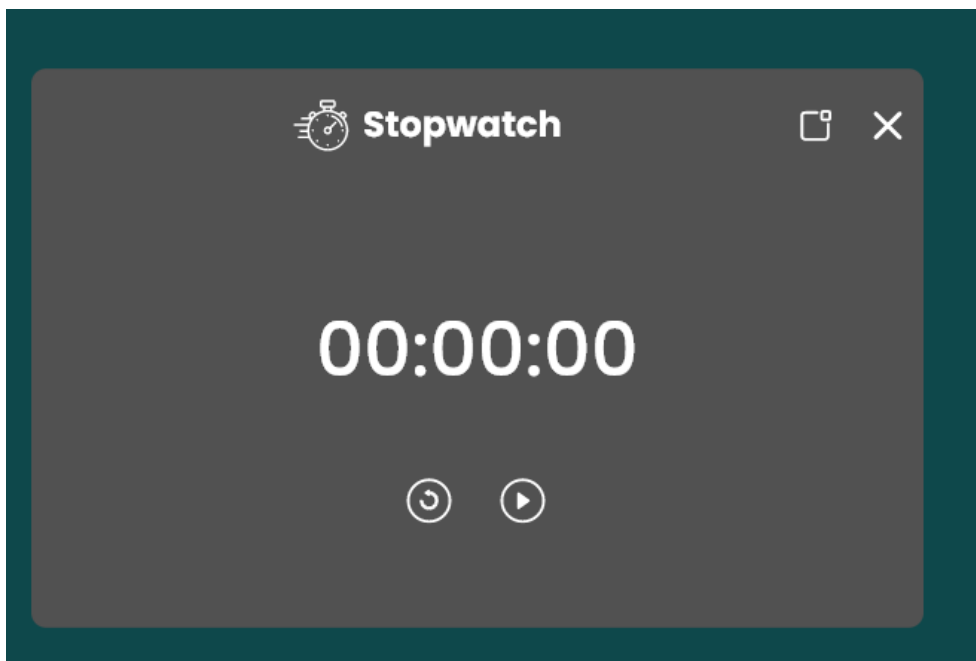
- Countdown

If the user clicks on the Timer icon, it enables the countdown timer.



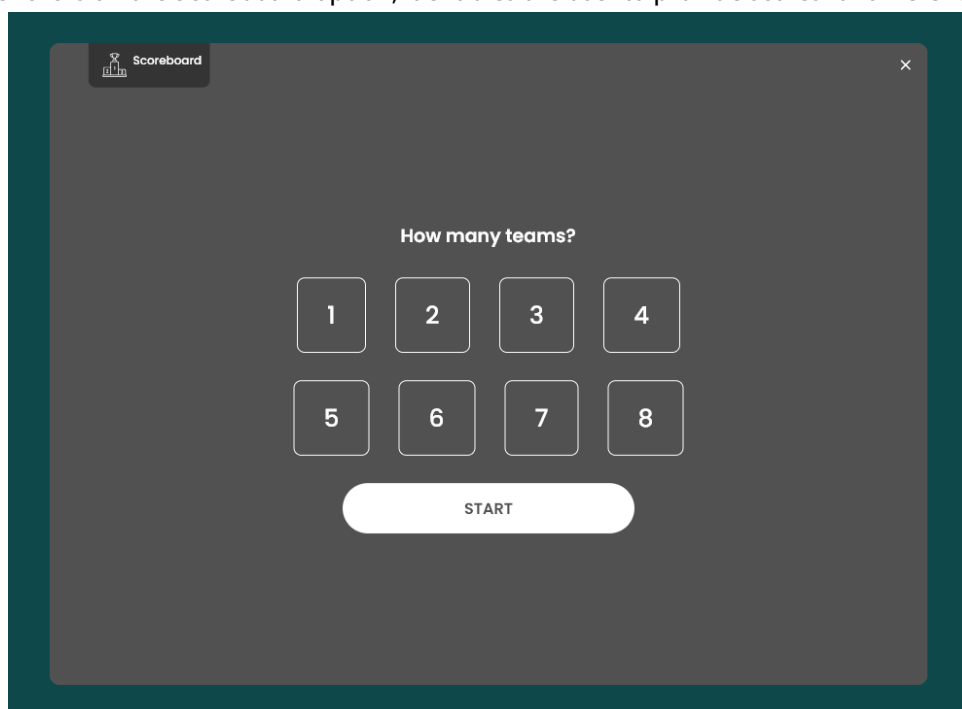
- Stopwatch

If the user clicks on the Stopwatch option, it enables the stopwatch.



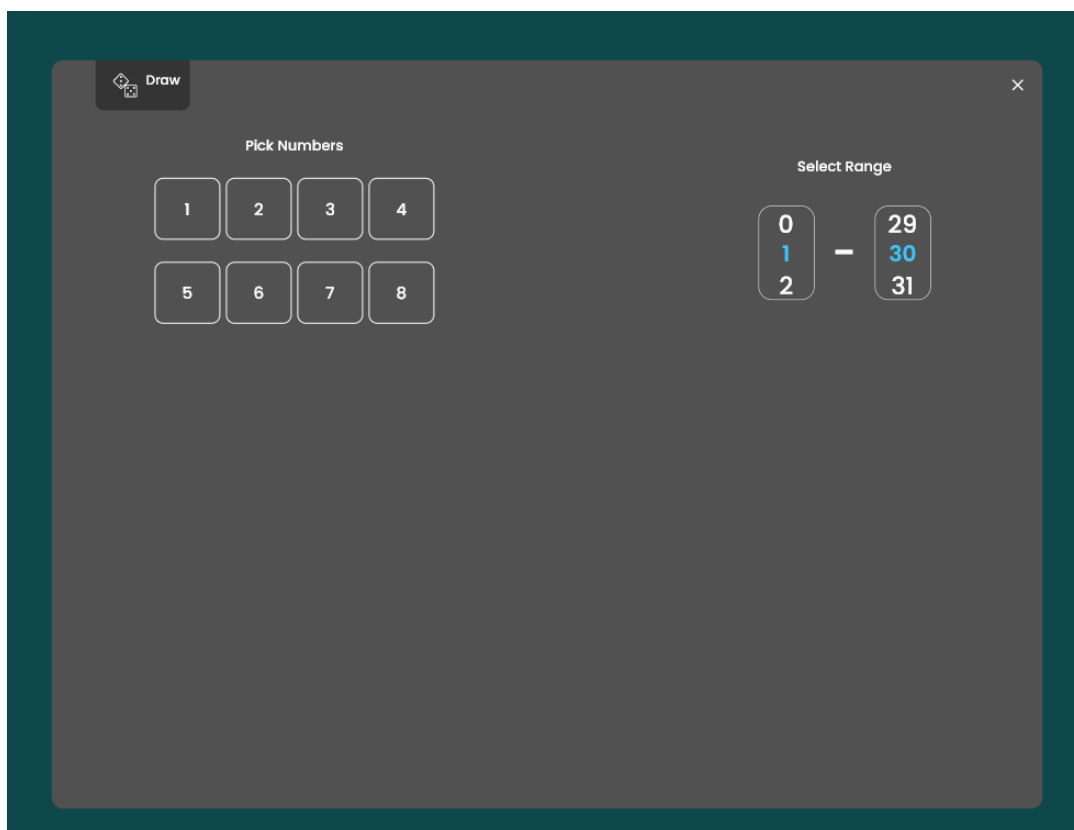
- Scoreboard

If the user clicks on the Scoreboard option, it enables the user to provide scores for different teams.



