Frontend Application Test-Cases

Case 1 :

Description	Value
Test ID	1
Test Case Description	Validation of Register Functionality on Happy Path
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run.
Test Scenario	User opens up the application, navigates to signup page and tries to register to the game.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User navigates to Sign Up page by clicking 'Not Have an Existing Account? No Problems, Sign Up Now for Free!' button 4 - User encounters the Sign Up page 5 - User enters 'test_user' as username 6 - User enters '123' as password 7 - User enters '123' to the 'Password Again' field. 8 - User clicks 'Sign Up' Button
Expected Result	1 – User with such credentials is created and user is redirected to the Dashboard 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	1- Having Frontend 'UiApplication' Application ready to run.

	2- Havind an existing user account with username: 'test_user'
Test Scenario	User opens up the application, navigates to signup 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 the Sign In page 3 - User navigates to Sign Up page by clicking 'Not Have an Existing Account? No Problems, Sign Up Now for Free!' button 4 - User encounters the Sign Up page 5 - User enters 'test_user' as username 6 - User enters '123' as password 7 - User enters '123' to the 'Password Again' field. 8 - User clicks 'Sign Up' Button
Expected Result	1 – Operation fails and an error toast with "Username already exists. Please choose another and try again." content is displayed to the user from the bottom of the page.

Case 3 :

Description	*Value*
Test ID	3
Test Case Description	Validation of Register Functionality Checks-2
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run.
Test Scenario	User opens up the application, navigates to signup page and tries to register to the game. But user does not input the same password to the "Password Again" field.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User navigates to Sign Up page by clicking 'Not Have an Existing Account? No Problems, Sign Up Now for Free!' button 4 - User encounters the Sign Up page 5 - User enters 'test_user' as username 6 - User enters '123' as password 7 - User enters '1234' to the 'Password Again' field.

	8 - User clicks 'Sign Up' Button
Expected Result	1 – Operation fails and an error toast with "Passwords does not match" content is displayed to the user from the bottom of the page.

Case 4 :

Description	Value
Test ID	4
Test Case Description	Validation of Register Functionality Checks-3
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run.
Test Scenario	User opens up the application, navigates to signup page and tries to register to the game. But user does not input username field.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User navigates to Sign Up page by clicking 'Not Have an Existing Account? No Problems, Sign Up Now for Free!' button 4 - User encounters the Sign Up page 5 - User enters '123' as password 6 - User enters '123' to the 'Password Again' field. 7 - User clicks 'Sign Up' Button
Expected Result	1 – Operation fails and an error toast with "Please enter your username" content is displayed to the user from the bottom of the page.

Case 5 :

Description	Value
Test ID	5
Test Case	Validation of Register Functionality Checks-4

Description	
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run.
Test Scenario	User opens up the application, navigates to signup page and tries to register to the game. But user does not input password field.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User navigates to Sign Up page by clicking 'Not Have an Existing Account? No Problems, Sign Up Now for Free!' button 4 - User encounters the Sign Up page 5 - User enters 'test_user' as username 6 - User enters '123' to the 'Password Again' field. 7 - User clicks 'Sign Up' Button
Expected Result	1 – Operation fails and an error toast with "Please enter your password" content is displayed to the user from the bottom of the page.

Case 6 :

Description	Value
Test ID	6
Test Case Description	Validation of Register Functionality Checks - 5
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run.
Test Scenario	User opens up the application, navigates to signup page and tries to register to the game. But user does not input password again field.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User navigates to Sign Up page by clicking 'Not Have an Existing Account? No Problems, Sign Up Now for Free!' button

	4 - User encounters the Sign Up page 5 - User enters 'test_user' as username 6 - User enters '123' as password 7 - User clicks 'Sign Up' Button
Expected Result	1 – Operation fails and an error toast with "Please enter your password again." content is displayed to the user from the bottom of the page.

Case 7 :

Description	*Value*
Test ID	7
Test Case Description	Validation of Register to Login Page Redirection Functionality
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run.
Test Scenario	User opens up the application, navigates to signup page then tries to navigate back to signin page.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User navigates to Sign Up page by clicking 'Not Have an Existing Account? No Problems, Sign Up Now for Free!' button 4 - User navigates back to Sign In page by clicking 'Already Have an Account? Sign In and Start Killing some Coronaviruses!' button
Expected Result	1 – User is successfully redirected back to Sign In page.

