



**NANYANG  
TECHNOLOGICAL  
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**SINGAPORE**

# **Drawdiculous**

## **Test Cases and Test Coverage Report**

Version 1.4

Prepared by Team Luck

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## Document Change Record

| Revision | Description of Change | Approved by                     | Date        |
|----------|-----------------------|---------------------------------|-------------|
| 1.1      | Initial Template      | Sannabhadti<br>Shipra<br>Deepak | 24 Oct 2021 |
| 1.2      | Designed Test Cases   | Sannabhadti<br>Shipra Deepak    | 24 Oct 2021 |
| 1.3      | Executed Test Cases   | Jin Han                         | 25 Oct 2021 |
| 1.4      | Updated New Test Case | Sannabhadti<br>Shipra Deepak    | 26 Oct 2021 |
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## 1. Account Creation and Login

|                    |   |   |                  |         |
|--------------------|---|---|------------------|---------|
| Test Case #:       | 1.1   | Test Case Name:   | Register Account |         |
| System:            | Drawdiculous  | Subsystem:  | Register Account |         |
| Designed by:       | Shipra  | Design Date:  | 24/10/2021       |         |
| Executed by:       | Jin Han   | Execution Date:   | 25/10/2021       |         |
| Short Description: | User registers a new Drawdiculous account.  |   |                  |         |
| Pre-conditions:    | 1. The mobile device has stable Internet connectivity.<br>2. User has not previously created an account with their email.<br>3. User is currently on the Authentication page. |   |                  |         |
| Step               | Action  | Expected System Response  | Pass/Fail        | Comment |
| 1                  | Tap on the “Register” button  | User is redirected to the Register page.  | Pass             |         |
| 2                  | Fill in the username, email and password  | Account is created and stored in the database. User is redirected to the Authentication page. | Pass             |         |
| Post-conditions:   | Users are able to login to their account.   |   |                  |         |

|                    |  |  |                  |         |
|--------------------|--|--|------------------|---------|
| Test Case #:       | 1.2  | Test Case Name:  | Login Successful |         |
| System:            | Drawdiculous   | Subsystem:   | Login            |         |
| Designed by:       | Shipra   | Design Date:   | 24/10/2021       |         |
| Executed by:       | Jin Han  | Execution Date:  | 25/10/2021       |         |
| Short Description: | User successfully logs in to Drawdiculous account.   |  |                  |         |
| Pre-conditions:    | 1. The mobile device has stable Internet connectivity.<br>2. User has an existing account.<br>3. User is currently on the Authentication page. |  |                  |         |
| Step               | Action   | Expected System Response   | Pass/Fail        | Comment |
| 1                  | Tap on the “Login” button  | User is redirected to the Login page.  | Pass             |         |
| 2                  | Fill in the correct email and password   | User is authenticated and logged into their account.<br>User is redirected to the Home page. | Pass             |         |
| Post-conditions:   | Users have access to the “Create Room” and “Join Room” functions in Drawdiculous.  |  |                  |         |

|                    |  |  |               |         |
|--------------------|--|--|---------------|---------|
| Test Case #:       | 1.3  | Test Case Name:  | Login Failure |         |
| System:            | Drawdiculous   | Subsystem:   | Login         |         |
| Designed by:       | Shipra   | Design Date:   | 24/10/2021    |         |
| Executed by:       | Jin Han  | Execution Date:  | 25/10/2021    |         |
| Short Description: | User unsuccessfully attempts login.  |  |               |         |
| Pre-conditions:    | 1. The mobile device has stable Internet connectivity.<br>2. User is currently on the Authentication page. |  |               |         |
| Step               | Action   | Expected System Response   | Pass/Fail     | Comment |
| 1                  | Tap on the “Login” button  | User is redirected to the Login page.  | Pass          |         |
| 2                  | Fill in an invalid email and/ or password  | User is not authenticated and cannot login to the account. User remains on the Login page. | Pass          |         |
| Post-conditions:   | Users do not have access to the “Create Game” and “Join Game” functions in Drawdiculous.                   |  |               |         |