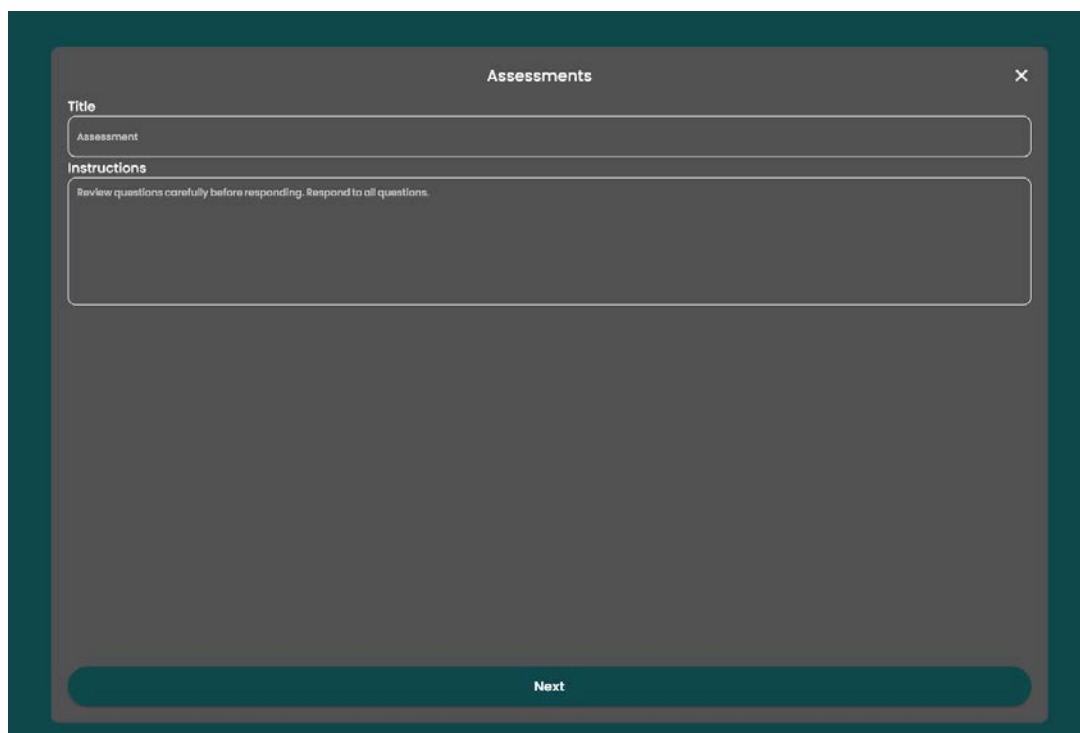
- Draw

If the user clicks on the Draw option, it enables the user to draw the dice.



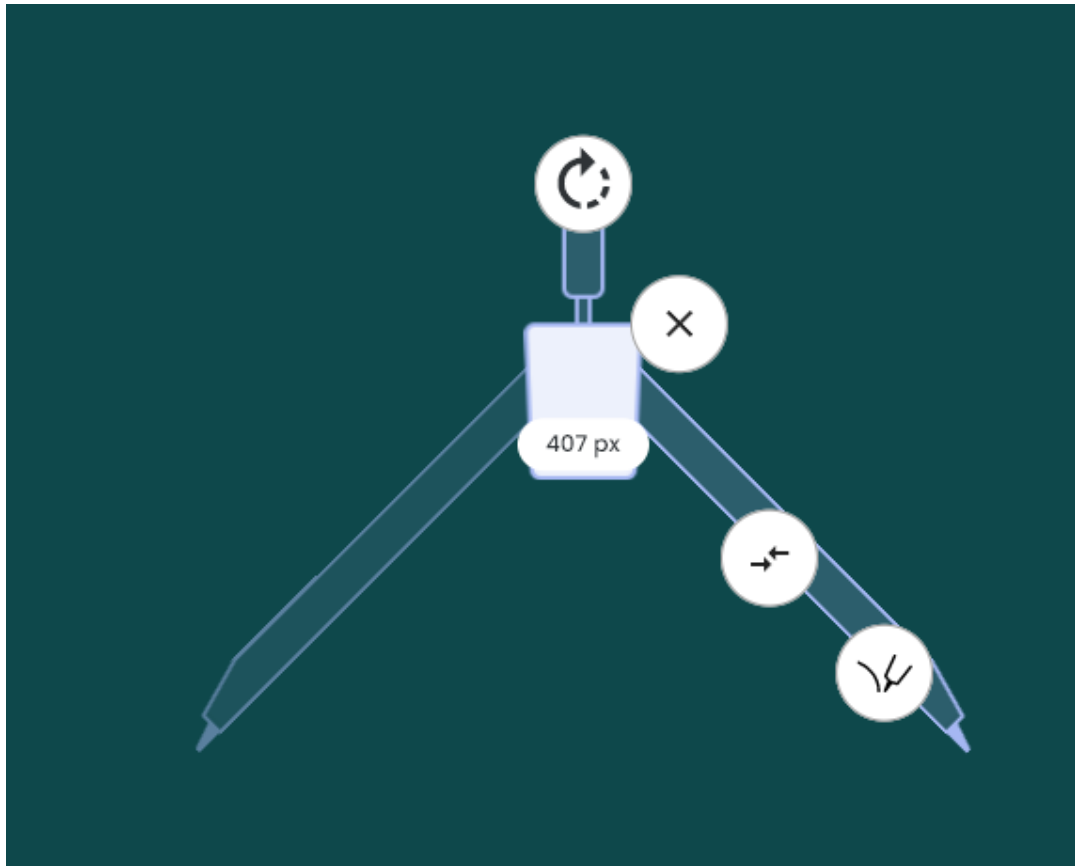
- Quiz/ Assessments:

If the user clicks on the Quiz option, it enables the user to create a quiz.



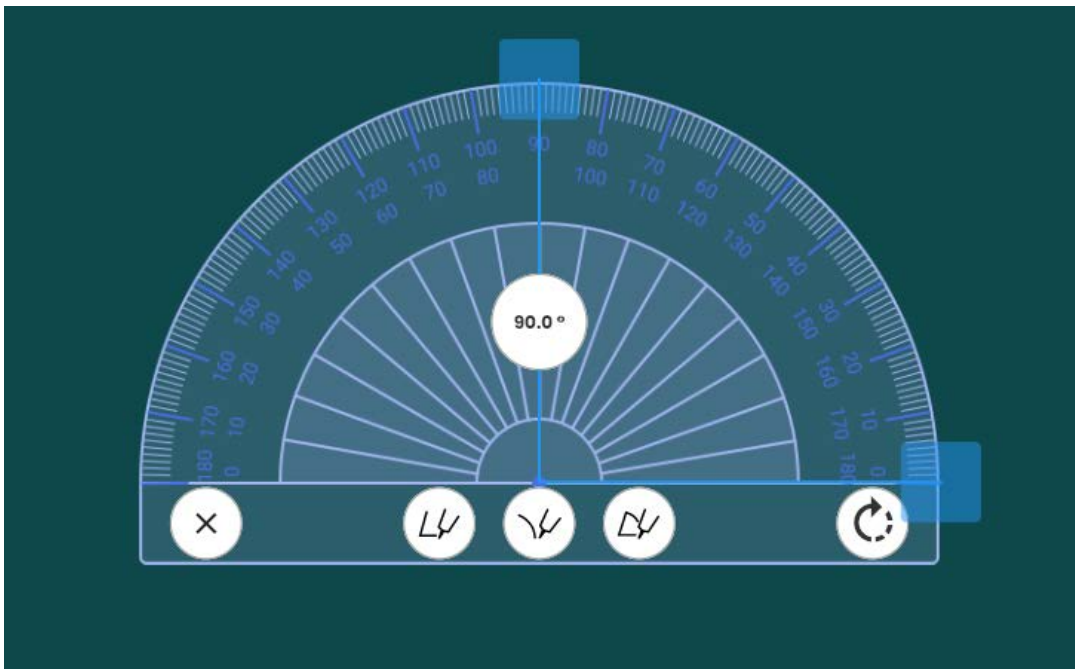
- Compass

If the user clicks on the compass option, it enables the user to use the compass.