Case 8 :

Description	*Value*
Test ID	8
Test Case	Validation of Login Functionality with Correct Credentials

Description	(Happy Path)
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Having an existing user account with username: 'test_user' and password: '123'
Test Scenario	User opens up the application and tries to login to the game directly from login page.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User enters 'test_user' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button
Expected Result	1 – User is redirected to the Dashboard page directly.

Case 9 :

Description	*Value*
Test ID	9
Test Case Description	Validation of Login Functionality Checks-1
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' 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 the Sign In page 3 - User enters '123' as password 4 - User clicks 'Sign In' Button
Expected Result	1 – Operation fails and an error toast with "Please enter your username" content is displayed to the user from the bottom of the page.

Case 10 :

Description	Value
Test ID	10
Test Case Description	Validation of Login Functionality Checks-2
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' 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 the Sign In page 3 - User enters 'test_user' as username 4 - User clicks 'Sign In' Button
Expected Result	1 – Operation fails and an error toast with "Please enter your password" content is displayed to the user from the bottom of the page.

Case 11 :

Description	Value
Test ID	11
Test Case Description	Validation of Login Functionality Checks-3
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Not Having an existing user account with username: 'test_user_1' and password: '123'
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 the Sign In page 3 - User enters 'test_user_1' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button
Expected Result	1 – Operation fails and an error toast with "Invalid username or password - UNAUTHORIZED" content is displayed to the user from the bottom of the page.

Case 12 :

Description	*Value*
Test ID	12
Test Case Description	Validation of Login Functionality Checks-4
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Not Having an existing user account with username: 'test_user' and password: '1234'
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 the Sign In page 3 - User enters 'test_user' as username 4 - User enters '1234' as password 5 - User clicks 'Sign In' Button
Expected Result	1 – Operation fails and an error toast with "Invalid username or password - UNAUTHORIZED" content is displayed to the user from the bottom of the page.

Case 13 :

Description	*Value*

Test ID	13
Test Case Description	Validation of Login to Register Page Redirection Functionality
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run.
Test Scenario	User opens up the application, navigates to signup page then tries to navigate back to signin page.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User navigates to Sign Up page by clicking 'Not Have an Existing Account? No Problems, Sign Up Now for Free!' button
Expected Result	1 – User is successfully redirected back to Sign Up page.

Case 14 :

Description	Value
Test ID	14
Test Case Description	Validation of No Internet (or Connection error of some sort) Response.
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Being not able to access Backend API (API may not be running or network connection may not work) 3- Having an existing user account with username: 'test_user' and password: '123'
Test Scenario	(This scenario works the same for each action on application that makes a request to the Backend, however we are examining it only on a specific action) User tries to login to the system with correct credentials but Backend API is not running or is inaccessible.
Steps	1 - User opens the Application 2 - User encounters the Sign In page

	3 - User enters 'test_user' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button
Expected Result	1 – Operation fails and an error toast with "Oops! Seems like you can't access the game server. Please check your internet connection and try again." content is displayed to the user from the bottom of the page.

Case 15 :

Description	*Value*
Test ID	15
Test Case Description	Validation of Dashboard to Leaderboard Redirection
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Having an existing user account with username: 'test_user' and password: '123'
Test Scenario	User successfully logs in to the application and tries to navigate to leaderboard page from dashboard page.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User enters 'test_user' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button 6 - User encounters the Dashboard page 7 - User clicks the Leaderboard button
Expected Result	1 – User is successfully redirected to the Leaderboard page

Case 16 :

Description	*Value*
Test ID	16

Test Case Description	Validation of Logout functionality from Dashboard
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Having an existing user account with username: 'test_user' and password: '123'
Test Scenario	User successfully logs in to the application and tries to logout by the dashboard page.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User enters 'test_user' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button 6 - User encounters the Dashboard page 7 - User clicks the Logout button
Expected Result	1 – User is successfully redirected to the Login page

Case 17 :

Description	Value
Test ID	17
Test Case Description	Validation of Game Session Restrictions on the Dashboard UI
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Having an existing user account with username: 'test_user' and password: '123' 3- Not having an ongoing game session (not having started an unfinished game beforehand)
Test Scenario	User successfully logs in to the application and encounters a disabled 'Continue Game' button and also can't see a "Ongoing session score" text on top right corner.
Steps	1 - User opens the Application

	2 - User encounters the Sign In page 3 - User enters 'test_user' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button 6 - User encounters the Dashboard page
Expected Result	1 – 'Continue Game' button is disabled for the user and there is no such text with "Ongoing Session Score:" content in the top right corner.

