Case 1:

Description	Value
Test ID	1
Test Case Description	Validation of Register Functionality on Happy Path
Test Case Result (Pass/Fail)	Pass
Prerequisites	Having Frontend Application ready to run
Test Scenario	User opens up the application, navigates to register page and tries to register to the game.
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Register page by clicking Register button on Home Page 4 - User enters 'user1' as username 5 - User enters 'password1' as password 6 - User enters 'user1@example.com' as email 7 - User clicks 'Register' button
Expected Result	User with such credentials is created and user is redirected to the login page directly

Case 2:

Description	Value
Test ID	2
Test Case Description	Validation of Register Functionality Checks-1
Test Case Result (Pass/Fail)	Pass
Prerequisites	Having Frontend Application ready to run
Test Scenario	User opens up the application, navigates to register page and tries to register to the game. But user inputs an already existing (in the system) username to the username field.
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Register page by clicking Register button on Home Page 4 - User enters 'user1' as username 5 - User enters 'password1' as password

	6 - User enters ' <u>user1@example.com</u> ' as email 7 - User clicks 'Register' button
Expected Result	Operation fails and an error toast with "Username already exists" content is displayed with a pop up.

Case 3:

Description	Value
Test ID	3
Test Case Description	Validation of Register Functionality Checks-2
Test Case Result (Pass/Fail)	Pass
Prerequisites	Having Frontend Application ready to run
Test Scenario	User opens up the application, navigates to register page and tries to register to the game.
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Register page by clicking Register button on Home Page 4 - User enters 'user111' as username 5 - User enters 'password1' as password 6 - User enters 'user1@example.com' as email 7 - User clicks 'Register' button
Expected Result	Operation fails and an error toast with "email already exists" content is displayed with a pop up.

Case 4:

Description	Value
Test ID	4
Test Case Description	Validation of Register Functionality Checks-3
Test Case Result (Pass/Fail)	Pass

Prerequisites	Having Frontend Application ready to run
Test Scenario	User opens up the application, navigates to register page and tries to register to the game.
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Register page by clicking Register button on Home Page 4 - User does not enter username 5 - User enters 'password1' as password 6 - User enters 'user1@example.com' as email 7 - User clicks 'Register' button
Expected Result	Operation fails and an error toast with "Please enter a username" content is displayed with a pop up.

Case 5:

Description	Value
Test ID	5
Test Case Description	Validation of Register Functionality Checks-4
Test Case Result (Pass/Fail)	Pass
Prerequisites	Having Frontend Application ready to run
Test Scenario	User opens up the application, navigates to register page and tries to register to the game.
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Register page by clicking Register button on Home Page 4 - User enters 'user111' as username 5 - User does not enter password 6 - User enters 'user1@example.com' as email 7 - User clicks 'Register' button
Expected Result	Operation fails and an error toast with "Please enter a password" content is displayed with a pop up.

Case 6:

Description	Value
Test ID	6
Test Case Description	Validation of Register Functionality Checks-5
Test Case Result (Pass/Fail)	Pass
Prerequisites	Having Frontend Application ready to run
Test Scenario	User opens up the application, navigates to register page and tries to register to the game.
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Register page by clicking Register button on Home Page 4 - User enters 'user111' as username 5 - User enters 'password1' as password 6 - User does not enter an email 7 - User clicks 'Register' button
Expected Result	Operation fails and an error toast with "Please enter an email" content is displayed with a pop up.

Case 7:

Description	Value
Test ID	7
Test Case Description	Validation of Login Functionality on Happy Path
Test Case Result (Pass/Fail)	Pass
Prerequisites	Having Frontend Application ready to run
Test Scenario	User opens up the application, navigates to login page and tries to login to the game.
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Login page by clicking Login button on Home Page

	4 - User enters 'user1' as username 5 - User enters 'password1' as password 6 - User clicks 'Login' button
Expected Result	User is redirected to the Home page directly.

Case 8:

Description	Value
Test ID	8
Test Case Description	Validation of Login Functionality Checks-1
Test Case Result (Pass/Fail)	Pass
Prerequisites	Having Frontend Application ready to run
Test Scenario	User opens up the application, tries to login to the game. But user does not input username field.
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Login page by clicking Login button on Home Page 4 - User enters 'password1' as password 5 - User clicks 'Login' button
Expected Result	Operation fails and an error popup with "Username cannot be empty" content is displayed to the user at the center of the page.

Case 9:

Description	Value
Test ID	9
Test Case Description	Validation of Login Functionality Checks-2
Test Case Result (Pass/Fail)	Pass

Prerequisites	Having Frontend Application ready to run
Test Scenario	User opens up the application, tries to login to the game. But user does not input password field.
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Login page by clicking Login button on Home Page 4 - User enters 'user1' as username 5 - User clicks 'Login' button
Expected Result	Operation fails and an error popup with "Password cannot be empty" content is displayed to the user at the center of the page.