|                    |  |   |                 |         |
|--------------------|--|---|-----------------|---------|
| Test Case #:       | 1.4  | Test Case Name:   | Forgot Password |         |
| System:            | Drawdiculous   | Subsystem:  | Login           |         |
| Designed by:       | Shipra   | Design Date:  | 26/10/2021      |         |
| Executed by:       | Jin Han  | Execution Date:   | 26/10/2021      |         |
| Short Description: | User clicks on the forgot password prompt.   |   |                 |         |
| Pre-conditions:    | 1. The mobile device has stable Internet connectivity.<br>2. User has an existing account.<br>3. User is currently on the Authentication page. |   |                 |         |
| Step               | Action   | Expected System Response  | Pass/Fail       | Comment |
| 1                  | Tap on the “Login” button  | User is redirected to the Login page.                                   | Pass            |         |
| 2                  | Tap on “Forget Password” button  | User is redirected to the Forgot Password page.                         | Pass            |         |
| 3                  | Fill in account’s email address and tap on the “Recover” button  | System sends an email with a recovery link to the inputted address.     | Pass            |         |
| 4                  | Click on the recovery link and fill in new password  | System updates the new password for the chosen account in the database. | Pass            |         |

|                         |   |
|-------------------------|---|
| <b>Post-conditions:</b> | Password for user's account is updated. |
|-------------------------|---|



## 2. Assemble Players

|                    |   |  |                  |  |
|--------------------|---|--|------------------|--|
| Test Case #:       | 2.1   | Test Case Name:  | Create Game Room |  |
| System:            | Drawdiculous  | Subsystem:   | Create Game Room |  |
| Designed by:       | Shipra  | Design Date:   | 24/10/2021       |  |
| Executed by:       | Jin Han   | Execution Date:  | 25/10/2021       |  |
| Short Description: | User creates a new game room.   |  |                  |  |
| Pre-conditions:    | 1. The mobile device has stable Internet connectivity.<br>2. User is already logged into an existing account.<br>3. User is currently on the Home page. |  |                  |  |
| Step               | Action  | Expected System Response   | Pass/Fail        | Comment  |
| 1                  | Tap on the “Create a new game” button   | User is redirected to the Create Room page.  | Pass             |  |
| 2                  | Fill in password  | System creates a private game room. User is redirected to the Game Room page for the newly-created room. | Pass             | If the user chooses not to fill in the password, a public game room is created instead of private. |
| Post-conditions:   | User is the host of a private game room with the aforementioned password.   |  |                  |  |

|                    |  |  |                                    |         |
|--------------------|--|--|------------------------------------|---------|
| Test Case #:       | 2.2  | Test Case Name:  | Join Specific Game Room Successful |         |
| System:            | Drawdiculous   | Subsystem:   | Join Game                          |         |
| Designed by:       | Shipra   | Design Date:   | 24/10/2021                         |         |
| Executed by:       | Jin Han  | Execution Date:  | 25/10/2021                         |         |
| Short Description: | User enters Room ID and optional Password to join a specific game room.  |  |                                    |         |
| Pre-conditions:    | 1. The mobile device has stable Internet connectivity.<br>2. User is already logged into an existing account.<br>3. Game Room with specified ID has been previously created.<br>4. User is currently on the Home Page. |  |                                    |         |
| Step               | Action   | Expected System Response   | Pass/Fail                          | Comment |
| 1                  | Tap on the “Join an existing game” button  | User is redirected to the Join Room page.                          | Pass                               |         |
| 2                  | Fill in the correct Room ID and password, if applicable.   | User is redirected to the Game Room page for the chosen game room. | Pass                               |         |
| Post-conditions:   | User is a member of the chosen game room.  |  |                                    |         |

|                    |   |  |                                 |         |
|--------------------|---|--|---------------------------------|---------|
| Test Case #:       | 2.3   | Test Case Name:  | Join Specific Game Room Failure |         |
| System:            | Drawdiculous  | Subsystem:   | Join Game                       |         |
| Designed by:       | Shipra  | Design Date:   | 24/10/2021                      |         |
| Executed by:       | Jin Han   | Execution Date:  | 25/10/2021                      |         |
| Short Description: | User enters an incorrect Room ID and optional Password to join a specific game room.  |  |                                 |         |
| Pre-conditions:    | 1. The mobile device has stable Internet connectivity.<br>2. User is already logged into an existing account.<br>3. User is currently on the Home Page. |  |                                 |         |
| Step               | Action  | Expected System Response   | Pass/Fail                       | Comment |
| 1                  | Tap on the “Join an existing game” button   | User is redirected to the Join Room page.                                    | Pass                            |         |
| 2                  | Fill in an invalid Room ID and/ or password.  | System displays prompt “Room not found”. User remains on the Join Room page. | Pass                            |         |
| Post-conditions:   | User is not a member of any game room.  |  |                                 |         |