Case 18 :

Description	Value
Test ID	18
Test Case Description	Validation of Game Session Restrictions on the Dashboard UI-2
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Having an existing user account with username: 'test_user' and password: '123' 3- Having an ongoing game session
Test Scenario	User successfully logs in to the application and encounters an enabled 'Continue Game' button and also sees a "Ongoing session score" text on top right corner.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User enters 'test_user' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button 6 - User encounters the Dashboard page
Expected Result	1 – 'Continue Game' button is enabled for the user and there exists a text with "Ongoing Session Score:" content in the top right corner.

Case 19 :

Description	Value
Test ID	19
Test Case Description	Validation of Continue Game functionality from Dashboard
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Having an existing user account with username: 'test_user' and password: '123' 3- Having an ongoing game session
Test Scenario	User successfully logs in to the application and tries to continue his/her ongoing game by the button in the dashboard.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User enters 'test_user' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button 6 - User encounters the Dashboard page 7 - User clicks the Continue Game button
Expected Result	1 – User is successfully redirected to the User's Last Saved Game Level page

Case 20 :

Description	Value
Test ID	20
Test Case Description	Validation of New Game functionality from Dashboard
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Having an existing user account with username: 'test_user' and password: '123'
Test Scenario	User successfully logs in to the application and tries to start a

	new game by the button in the dashboard.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User enters 'test_user' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button 6 - User encounters the Dashboard page 7 - User clicks the New Game button
Expected Result	1 – User is successfully redirected to the first level of the game.

Case 21 :

Description	*Value*
Test ID	21
Test Case Description	Validation of Logout functionality from Leaderboard
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Having an existing user account with username: 'test_user' and password: '123'
Test Scenario	User successfully logs in to the application, then navigates to leaderboard page and tries to logout by the button in leaderboard page.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User enters 'test_user' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button 6 - User encounters the Dashboard page 7 - User clicks the Leaderboard button 8 - User encounters the Leaderboard page 9 - User clicks the Logout button
Expected Result	1 – User is successfully redirected to the Login page

Case 22 :

Description	Value
Test ID	22
Test Case Description	Validation of Leaderboard to Dashboard Redirection Functionality
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Having an existing user account with username: 'test_user' and password: '123'
Test Scenario	User successfully logs in to the application, then navigates to leaderboard page and then tries to navigate back to dashboard page.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User enters 'test_user' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button 6 - User encounters the Dashboard page 7 - User clicks the Leaderboard button 8 - User encounters the Leaderboard page 9 - User clicks the Back To Dashboard button
Expected Result	1 – User is successfully redirected to the Dashboard page

Case 23 :

Description	Value
Test ID	23
Test Case Description	Validation of Leaderboard Data Functionality
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Having an existing user account with username: 'test_user'

	and password: '123' 3- Having another existing player account with username: 'test_user_2' and password: '123' 4- Having another existing player account with username: 'test_user_3' and password: '123' 5- Having 'test_user' account play the game 3 times, one 1 month ago, one 1 week ago and 1 a day ago, beforehand and in the first one having it gain 100 points, second one 50 and in the third one 25 points. 6- Having 'test_user_2' account play the game 2 times, one 1 week ago and 1 a day ago, beforehand and in the first one having it gain 100 points, second one 50. 7- Having 'test_user_3' account play the game 1 time, 1 a day ago, beforehand and having it gain 100 points. (Below values can also be set in the database 'player' and 'score' tables. For each playing, a score row needs to be entered on the 'score' table with corresponding user.)
Test Scenario	User successfully logs in to the application, then navigates to leaderboard page, then displays All Time Leaderboard, then chooses Weekly Leaderboard and finally chooses Monthly Leaderboard.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User enters 'test_user' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button 6 - User encounters the Dashboard page 7 - User clicks the Leaderboard button 8 – User displays the All times table 9 – Then Chooses Weekly Leaderboard 10 – User displays the Weekly table 11 – Then Chooses Monthly Leaderboard 12 – User displays the All time table

Expected Result	1 – User displays following ordering in the All Time Leaderboard:
	        1- test_user_1 175
	        2- test_user_2 150
	        3- test_user_3 100
	
	2 – User displays following ordering in the Weekly Leaderboard:
	        1- test_user_1 150

	2- test_user_2 100
	3 – User displays following ordering in the Monthly Leaderboard:
	1- test_user_1 100

Case 24 :

Description	Value
Test ID	24
Test Case Description	Validation of Ability to Shoot in the Game
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Having an existing user account with username: 'test_user' and password: '123'
Test Scenario	User successfully logs in to the application, starts a new game via Dashboard
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User enters 'test_user' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button 6 - User encounters the Dashboard page 7 - User clicks the New Game button 8 - User encounters the First level page of the game
Expected Result	1 – User validates that bullets are auto-fired from user's ship