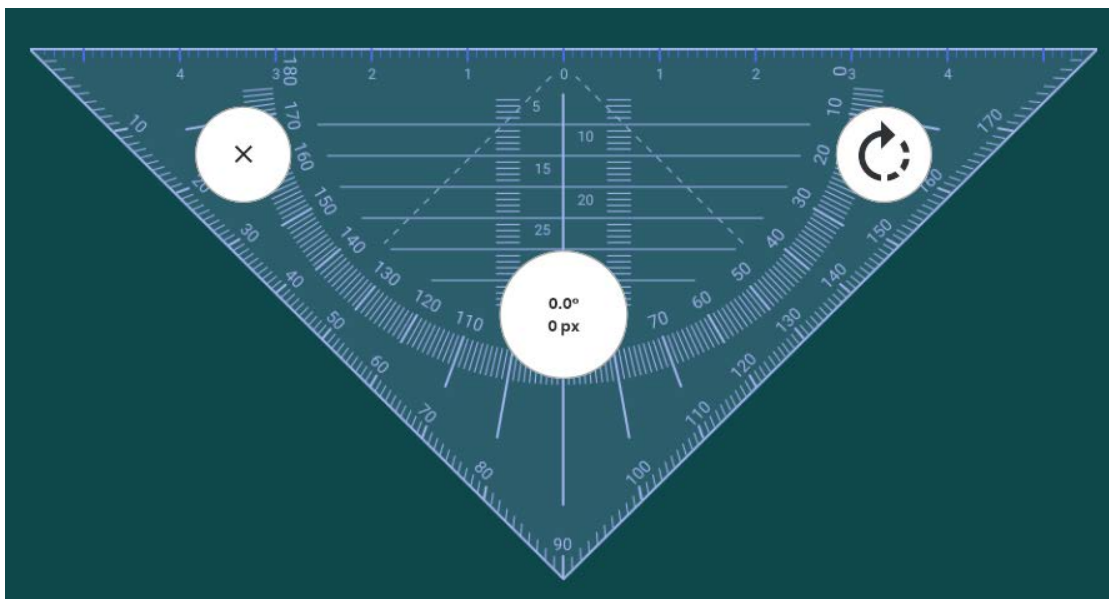
- Protractor

If the user clicks on the Protractor option, it enables the user to use the protractor.



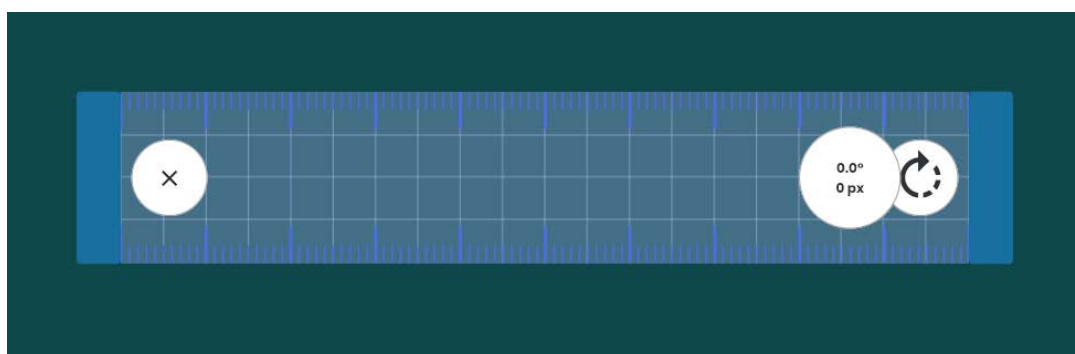
- Set Square

If the user clicks on the Set Square option, it enables the user to use the set square.



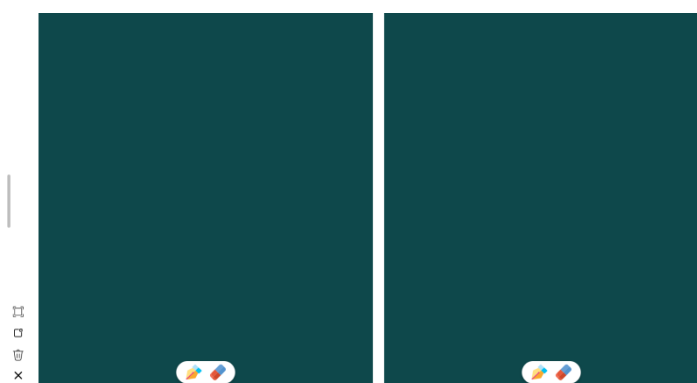
- Ruler

If the user clicks on the Ruler option, it enables the user to use the ruler.



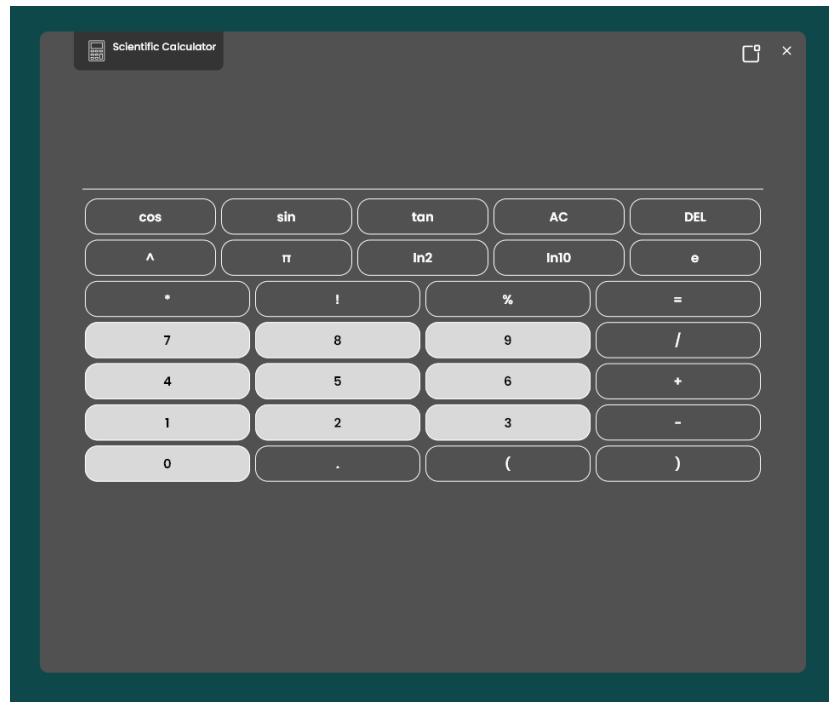
- Split Screen

If the user clicks on the Split screen option, it enables multiple users to write at a time by splitting the screen.



