# Synchronous

Team 10

Sprint 3 Test Cases Document

## User Story 1:

- 1. Multiple Users can create a Whiteboard App
  - a. Input: Users click on a button to create a whiteboard app
  - b. Output: Whiteboard app is created and appears on screen in the workspace
- 2. Multiple users can create multiple whiteboard apps.
  - a. Input: More than one user should create a whiteboard app
  - b. Output: Multiple whiteboards are created and appear on screen in workspace, each created by a different person
- 3. Multiple users can see whiteboard
  - Input: A Created whiteboard, and logging on as multiple users each with their own session
  - b. Output: Each user is able to see the whiteboard
- 4. Multiple Users can create whiteboard content
  - a. Input: Each user should try to draw on a newly created whiteboard
  - b. Output: Each user's input to appear on the whiteboard
- 5. Multiple users can change whiteboard content
  - a. Input: Each user should try to alter the whiteboard content, by drawing, erasing, or changing the content in some way.
  - b. Output: The changes that the users make should appear on the whiteboard
- 6. Whiteboard content changes persist upon exit
  - a. Input: Inputting changes to the whiteboard content
  - b. Output: Changes should be reflected and should persist after exit.
- 7. Multiple Users can see whiteboard changes in real time
  - a. Input: One user should see the whiteboard while another user is providing input
  - b. Output: The user should be able to see the other user inputting data on the whiteboard in real time.
- 8. Multiple users can see whiteboard changes after refresh
  - a. Input: Input changes to the whiteboard
  - b. Output: Changes should be reflected and should persist after refresh.

# User Story 2:

- 1. Multiple users can draw on whiteboard with any color
  - a. Input: Multiple users should draw on the whiteboard, while choosing a random color to draw.
  - b. Output: The different output should be reflected on the whiteboard, with the ink reflecting the chosen colors.
- 2. Colors persist upon exit
  - a. Input: Input ink on whiteboard with a chosen color.
  - b. Output: Ink with color should appear and persist even after workspace exit.
- 3. Colors persist upon refresh.

- a. Input: Input ink on whiteboard with a chosen color.
- b. Output: Ink with color should appear and persist even after workspace refresh.
- 4. Multiple users can change color of ink on whiteboard
  - a. Input: Multiple users should draw on the whiteboard, and then try and change the color of the ink already on the whiteboard
  - b. Output: The ink should reflect the changes and appear with the new chosen color.
- 5. Multiple users can change the color of the pen.
  - a. Input: Multiple users should try and change the color of their pen and then draw on the whiteboard
  - b. Output: The ink on the whiteboard should appear with the changed color.
- 6. Color change to pen persists after change
  - a. Input: Change the color of the pen
  - b. Output: The color change should persist even after input or tool switch
- 7. Color change to ink on whiteboard persists after change
  - a. Input: Change the color of ink already on the screen
  - b. Output: The color change should persist.
- 8. Colors persist across all user screens.
  - a. Input: Multiple users should try to view the whiteboard with ink of different colors
  - b. Output: The users should be able to see all the ink with all the colors.

### User Story 3:

- 1. Change the marker size
  - a. Input: User should try and change the size of the marker and draw on whiteboard
  - b. Output: The ink should be the size of the newly requested marker size.
- 2. Change the ink size
  - a. Input: Change the size of ink already on the whiteboard
  - b. Output: The ink should be the newly requested size
- 3. Multiple users can change size of marker or ink
  - a. Input: Multiple users should try and change the size of the marker and draw, and change the size of the ink already on the screen
  - b. Output: The markers and the ink should be the newly requested size.
- 4. Multiple users can see the size change of the ink
  - a. Input: After changing the ink size, each user should open the workspace and observe the screen
  - b. Output: The users should be able to see the change in ink size.
- 5. Multiple users can draw with the newly changed marker
  - a. Input: after marker size change, users should be able to draw with the marker.
  - b. Output: newly resized ink should appear on the screen.
- 6. The drawing post size change stays the same size
  - a. Input: User should draw after changing the size.
  - b. Output: The size should persist after change.
- 7. The ink persists post refresh

- a. Input: Refresh the page with some ink on the whiteboard
- b. Output: the ink should persist after refresh
- 8. The ink persists upon exit
  - a. Input: Exit the workspace and reenter the workspace with some ink on the whiteboard
  - b. Output: The ink should persist after exit and reentry.

## User Story 4:

- 1. Multiple users can erase strokes
  - a. Input: Multiple users should try and erase ink on the whiteboard
  - b. Output: The ink should disappear.
- 2. Strokes do not persist upon refresh or exit
  - a. Input: After erasing, refresh the page or exit the workspace and reenter.
  - b. Output: The ink should still be erased.
- 3. Changes are reflected across all screens
  - a. Input: Erase ink on the screen
  - b. Output: The ink should disappear from all user instances of the workspace.
- 4. Post erase, users can add ink in the same spot.
  - a. Input: Erase ink and then draw in the same spot.
  - b. Output: The new ink should appear.