|                    |   |   |                       |         |
|--------------------|---|---|-----------------------|---------|
| Test Case #:       | 2.4   | Test Case Name:   | Join Random Game Room |         |
| System:            | Drawdiculous  | Subsystem:  | Join Random Game      |         |
| Designed by:       | Shipra  | Design Date:  | 24/10/2021            |         |
| Executed by:       | Jin Han   | Execution Date:   | 25/10/2021            |         |
| Short Description: | User clicks to join a random game room.   |   |                       |         |
| Pre-conditions:    | 1. The mobile device has stable Internet connectivity.<br>2. User is already logged into an existing account.<br>3. A public (non-password-protected) Game Room currently exists.<br>4. User is currently on the Home Page. |   |                       |         |
| Step               | Action  | Expected System Response  | Pass/Fail             | Comment |
| 1                  | Tap on the “Join an existing game” button   | User is redirected to the Game Room page for a random public game room. | Pass                  |         |
| Post-conditions:   | User is a member of a public game room.   |   |                       |         |

|                    |   |   |                 |   |
|--------------------|---|---|-----------------|---|
| Test Case #:       | 2.5   | Test Case Name:   | Leave Game Room |   |
| System:            | Drawdiculous  | Subsystem:  | Game Room       |   |
| Designed by:       | Shipra  | Design Date:  | 24/10/2021      |   |
| Executed by:       | Jin Han   | Execution Date:   | 25/10/2021      |   |
| Short Description: | User clicks to leave the game room.   |   |                 |   |
| Pre-conditions:    | 1. The mobile device has stable Internet connectivity.<br>2. User is already logged into an existing account.<br>3. User is currently in the Game Room. |   |                 |   |
| Step               | Action  | Expected System Response  | Pass/Fail       | Comment   |
| 1                  | Tap on the “Leave room” button  | Users leave their current game room. User is redirected to the Home page. | Pass            | If the user is the host of their current game room, all other players leave as well and the game room is deleted. |
| Post-conditions:   | User is not a member or host of any game room.  |   |                 |   |

|                    |  |  |               |                                 |
|--------------------|--|--|---------------|---------------------------------|
| Test Case #:       | 2.6  | Test Case Name:  | Remove Player |                                 |
| System:            | Drawdiculous   | Subsystem:   | Game Room     |                                 |
| Designed by:       | Shipra   | Design Date:   | 24/10/2021    |                                 |
| Executed by:       | Jin Han  | Execution Date:  | 25/10/2021    |                                 |
| Short Description: | User clicks on the cross button to remove the associated player from the game room.  |  |               |                                 |
| Pre-conditions:    | 1. The mobile device has stable Internet connectivity.<br>2. User is already logged into an existing account.<br>3. User is currently in the Game Room.<br>4. User is the Host of the Game Room. |  |               |                                 |
| Step               | Action   | Expected System Response   | Pass/Fail     | Comment                         |
| 1                  | Tap on the “X” button next to the name of the player to be removed.  | Chosen player is removed from the game room. Chosen player is redirected to the Home page. Name of the chosen player is removed from the Game Room page. | Pass          | Users cannot remove themselves. |
| Post-conditions:   | -  |  |               |                                 |

### 3. Gameplay

|                    |   |  |            |         |
|--------------------|---|--|------------|---------|
| Test Case #:       | 3.1   | Test Case Name:  | Start Game |         |
| System:            | Drawdiculous  | Subsystem:   | Game Room  |         |
| Designed by:       | Shipra  | Design Date:   | 24/10/2021 |         |
| Executed by:       | Jin Han   | Execution Date:  | 25/10/2021 |         |
| Short Description: | User clicks to start the game.  |  |            |         |
| Pre-conditions:    | <div>1. The mobile device has stable Internet connectivity.</div> <div>2. User is already logged into an existing account.</div> <div>3. User is currently in the Game Room.</div> <div>4. User is the Host of the Game Room.</div> <div>5. Two or more players are in the Game Room.</div> |  |            |         |
| Step               | Action  | Expected System Response   | Pass/Fail  | Comment |
| 1.                 | Tap on the “Start Game” button.   | System redirects all players to the Drawing page. System assigns the user as ‘Artist’ and all other players as ‘Guesser’.                  | Pass       |         |
| 2.                 | Draw on canvas based on prompt  | System sends the drawing to all other players. When time limit is reached, system assigns next player as ‘Artist’ and all other players as | Pass       |         |

|                         |  |  |      |  |
|-------------------------|--|--|------|--|
|                         |  | 'Guesser'  |      |  |
| 3                       | Repeat Step 2 until all players have been assigned as 'Artist' | System ends the game. All players are redirected to the Result page. | Pass |  |
| <b>Post-conditions:</b> | -  |  |      |  |