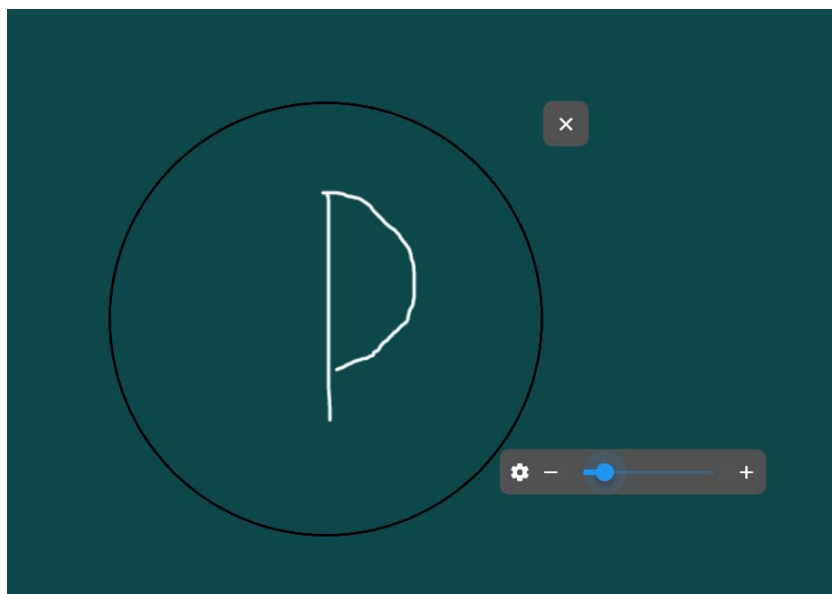
- Calculator

If the user clicks on the Calculator option, it enables the user to use the calculator.



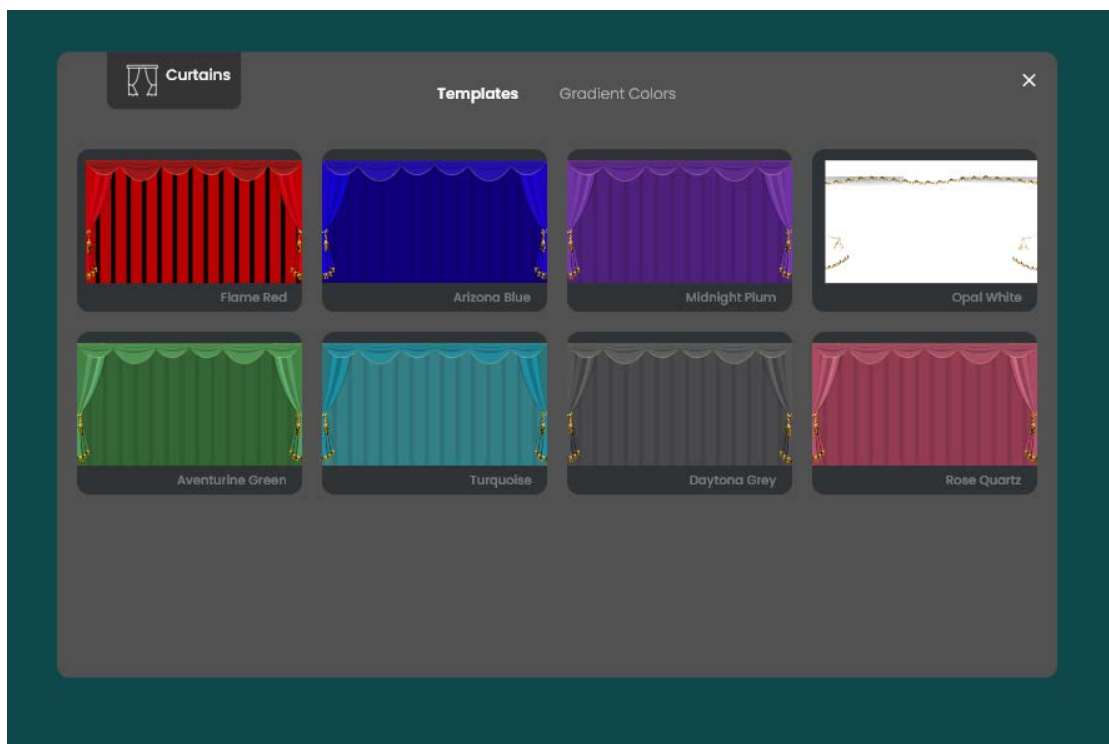
- **Magnifier**

If the user clicks on the Magnifier option, it enables the user to use the magnifier for enlarging the content on the slide.



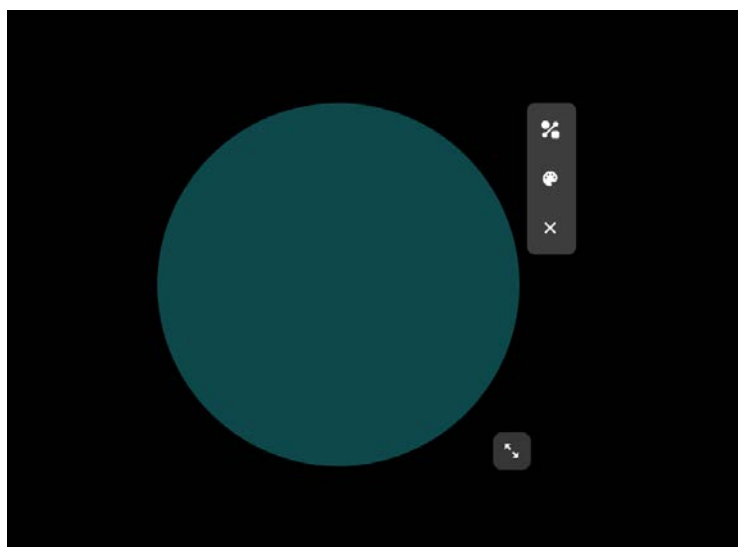
- **Curtain**

If the user clicks on the Curtain option, it enables the user to select curtains for hiding the content in the slide.



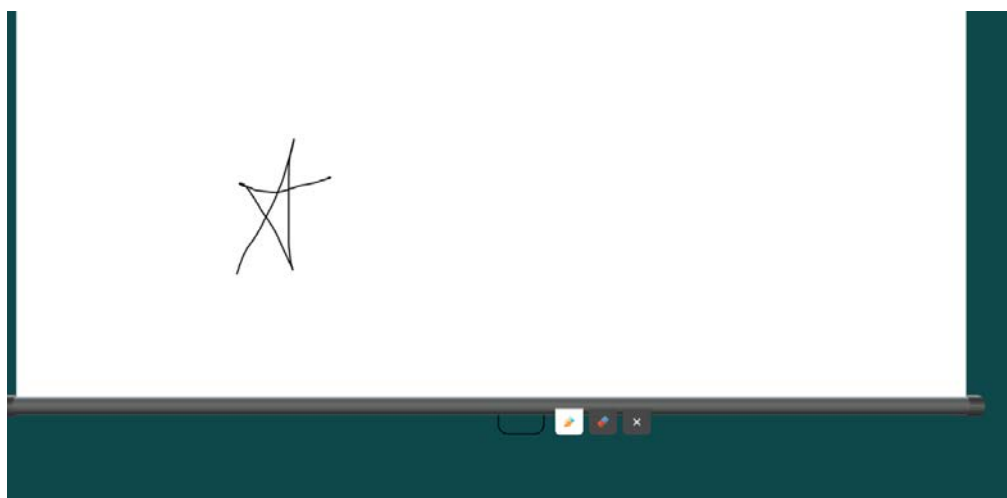
- Spotlight

If the user clicks on the Spotlight option, it enables the user to spotlight for any required content.