#### User Story 5:

- 1. Users can see who is currently drawing
  - a. Input: One user should watch the screen while another user draws
  - b. Output: The user who is drawing should be identified and highlighted for the other user to see.
- 2. Users can differentiate between other current users
  - a. Input: One user should watch the screen while multiple users draw on screen
  - b. Output: The viewing user should be able to see each person drawing and be able to identify which user is which
- 3. Users can see other users' pointers while drawing
  - a. Input: One user should watch the screen while another user draws
  - b. Output: The drawing user's pointer should appear on the viewing user's screen, and should be identifiable by user
- 4. Users can see other users' pointers while not drawing.
  - a. Input: One user should watch the screen while another user moves the pointer
  - b. Output: The moving user's pointer should should appear on the viewing user's screen, and should be identifiable by user

# User Story 6:

- 1. Users can upload an image to the whiteboard
  - a. Input: User should try and upload an image to the whiteboard

- b. Output: Image should appear as a background for the whiteboard
- 2. Users can draw on the image
  - a. Input: Users should draw on the image
  - b. Output: The ink should persist on the image
- 3. Users changes persist
  - a. Input: Users should modify the drawing
  - b. Output: The changes should persist, even after a refresh or an exit.
- 4. Uploaded drawing persists
  - a. Input: A user should upload an image.
  - b. Output: The image should persist even after refresh or an exit

## User Story 7:

- 1. Users can download the contents of the whiteboard
  - a. Input: User should try and download the contents of the whiteboard
  - b. Output: The whiteboard contents are downloaded and saved on to the local system.
- 2. Users can download the contents of the whiteboard as a pdf
  - Input: Users should specify the file type as a pdf and download the contents as a pdf
  - b. Output: The whiteboard contents are downloaded as a pdf and saved on to the local system.
- 3. Users can download the contents of the whiteboard as a jpg
  - Input: Users should specify the file type as a jpg and download the contents as a jpg
  - b. Output: The whiteboard contents are downloaded as a jpg and saved on to the local system.
- 4. Users can download the contents of the whiteboard as a png
  - Input: Users should specify the file type as a png and download the contents as a pdf
  - b. Output: The whiteboard contents are downloaded as a png and saved on to the local system.

# User Story 8:

- 1. Users can add shapes
  - a. Input: User should try and add a shape to the workspace
  - b. Output: The shape should appear in the workspace
- 2. Users can add tables
  - a. Input: User should try and add a table to the workspace
  - b. Output: The table should appear in the workspace
- 3. Users can add data to tables
  - a. Input: User should add data to the tables
  - b. Output: The data appears in the table and persists
- 4. Users can change the characteristics of shapes

- a. Input: User should try and change some characteristics of the shape, like color, size etc.
- b. Output: the changes should appear and persist.

## User Story 9:

- 1. Users can download an entire workspace
  - a. Input: Users should try and download the entire workspace
  - b. Output: The workspace should be downloaded to the local system.
- 2. Users can download it as a zip
  - a. Input: users should specify downloading the workspace as a zip file
  - b. Output: the workspace should be compressed as a zip file and then downloaded to the local system
- 3. Users can download all the apps at once
  - a. Input: Users should try and download all the apps contents at once
  - b. Output: The contents should be downloaded to the local system
- 4. Users can use a UI based option to download the workspace.
  - a. Input: The user should have a UI option like a menu or a button to download the workspace and should click on that option to download the workspace
  - b. Output: the workspace is downloaded to system.

#### User Story 10:

- 1. Users can upload a previously downloaded workspace
  - a. Input: Users should try and upload a previous workspace
  - b. Output: The workspace should appear on the screen
- 2. All apps reflect the contents of the uploaded workspace
  - a. Input: Users should check the contents of the uploaded workspace and compare with the actual contents of the previously downloaded workspace
  - b. Output: The content should match
- 3. The data in the workspace is of the newly uploaded workspace and not the previous one.
  - a. Input: Compare the output of the new workspace with the content of the old workspace
  - b. Output: The new workspace content should not have the content of the old workspace.
- 4. All users can see the uploaded workspace
  - a. Input: multiple users should log on and access the workspace with the uploaded content
  - b. Output: Each user should be able to see the workspace and its contents.

# User Story 11:

1. Users can split the workspace into multiple workspaces

- a. Input: Click on a tab to create a new workspace within the overall workspace
- b. Output: A new workspace should be created with its own sidebar and buttons
- 2. Each tab has its own contents
  - a. Input: add apps in multiple workspaces
  - b. Output: The workspaces should have their own apps and data.
- 3. Each tab's data persists
  - a. Input: Enter data in each workspace and switch between workspaces
  - b. Output: The data in each workspace should persist.
- 4. All users can see each workspace
  - a. Input: Multiple users should log onto the workspace and navigate between tabs
  - b. Output: They should be able to see each and every workspace with data reflected in each tab.

### User Story 12:

- 1. Each user can edit data after lost connection
  - a. Input: Disconnect the system from the internet and try to enter data
  - b. Output: data should change with each new entry
- 2. Each user can see the changes synced after resumed connection
  - a. Input: Reconnect the system and let the workspace resync
  - b. Output: The workspace should show all the data, including the new data added before resync
- 3. Changes persist after resync
  - a. Input: After resync try to add more changes
  - Output: The changes added should be added to workspace and changes should be updated
- 4. No loss of data post resync.
  - a. Input: Post resync try to refresh the page or exit and reenter the workspace.
  - b. Output: The data should still be in the workspace.