Case 10:

Description	Value
Test ID	10
Test Case Description	Validation of Login Functionality Checks-3
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend Application ready to run 2- Not Having an existing user account with username: 'user11' and password: 'password1'
Test Scenario	User opens up the application, tries to login to the game. But user inputs a wrong username.
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Login page by clicking Login button on Home Page 4 - User enters 'user11' as username 5- User enters 'password1' as password 6 - User clicks 'Login' button
Expected Result	Operation fails and an error popup with "Login failed: Invalid username or password" content is displayed to the user at the center of the page.

Case 11:

Description	Value
Test ID	11
Test Case Description	Validation of Login Functionality Checks-4
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend Application ready to run 2- Not Having an existing user account with username: 'user1' and password: 'password11'
Test Scenario	User opens up the application, tries to login to the game. But user inputs a wrong password.
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Login page by clicking Login button on Home Page 4 - User enters 'user1' as username 5- User enters 'password11" as password 6 - User clicks 'Login' button
Expected Result	Operation fails and an error popup with "Login failed: Invalid username or password" content is displayed to the user at the center of the page.

Case 12:

Description	Value
Test ID	12
Test Case Description	Validation of Logout functionality from Home
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend Application ready to run 2- Having an existing user account with username: 'user1' and password: 'password1'
Test Scenario	User successfully logs in to the application and tries to logout by the home page.

Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Login page by clicking Login button on Home Page 4 - User enters 'user1' as username 5 - User enters 'password1' as password 6 - User clicks 'Login' button and gets redirected to Home page 7 - User clicks the Logout button
Expected Result	User is successfully logged out of the game

Case 13:

Description	Value
Test ID	13
Test Case Description	Validation of Home to Leaderboard Redirection
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend Application ready to run
Test Scenario	User opens up the application and tries to navigate leaderboard page from home page.
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User clicks 'Leaderboard' Button
Expected Result	User is successfully redirected to the Leaderboard page

Case 14:

Description	Value
Test ID	14
Test Case Description	Validation of Home to Leaderboard Redirection after login
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend Application ready to run 2- Having an existing user account with username: 'user1' and password: 'password1'
Test Scenario	User opens up the application and tries to navigate leaderboard page from home page.
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Login page by clicking Login button on Home Page 4 - User enters 'user1' as username 5 - User enters 'password1' as password 6 - User clicks 'Login' button and gets redirected to Home page 7 - User clicks 'Leaderboard' Button
Expected Result	User is successfully redirected to the Leaderboard page

Case 15:

Description	Value
Test ID	15
Test Case Description	Validation of time filter changes in the Leaderboard page
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend Application ready to run
Test Scenario	User opens up the application and navigates to leaderboard page from home page. Then user changes the time filter by pressing the `MONTHLY` tab located on top of the page.

Steps	 1 - User opens the Application 2 - User encounters to Home Page 3 - User clicks 'Leaderboard' Button 4 - User encounters the 'WEEKLY' leaderboard by default. 5 - User clicks the 'MONTHLY' tab located on top of the page
Expected Result	User is successfully displayed the monthly leaderboard

Case 16:

Description	Value
Test ID	16
Test Case Description	Validation of Forgot Password Functionality on Happy Path
Test Case Result (Pass/Fail)	Pass
Prerequisites	Having Frontend Application ready to run
Test Scenario	User opens up the application, navigates to forgot password page and tries to reset its password
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Forgot Password page by clicking Forgot Password button on Home Page 4 - User enters 'user1@example.com' as email which is his registered email 5 - User hits submit button
Expected Result	Email send to <u>user1@example.com</u> and user is redirected to Change Password page.

Case 17:

Description	Value
Test ID	17
Test Case Description	Validation of Forgot Password Functionality Checks-1
Test Case Result (Pass/Fail)	Pass
Prerequisites	Having Frontend Application ready to run
Test Scenario	User opens up the application, navigates to forgot password page and tries to reset its password
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Forgot Password page by clicking Forgot Password button on Home Page 4 - User enters 'user111@example.com' as email which is not his registered email and do not exist in the system 5 - User hits submit button
Expected Result	Application gives 'Email address not found' error in a pop up.

Case 18:

Description	Value
Test ID	18
Test Case Description	Validation of Forgot Password Functionality Checks-2
Test Case Result (Pass/Fail)	Pass
Prerequisites	Having Frontend Application ready to run
Test Scenario	User opens up the application, navigates to forgot password page and tries to reset its password
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Forgot Password page by clicking Forgot Password button on Home Page

	4 - User do not enter email 5 - User hits submit button
Expected Result	Application gives 'Please enter your email' error in a pop up.