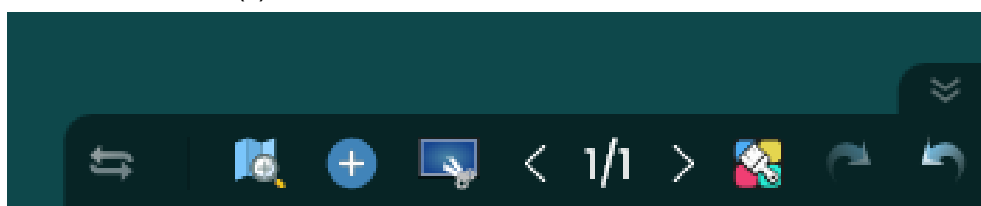


- Sliding whiteboard

If the user clicks on the Sliding whiteboard option, it enables the user to add an extra whiteboard for writing bullet points.



- Screen and Interaction (1):

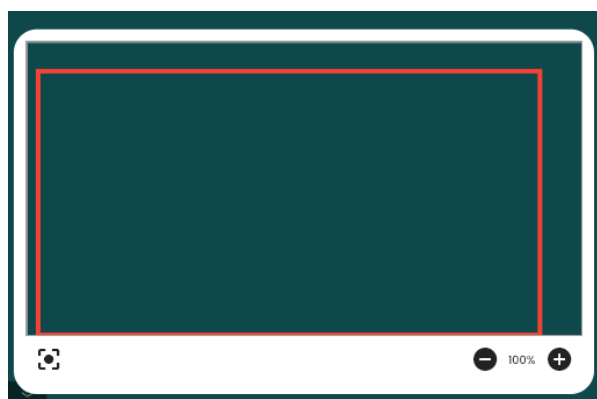


- Undo/Redo

If the user clicks on the Undo/Redo option, it allows the user to either Undo or Redo the slide action.

- Zoom in/Zoom out reference zone

If the user clicks on the Zoom in/Zoom out option, it allows the user to either zoom in or zoom out the slide.



- Add Slides:

- Add Slide after current slide

If the user clicks on this option, it allows the user to add a new slide next to the current slide.

- Add slide before current slide

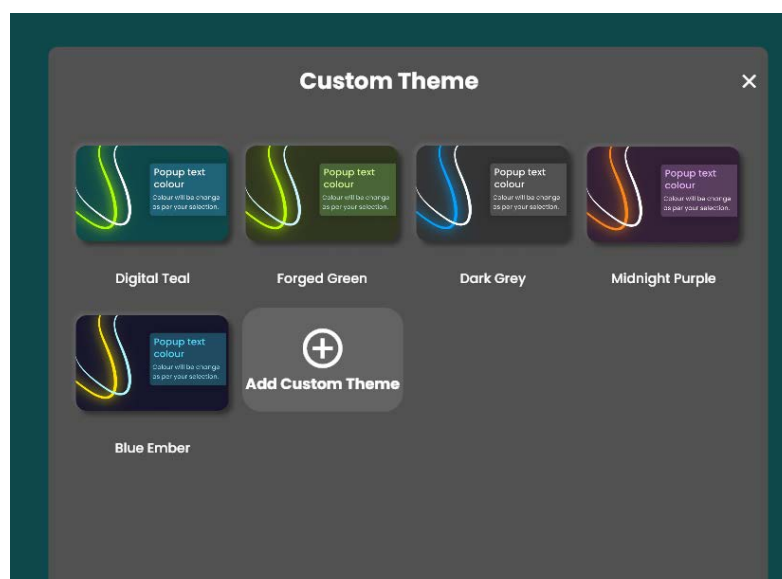
If the user clicks on this option, it allows the user to add a new slide before the current slide.

- Add slide at the end

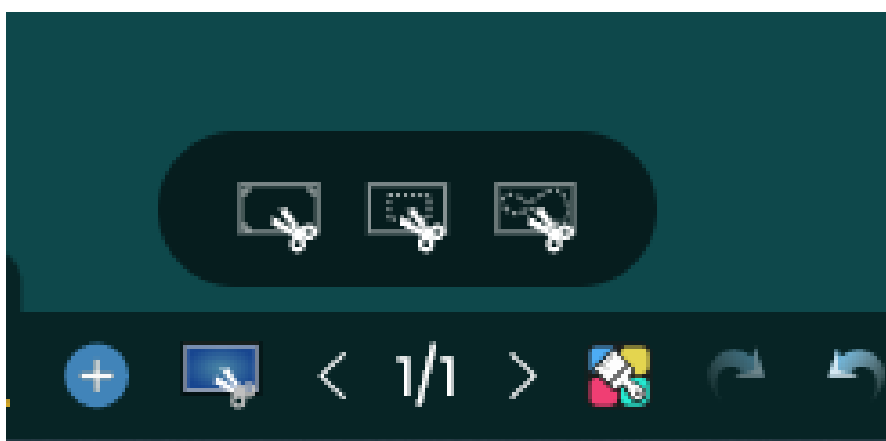
If the user clicks on this option, it allows the user to add a new slide at the end of the presentation.

- Themes

If the user clicks on Themes option, it allows the user to either select any default themes or either create any custom theme on his own.

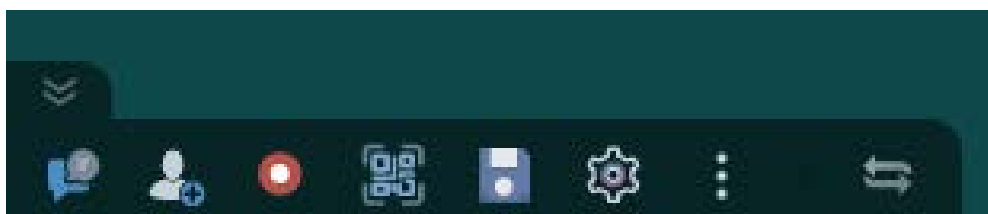


- Screen Capture



- Full Screen
- Custom size capture
- Freehand crop capture

- Screen and Interaction (2):



- Collaborative session Chat
- Add user to collaborative session via QR

- Screen recorder:

If the user clicks on the Screen Recorder option, it enables the user to record everything done on the slide.

