NANYANG TECHNOLOGICAL UNIVERSITY

CZ3003 - Software System Analysis & Design

Lab 3 Deliverables

Project Name: Food Wars

Group Name: Team 1

Lab group: TDDP3

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Testing Summary

For our testing, we have used the automated testing package, "UnityEngine.TestTools", to conduct the tests on our various components. A total of 35 test cases were conducted for all the various components and all of them have passed.
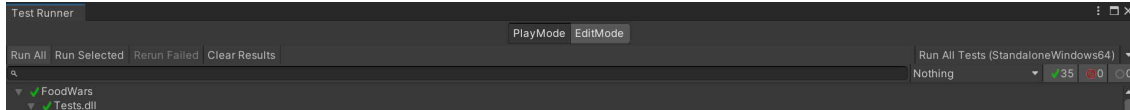
We will go into the details for each component's testing in the document below!

Sample Script

The following is a sample snippet from our testing scripts which is testing for whether the leaderboard is arranged in descending order by elo:

```
[UnityTest]
// Comment: Leaderboard check that all 5 ranks in rows are truthy
public IEnumerator leaderboard_content_check_correct_all_rows_have_rank()
{
    SceneManager.LoadScene("LeaderboardScene");
    yield return new WaitForSeconds(3);

    Text rankOneRank = GameObject.Find("Row1").GetComponent<RowUi>().rank;
    Text rankTwoRank = GameObject.Find("Row2").GetComponent<RowUi>().rank;
    Text rankThreeRank = GameObject.Find("Row3").GetComponent<RowUi>().rank;
    Text rankFourRank = GameObject.Find("Row4").GetComponent<RowUi>().rank;
    Text rankFiveRank = GameObject.Find("Row5").GetComponent<RowUi>().rank;

    Assert.IsTrue(rankOneRank);
    Assert.IsTrue(rankTwoRank);
    Assert.IsTrue(rankThreeRank);
    Assert.IsTrue(rankFourRank);
    Assert.IsTrue(rankFiveRank);
}
```

Leaderboard Testing

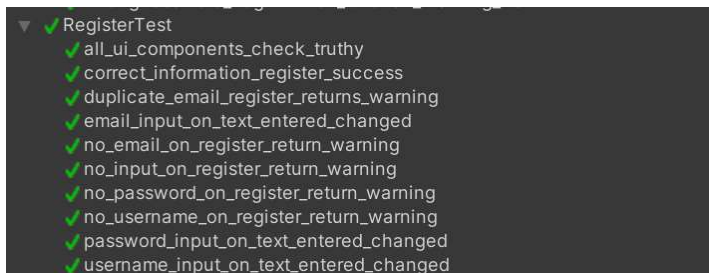For the leaderboard component, the following tests were conducted:
- There were five rows of data in the leaderboard
- The users in the leaderboard were arranged in descending order by their elo
- All five rows of data were correct
- The table headers were all correct
- The sharing buttons for WhatsApp and Telegram were both present
- View Season Rewards Button was functioning on click
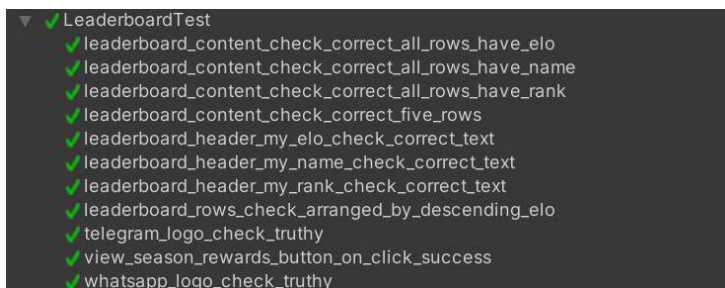
Register Testing

For the registration component, the following tests were conducted:
- All UI components, meaning the input boxes, dropdown and buttons, were functioning
- Missing information, be it username, email or password, prompted the user to enter them and registration fails
- The input boxes were containing the correct information after the information is entered
- Usage of an email already in the database would cause registration to fail due to duplicated emails
- Registration is successful if all information are provided and valid

Login Testing

For the login component, the following tests were conducted:
- Missing information would cause login to fail and a warning message would appear to prompt the user for the missing information
- If the user entered is not in the database, a warning message is shown to inform that the user credentials does not exist
- If the wrong password is entered meaning it does not match the database's for the user, a warning message is shown to inform that the user credentials entered is invalid
- Login is successful if valid credentials are entered
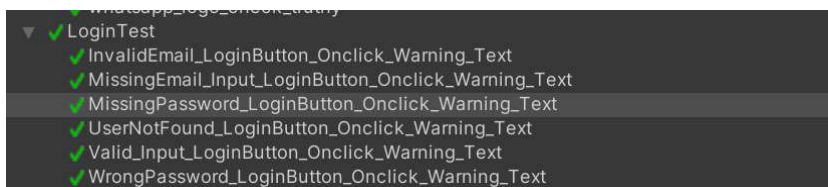
Inventory Testing

For the inventory component, the following tests were conducted:
- Only items that are owned by the users are displayed on the inventory screen

Shop Test

For the shop component, the following test were conducted:
- The powerups were displayed in the shop
- The accessory page is displayed when the user clicks on the tab to access the accessory page

Single Mode Test

For the single player mode component, the following tests were conducted:
- When a question is answered, the questions seen count increases as another question is shown
- When replay is selected, the points reset to zero
- When skip question is selected, the number of correct questions increases by one