Case 19:

Description	Value
Test ID	19
Test Case Description	Validation of Reset Password Functionality on Happy Path
Test Case Result (Pass/Fail)	Pass
Prerequisites	Having Frontend Application ready to run
Test Scenario	User opens up the application, navigates to forgot password page and tries to reset its password
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Forgot Password page by clicking Forgot Password button on Home Page 4 - User enters 'user1@example.com' as email which is his registered email and hits submit 5 - User redirected to Reset Password Page. 6 - User enters Password 7 - User enters Confirm Password 8 - User enters token that sent to user1@example.com 9 - User hits Reset Password button 10 - User redirected to Home Page
Expected Result	User's Password is changed successfully

Case 20:

Description	Value
Test ID	20
Test Case Description	Validation of Reset Password Functionality Checks-1

Test Case Result (Pass/Fail)	Pass
Prerequisites	Having Frontend Application ready to run
Test Scenario	User opens up the application, navigates to forgot password page and tries to reset its password
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Forgot Password page by clicking Forgot Password button on Home Page 4 - User enters 'user1@example.com' as email which is his registered email and hits submit 5 - User redirected to Reset Password Page. 6 - User enters Password 7 - User enters Confirm Password 8 - User enters wrong token that sent to user1@example.com 9 - User hits Reset Password button
Expected Result	Application shows pop-up "Invalid or expired token"

Case 21:

Description	Value
Test ID	21
Test Case Description	Validation of Reset Password Functionality Checks-2
Test Case Result (Pass/Fail)	Pass
Prerequisites	Having Frontend Application ready to run
Test Scenario	User opens up the application, navigates to forgot password page and tries to reset its password
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Forgot Password page by clicking Forgot Password button on Home Page 4 - User enters 'user1@example.com' as email which is his registered email and hits submit 5 - User redirected to Reset Password Page. 6 - User enters Password 7 - User does not enter Confirm Password 8 - User enters token that sent to user1@example.com 9 - User hits Reset Password button

	10 - User redirected to Home Page
Expected Result	Application shows pop-up "Passwords do not match"

Case 22:

Description	Value
Test ID	22
Test Case Description	Validation of Reset Password Functionality Checks-3
Test Case Result (Pass/Fail)	Pass
Prerequisites	Having Frontend Application ready to run
Test Scenario	User opens up the application, navigates to forgot password page and tries to reset its password
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Forgot Password page by clicking Forgot Password button on Home Page 4 - User enters 'user1@example.com' as email which is his registered email and hits submit 5 - User redirected to Reset Password Page. 6 - User does not enter Password 7 - User does not enter Confirm Password 8 - User does not enter token that sent to user1@example.com 9 - User hits Reset Password button 10 - User redirected to Home Page
Expected Result	Application shows pop-up "Please fill all the fields."

Case 23:

Description	Value
Test ID	23
Test Case Description	Validation of Starting The Game
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend Application ready to run

	2- Having an existing user account with username: 'user1' and password: 'password1'
Test Scenario	User opens up the application, successfully logs in and tries to start a game
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Login page by clicking Login button on Home Page 4 - User enters 'user1' as username 5 - User enters 'password1' as password 6 - User clicks 'Login' button and gets redirected to Home page 7 - User clicks on 'Play' button and gets redirected to Game page
Expected Result	Game starts

Case 24:

Description	Value
Test ID	24
Test Case Description	Validation of Roll Dice Functionality
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend Application ready to run 2- Having an existing user account with username: 'user1' and password: 'password1'
Test Scenario	User opens up the application, successfully logs in and tries to start a game
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Login page by clicking Login button on Home Page 4 - User enters 'user1' as username 5 - User enters 'password1' as password 6 - User clicks 'Login' button and gets redirected to Home page 7 - User clicks on 'Play' button and gets redirected to Game page 8 - Game starts 9 - Turn comes to the User 10 - User clicks on 'Roll Dice' button
Expected Result	Dice rolls and resources gets distributed accordingly

Case 25:

Description	Value
Test ID	25
Test Case Description	Validation of Building Road Functionality
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend Application ready to run 2- Having an existing user account with username: 'user1' and password: 'password1'
Test Scenario	User opens up the application, successfully logs in and tries to start a game
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Login page by clicking Login button on Home Page 4 - User enters 'user1' as username 5 - User enters 'password1' as password 6 - User clicks 'Login' button and gets redirected to Home page 7 - User clicks on 'Play' button and gets redirected to Game page 8 - Game starts 9 - Turn comes to the User 10 - User clicks on 'Roll Dice' button 11 - User clicks on the 'Road' button 12 - User clicks on one of the highlighted circles.
Expected Result	A road gets builded between the User's owned road and the circle that is clicked on