- QR Share:

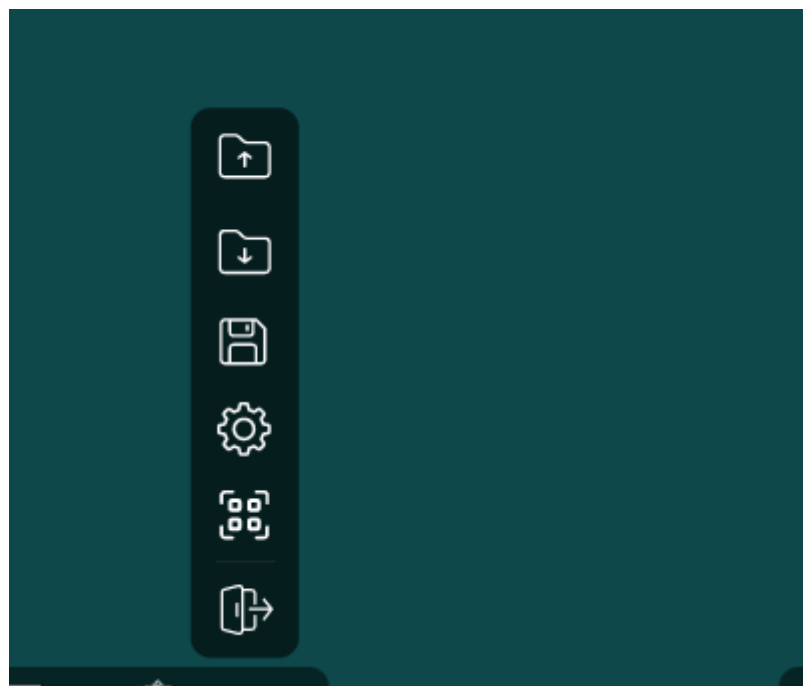
If the user clicks on the QR Share option, it allows the user to share either the current slide or the whole presentation to other users.

- Save:

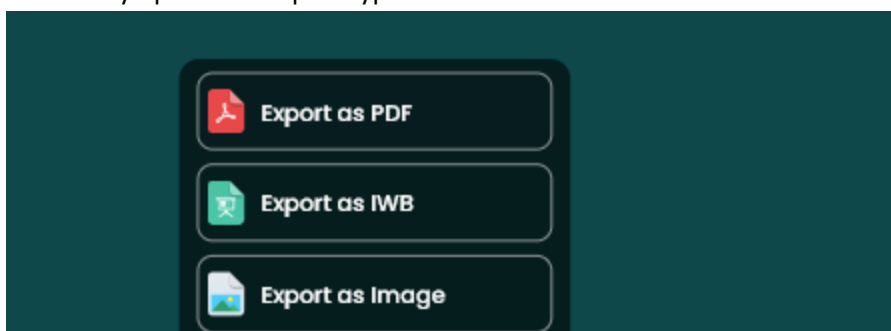
If the user clicks on the Save option, it allows the user to save the particular presentation to the users dashboard.

- Import / Export

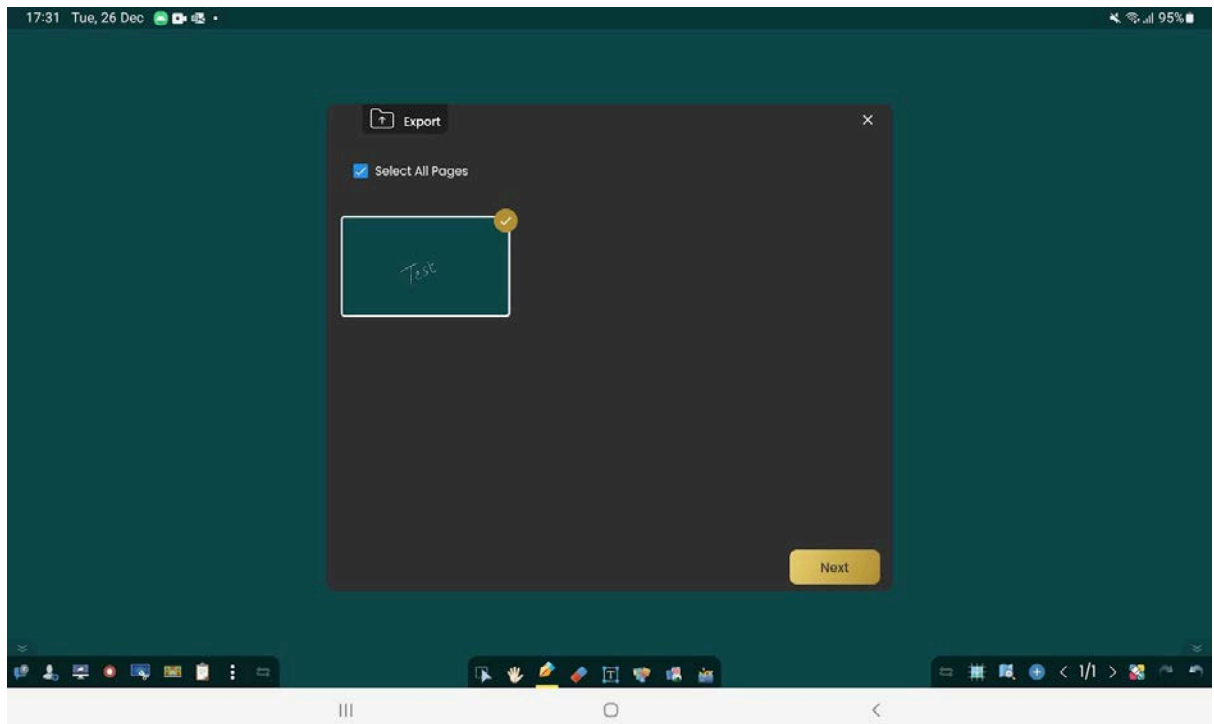
Click on either Export or Import option from the more icon in the toolbar.



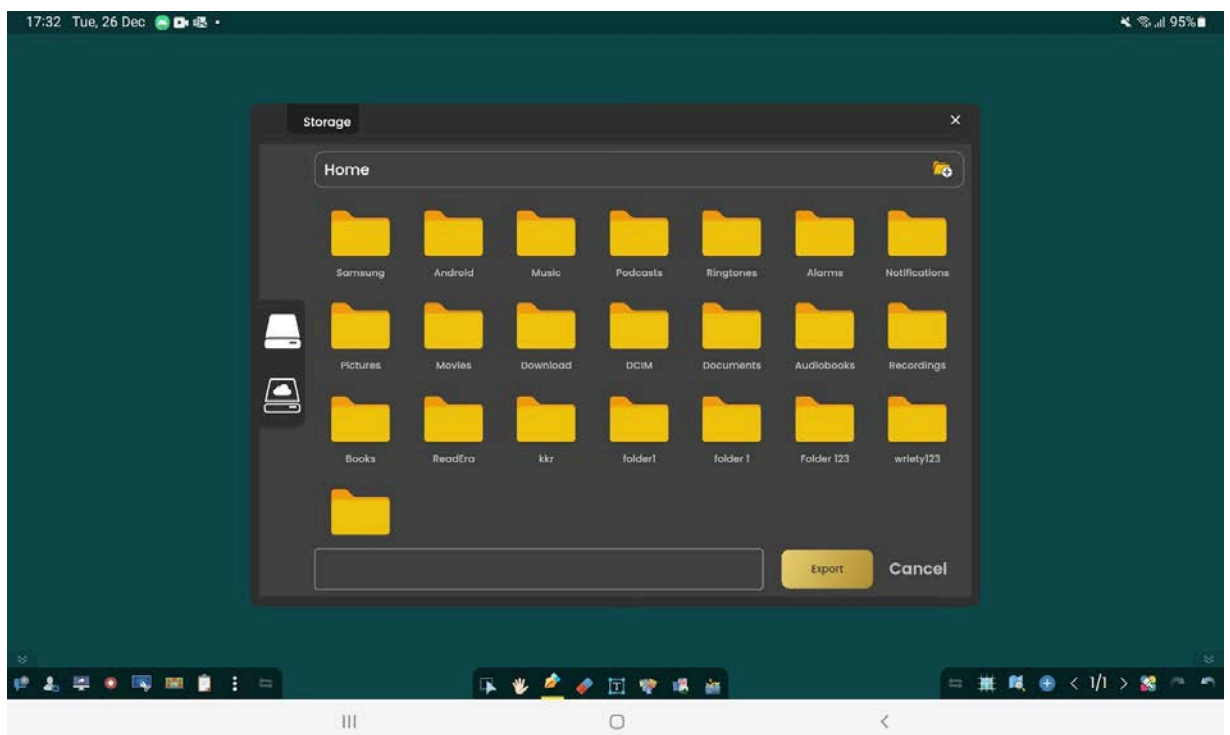
- Select any option for Export type from the menu.