Case 25 :

Description	Value
Test ID	25
Test Case Description	Validation of Ability to Move in the Game

Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Having an existing user account with username: 'test_user' and password: '123'
Test Scenario	User successfully logs in to the application, starts a new game via Dashboard, then tries to move his/her ship
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User enters 'test_user' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button 6 - User encounters the Dashboard page 7 - User clicks the New Game button 8 - User encounters the First level page of the game
Expected Result	1 – User validates ship can be moved by mouse drag and drops

Case 26 :

Description	Value
Test ID	26
Test Case Description	Validation of Changing Levels of the Game
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Having an existing user account with username: 'test_user' and password: '123' 3- Being able to finish the first level of the game
Test Scenario	User successfully logs in to the application, starts a new game via Dashboard, user kills all the coronaviruses in the first level of the game.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User enters 'test_user' as username

	4 - User enters '123' as password 5 - User clicks 'Sign In' Button 6 - User encounters the Dashboard page 7 - User clicks the New Game button 8 - User encounters the First level page of the game 9 – User finishes the level by killing all the CoronaViruses in the page by moving his/her ship
Expected Result	1 – User validates that he/she navigated to a new level with different viruses and HP of the user is sustained as well as the sessions score (But ship changed).

Case 27 :

Description	Value
Test ID	27
Test Case Description	Validation of Losing Functionality and returning back to Dashboard
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Having an existing user account with username: 'test_user' and password: '123' 3- Being unable to finish the first level of the game
Test Scenario	User successfully logs in to the application, starts a new game via Dashboard. Then user ship gets destroyed by the coronaviruses in the first level of the game.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User enters 'test_user' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button 6 - User encounters the Dashboard page 7 - User clicks the New Game button 8 - User encounters the First level page of the game 9 – User's ship gets destroyed by the coronoviruses in the first level.
Expected Result	1 – User validates redirected to the Dashboard and his/her

	global score is updated with the finished game score accordingly.

Case 28 :

Description	Value
Test ID	28
Test Case Description	Validation of Completion of the Game and returning back to Dashboard
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Having an existing user account with username: 'test_user' and password: '123' 3- Being able to finish all levels of the game
Test Scenario	User successfully logs in to the application, starts a new game via Dashboard. Then successfully completes all single player levels of the game (There are 4 of them).
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User enters 'test_user' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button 6 - User encounters the Dashboard page 7 - User clicks the New Game button 8 - User encounters the First level page of the game 9 – User successfully completes all single player levels of the game (There are 4 of them).
Expected Result	1 – User validates he/she is navigated to a Victory screen and displayed a Back to Dashboard button. User presses Back to Dashboard button and then gets redirected to the Dashboard.

Case 29 :

Description	Value
Test ID	29

Test Case Description	Validation of Exitting from an ongoing game session and returning back to dashboard.
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Having an existing user account with username: 'test_user' and password: '123' 3- Currently playing a game
Test Scenario	User successfully logs in to the application, starts a new game via Dashboard. Then tries to go back to the dashboard.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User enters 'test_user' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button 6 - User encounters the Dashboard page 7 - User clicks the New Game button 8 - User encounters the First level page of the game 9 – User presses 'Escape' key of his/her keyboard and displayed an error toast with buttons 10- User clicks Go Back to Main Menu button
Expected Result	1 – User gets redirected to the Dashboard. Discovers he/she can continue the game by 'Continue Game' button in the main menu and his/her ongoing game session score is displayed on the top right corner of the game.

Case 30 :

Description	Value
Test ID	30
Test Case Description	Validation of Cheating Functionality
Test Case Result (Pass/Fail)	Pass
Prerequisites	1- Having Frontend 'UiApplication' Application ready to run. 2- Having an existing user account with username: 'test_user' and password: '123'

	3- Currently playing a game
Test Scenario	User successfully logs in to the application, starts a new game via Dashboard. Then passes the levels one-by-one by the cheat key.
Steps	1 - User opens the Application 2 - User encounters the Sign In page 3 - User enters 'test_user' as username 4 - User enters '123' as password 5 - User clicks 'Sign In' Button 6 - User encounters the Dashboard page 7 - User clicks the New Game button 8 - User encounters the First level page of the game 9 – User presses 'ctrl+shift+9' key combination from his/her keyboard
Expected Result	1 – User passes the game levels one-by-one and his/her score is updated accordingly as if user killed all the viruses of the previous level.