Case 26:

Description	Value
Test ID	26
Test Case Description	Validation of Available Resource Check Functionality
Test Case Result (Pass/Fail)	Pass

Prerequisites	1- Having Frontend Application ready to run 2- Having an existing user account with username: 'user1' and password: 'password1'
Test Scenario	User opens up the application, successfully logs in and tries to start a game
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Login page by clicking Login button on Home Page 4 - User enters 'user1' as username 5 - User enters 'password1' as password 6 - User clicks 'Login' button and gets redirected to Home page 7 - User clicks on 'Play' button and gets redirected to Game page 8 - Game starts 9 - Turn comes to the User 10 - User clicks on 'Roll Dice' button
Expected Result	The buildings that User has enough resource to build is shown in red

Case 27:

Description	Value
Test ID	27
Test Case Description	Validation of Building Settlement Functionality
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend Application ready to run 2- Having an existing user account with username: 'user1' and password: 'password1'
Test Scenario	User opens up the application, successfully logs in and tries to start a game
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Login page by clicking Login button on Home Page 4 - User enters 'user1' as username 5 - User enters 'password1' as password 6 - User clicks 'Login' button and gets redirected to Home page 7 - User clicks on 'Play' button and gets redirected to Game page

	8 - Game starts 9 - Turn comes to the User 10 - User clicks on 'Roll Dice' button 11 - User clicks on the 'Road' button 12 - User clicks on one of the highlighted circles that are two circles away from their settlement 13 - User clicks on 'Settlement' button 14 - User clicks on the highlighted circle
Expected Result	A settlement gets builded on the last circle that User clicked

Case 28:

Description	Value
Test ID	28
Test Case Description	Validation of CPU Building Road Functionality
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend Application ready to run 2- Having an existing user account with username: 'user1' and password: 'password1'
Test Scenario	User opens up the application, successfully logs in and tries to start a game
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Login page by clicking Login button on Home Page 4 - User enters 'user1' as username 5 - User enters 'password1' as password 6 - User clicks 'Login' button and gets redirected to Home page 7 - User clicks on 'Play' button and gets redirected to Game page 8 - Game starts 9 - Turn comes to the CPU player
Expected Result	A road gets builded by CPU player

Case 29:

Description	Value
Test ID	29

Test Case Description	Validation of Building City Functionality
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend Application ready to run 2- Having an existing user account with username: 'user1' and password: 'password1'
Test Scenario	User opens up the application, successfully logs in and tries to start a game
Steps	 1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Login page by clicking Login button on Home Page 4 - User enters 'user1' as username 5 - User enters 'password1' as password 6 - User clicks 'Login' button and gets redirected to Home page 7 - User clicks on 'Play' button and gets redirected to Game page 8 - Game starts 9 - User plays the game long enough to get 3 Ore and 2 Grain resources. 10 - Turn comes to the User 11 - User clicks on 'Roll Dice' button. 12 - User clicks on any of their settlements.
Expected Result	A city gets builded on the circle that User clicked

Case 30:

Description	Value
Test ID	30
Test Case Description	Validation of Longest Road Functionality
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend Application ready to run 2- Having an existing user account with username: 'user1' and password: 'password1'
Test Scenario	User opens up the application, successfully logs in and tries to start a game
Steps	1 - User opens the Application 2 - User encounters to Home Page

	3 - User navigates to Login page by clicking Login button on Home Page 4 - User enters 'user1' as username 5 - User enters 'password1' as password 6 - User clicks 'Login' button and gets redirected to Home page 7 - User clicks on 'Play' button and gets redirected to Game page 8 - Game starts 9 - User plays the game long enough to get 5 consecutive roads.
Expected Result	An announcement is made on the log that User become the owner of the longest path and awarded with 2 Victory Points

Case 31:

Description	Value
Test ID	31
Test Case Description	Validation of Game Over Functionality
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend Application ready to run 2- Having an existing user account with username: 'user1' and password: 'password1'
Test Scenario	User opens up the application, successfully logs in and tries to start a game
Steps	1 - User opens the Application 2 - User encounters to Home Page 3 - User navigates to Login page by clicking Login button on Home Page 4 - User enters 'user1' as username 5 - User enters 'password1' as password 6 - User clicks 'Login' button and gets redirected to Home page 7 - User clicks on 'Play' button and gets redirected to Game page 8 - Game starts 9 - User or a CPU player gets 8 Victory Points
Expected Result	Application gives 'Game Over' in a pop up and the current score of User is submitted to the leaderboard