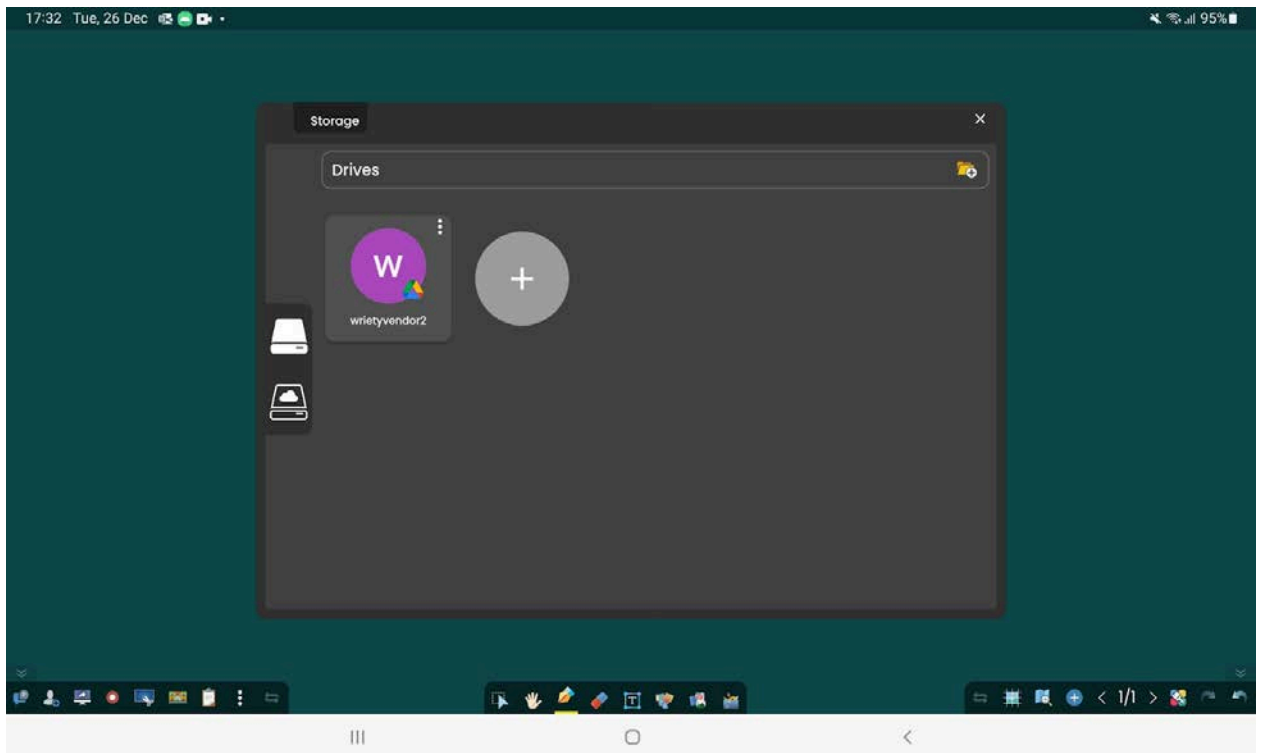
- After clicking on the type of export, select the no. of pages to be exported and click next.



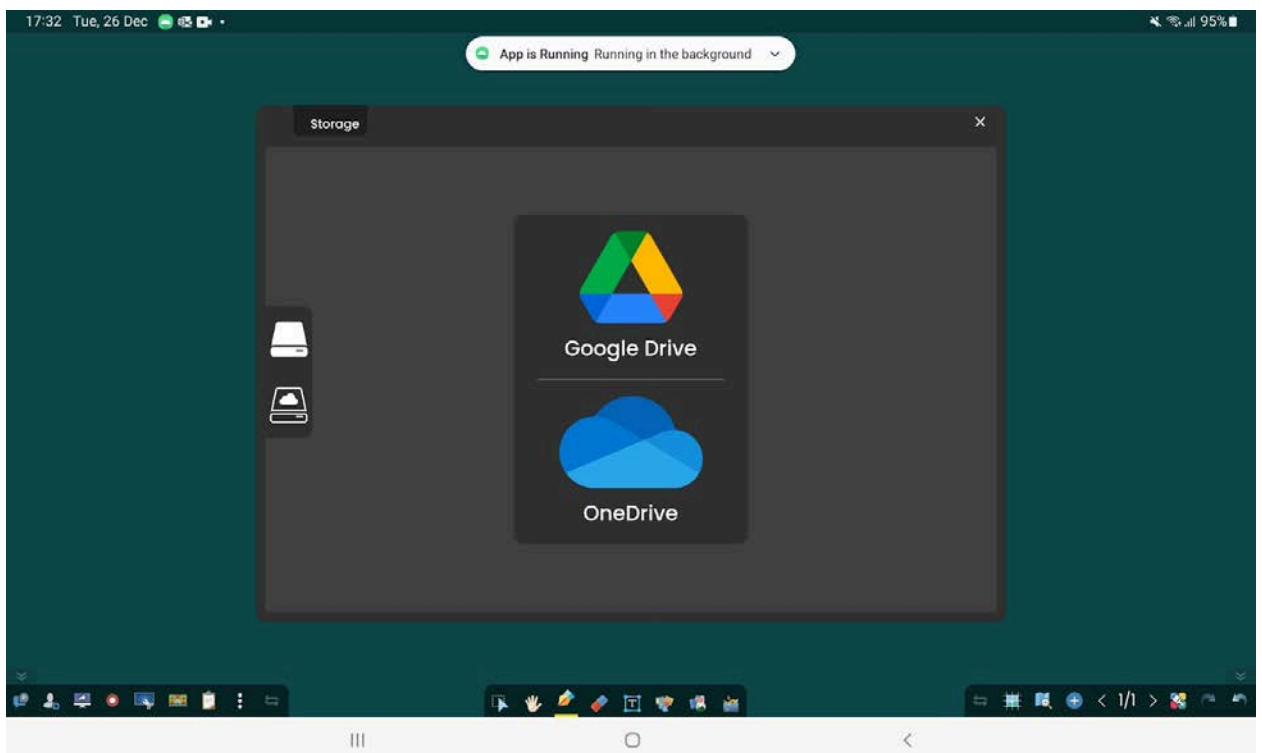
- We will find two types of storage options here as Local storage and Cloud storage.