|                    |  |   |                 |                         |
|--------------------|--|---|-----------------|-------------------------|
| Test Case #:       | 3.2  |   | Test Case Name: | Draw with all the Tools |
| System:            | Drawdiculous   |   | Subsystem:      | Game Play               |
| Designed by:       | Shipra   |   | Design Date:    | 24/10/2021              |
| Executed by:       | Jin Han  |   | Execution Date: | 25/10/2021              |
| Short Description: | User makes use of all the tools to draw according to the prompt.   |   |                 |                         |
| Pre-conditions:    | 1. The mobile device has stable Internet connectivity.<br>2. User is already logged into an existing account.<br>3. The game has started.<br>4. User has been assigned the role of ‘Artist’ and has been provided with a drawing prompt. |   |                 |                         |
| Step               | Action   | Expected System Response  | Pass/Fail       | Comment                 |
| 1                  | Tap on the “Paintbrush” button and choose brush size   | User’s current tool is set to brush. Brush is changed to the chosen size.   | Pass            |                         |
| 2                  | Tap on the “Palette” button and choose colour of brush   | User’s brush is changed to the chosen colour.                               | Pass            |                         |
| 3                  | Tap on the “Eraser” button and choose eraser size  | User’s current tool is set to eraser. Eraser is changed to the chosen size. | Pass            |                         |
| 4                  | Tap on the “Dustbin”   | Canvas is cleared for   | Pass            |                         |

|                         |        |                                 |  |  |
|-------------------------|--------|---------------------------------|--|--|
|                         | button | users and all<br>other players. |  |  |
| <b>Post-conditions:</b> | -      |                                 |  |  |

|                    |   |  |                  |  |
|--------------------|---|--|------------------|--|
| Test Case #:       | 3.3   | Test Case Name:                              | Use Chat Feature |  |
| System:            | Drawdiculous  | Subsystem:                                   | Game Play        |  |
| Designed by:       | Shipra  | Design Date:                                 | 24/10/2021       |  |
| Executed by:       | Jin Han   | Execution Date:                              | 25/10/2021       |  |
| Short Description: | User sends messages via chat box.   |  |                  |  |
| Pre-conditions:    | 1. The mobile device has stable Internet connectivity.<br>2. User is already logged into an existing account.<br>3. The game has started.<br>4. Message delivered via chat box is not the answer. |  |                  |  |
| Step               | Action  | Expected System Response                     | Pass/Fail        | Comment  |
| 1.                 | Tap on the “Type Your Answer” answer box  | System displays a keyboard.                  | Pass             |  |
| 2.                 | Type in message   | System displays the message in the Chat Box. | Pass             | If the message is the correct answer, see Test Case #13. |
| Post-conditions:   | -   |  |                  |  |

|                    |   |   |                      |         |
|--------------------|---|---|----------------------|---------|
| Test Case #:       | 3.4   | Test Case Name:   | Guess Word Correctly |         |
| System:            | Drawdiculous  | Subsystem:  | Game Play            |         |
| Designed by:       | Shipra  | Design Date:  | 24/10/2021           |         |
| Executed by:       | Jin Han   | Execution Date:   | 25/10/2021           |         |
| Short Description: | User sends the correct answer via chat box.   |   |                      |         |
| Pre-conditions:    | 1. The mobile device has stable Internet connectivity.<br>2. User is already logged into an existing account.<br>3. The game has started.<br>4. User has been assigned the role of ‘Guesser’.<br>5. Message delivered via chat box is the answer. |   |                      |         |
| Step               | Action  | Expected System Response  | Pass/Fail            | Comment |
| 1.                 | Tap on the “Type Your Answer” answer box  | System displays a keyboard.   | Pass                 |         |
| 2.                 | Type in message   | System displays “Bingo!” in the Chat Box.<br>Users are awarded points.<br>Leaderboard is updated. | Pass                 |         |
| Post-conditions:   | Users can no longer gain points from guessing the word correctly for that round.  |   |                      |         |

## 4. Post-game

|                    |   |                                      |              |         |
|--------------------|---|--------------------------------------|--------------|---------|
| Test Case #:       | 4.1   | Test Case Name:                      | Back to Home |         |
| System:            | Drawdiculous  | Subsystem:                           | Results      |         |
| Designed by:       | Shipra  | Design Date:                         | 24/10/2021   |         |
| Executed by:       | Jin Han   | Execution Date:                      | 25/10/2021   |         |
| Short Description: | Click on the back button to return to the home page after viewing results.  |                                      |              |         |
| Pre-conditions:    | 1. The mobile device has stable Internet connectivity.<br>2. Gameplay is over.<br>3. User has finished viewing the results. |                                      |              |         |
| Step               | Action  | Expected System Response             | Pass/Fail    | Comment |
| 1                  | Tap on the “Back” button  | User is redirected to the Home page. | Pass         |         |
| Post-conditions:   | -   |                                      |              |         |