- When we select the Local storage option, all the folders present locally are displayed here from where we select a particular file to either Export or Import it to the canvas.
- When we select the Cloud storage option, we have an icon to add our accounts as below:



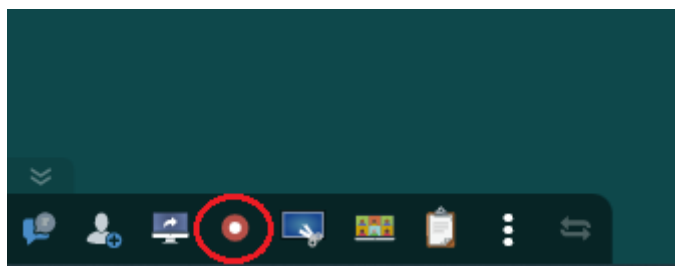
- We can either use a Google drive or One Drive account to login.



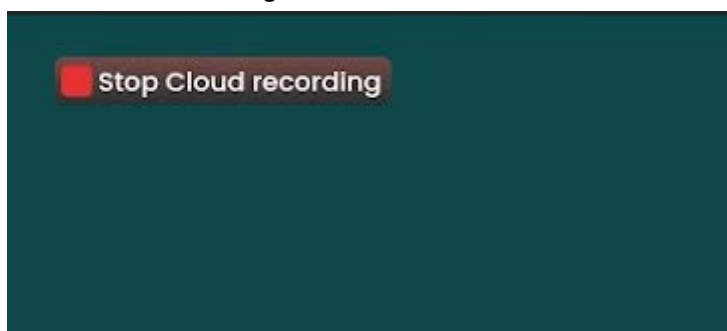
- After we login with the respective accounts, they will be displayed in the storage popup with their respective folders.

- Cloud Recording.

Cloud recording can be selected from here:



Cloud recording then starts with a floating status bar.



You may click on the red box to stop the recording, post which it gets saved.



The cloud recording can then be accessed via the three dots in join history:

SAI ADI	19-12-2023	03:04 PM		Presentation	1		⬆
SAI ADI	19-12-2023	02:43 PM	03:04 PM	Presentation	1	⋮	⬆
SAI ADI	19-12-2023	02:37 PM	02:43 PM	Presentation	1	Show menu	⬆
SAI ADI	18-12-2023	06:05 PM		Presentation	1		⬆
SAI ADI	18-12-2023	05:57 PM		Presentation	1		⬆
SAI ADI	18-12-2023	05:56 PM	05:57 PM	Presentation	1		⬆
SAI ADI	19-12-2023	03:04 PM		Presentation	1		⬆
SAI ADI	19-12-2023	02:43 PM	03:04 PM	Presentation		⋮	⬆
SAI ADI	19-12-2023	02:37 PM	02:43 PM	Presentation		⋮	⬆
SAI ADI	18-12-2023	06:05 PM		Presentation	1		⬆
SAI ADI	18-12-2023	05:57 PM		Presentation	1		⬆

Appendix 1 Cybersecurity Recommendations

Cybersecurity is more than just a buzzword: it's something that pertains to every device that is connected to the internet. IP video surveillance is not immune to cyber risks, but taking basic steps toward protecting and strengthening networks and networked appliances will make them less susceptible to attacks. Below are some tips and recommendations from Dahua on how to create a more secured security system.

Mandatory actions to be taken for basic device network security:

1. Use Strong Passwords

Please refer to the following suggestions to set passwords.

- The length should not be less than 8 characters.
- Include at least two types of characters; character types include upper and lower case letters, numbers and symbols.
- Do not contain the account name or the account name in reverse order.
- Do not use continuous characters, such as 123, abc, etc.
- Do not use overlapped characters, such as 111, aaa, etc.

2. Update Firmware and Client Software in Time

- According to the standard procedure in Tech-industry, we recommend to keep your device (such as NVR, DVR, IP camera, etc.) firmware up-to-date to ensure the system is equipped with the latest security patches and fixes. When the device is connected to the public network, it is recommended to enable the "auto-check for updates" function to obtain timely information of firmware updates released by the manufacturer.
- We suggest that you download and use the latest version of client software.

"Nice to have" recommendations to improve your device network security:

1. Physical Protection

We suggest that you perform physical protection to device, especially storage devices. For example, place the device in a special computer room and cabinet, and implement well-done access control permission and key management to prevent unauthorized personnel from carrying out physical contacts such as damaging hardware, unauthorized connection of removable device (such as USB flash disk, serial port), etc.

2. Change Passwords Regularly

We suggest that you change passwords regularly to reduce the risk of being guessed or cracked.

3. Set and Update Passwords Reset Information Timely

The device supports password reset function. Please set up related information for password reset in time, including the end user's mailbox and password protection questions. If the information changes, please modify it in time. When setting password protection questions, it is suggested not to use those that can be easily guessed.

4. Enable Account Lock

The account lock feature is enabled by default, and we recommend you to keep it on to guarantee the account security. If an attacker attempts to log in with the wrong password several times, the corresponding account and the source IP address will be locked.

5. Change Default HTTP and Other Service Ports

We suggest you to change default HTTP and other service ports into any set of numbers

between 1024–65535, reducing the risk of outsiders being able to guess which ports you are using.

6. Enable HTTPS

We suggest you to enable HTTPS, so that you visit Web service through a secure communication channel.

7. MAC Address Binding

We recommend you to bind the IP and MAC address of the gateway to the device, thus reducing the risk of ARP spoofing.

8. Assign Accounts and Privileges Reasonably

According to business and management requirements, reasonably add users and assign a minimum set of permissions to them.

9. Disable Unnecessary Services and Choose Secure Modes

If not needed, it is recommended to turn off some services such as SNMP, SMTP, UPnP, etc., to reduce risks.

If necessary, it is highly recommended that you use safe modes, including but not limited to the following services:

- SNMP: Choose SNMP v3, and set up strong encryption passwords and authentication passwords.
- SMTP: Choose TLS to access mailbox server.
- FTP: Choose SFTP, and set up strong passwords.
- AP hotspot: Choose WPA2-PSK encryption mode, and set up strong passwords.

10. Audio and Video Encrypted Transmission

If your audio and video data contents are very important or sensitive, we recommend that you use encrypted transmission function, to reduce the risk of audio and video data being stolen during transmission.

Reminder: encrypted transmission will cause some loss in transmission efficiency.

11. Secure Auditing

- Check online users: we suggest that you check online users regularly to see if the device is logged in without authorization.
- Check device log: By viewing the logs, you can know the IP addresses that were used to log in to your devices and their key operations.

12. Network Log

Due to the limited storage capacity of the device, the stored log is limited. If you need to save the log for a long time, it is recommended that you enable the network log function to ensure that the critical logs are synchronized to the network log server for tracing.

13. Construct a Safe Network Environment

In order to better ensure the safety of device and reduce potential cyber risks, we recommend:

- Disable the port mapping function of the router to avoid direct access to the intranet devices from external network.
- The network should be partitioned and isolated according to the actual network needs. If there are no communication requirements between two sub networks, it is suggested to use VLAN, network GAP and other technologies to partition the network, so as to achieve the network isolation effect.
- Establish the 802.1x access authentication system to reduce the risk of unauthorized access to private networks.

- Enable IP/MAC address filtering function to limit the range of hosts allowed to access the device.

More information

Please visit Dahua official website security emergency response center for security announcements and the latest security recommendations.

ENABLING A SAFER SOCIETY AND SMARTER LIVING

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