**TEST DOCUMENTATION**

1. **Testing Objective**

The objective of this document is to document the steps taken to test our system. The test cases listed will be used to verify if our system works properly.

1. **Testing Scope**

We will be doing both frontend testing and backend testing.

Backend Testing

We will be doing integration testing, we will be testing on the API endpoints, which the backend system exposes, are functioning correctly. This is to ensure a smooth and correct integration with the frontend system.

Frontend Testing

We will conduct subsystem testing for frontend. This will be the last stage of testing when all integrations between components have been shown to work and the system is functional. We will be using white box testing such as control flow testing to determine the execution order of statements or instructions of the programme through a control structure.

1. **Backend Test Cases**

3.1 JustJio Server API

3.1.1 Integration Testing

| Test Case | Test Input | Expected Result | Test Result | Pass / Fail |
| --- | --- | --- | --- | --- |
| Create user account | {  "email": "ww@gmail.com",  "username": "ww123",  "password": "Ww12345678!",  "phoneNum": "99947033"  } | HTTP\_201\_CREATED | HTTP\_201\_CREATED | Pass |
| Create user with duplicate username | {  "email": "ww@gmail.com",  "username": "ks123",  "password": "Ww12345678!",  "phoneNum": "99947033"  } | HTTP\_400\_BAD\_REQUEST | HTTP\_400\_BAD\_REQUEST | Pass |
| Create user with duplicate email | {  "email": "ww@gmail.com",  "username": "ww123",  "password": "Ww12345678!",  "phoneNum": "99947033"  } | HTTP\_400\_BAD\_REQUEST | HTTP\_400\_BAD\_REQUEST | Pass |
| Login with valid credentials | {  "username": "ks123",  "password": "Ks12345678!"  } | HTTP\_200\_OK | HTTP\_200\_OK | Pass |
| Login with invalid username | {  "username": "brad",  "password": "Ks12345678!"  } | HTTP\_404\_NOT\_FOUND | HTTP\_404\_NOT\_FOUND | Pass |
| Login with wrong password | {  "username": "ks123",  "password": "ks123"  } | HTTP\_401\_UNAUTHORIZED | HTTP\_401\_UNAUTHORIZED | Pass |
| Create a room with inviting valid users | {  "room": {  "name": "test for yes error 21",  "time": "3:00pm",  "venue": "ntu tama",  "date": "29/12/2022"  },  "invitees": [  "ks123",  "zh123"  ]  } | HTTP\_200\_OK | HTTP\_200\_OK | Pass |
| Create a room with inviting invalid users | {  "room": {  "name": "test for yes error 21",  "time": "3:00pm",  "venue": "ntu tama",  "date": "29/12/2022"  },  "invitees": [  "brad",  "zh123"  ]  } | HTTP\_404\_NOT\_FOUND | HTTP\_404\_NOT\_FOUND | Pass |
| Fetch rooms with authenticated token | Nil | HTTP\_200\_OK | HTTP\_200\_OK | Pass |
| Fetch rooms without authenticated token | Nil | HTTP\_401\_UNAUTHORIZED | HTTP\_401\_UNAUTHORIZED | Pass |
| Fetch room invitations with authenticated token | Nil | HTTP\_200\_OK | HTTP\_200\_OK | Pass |
| Fetch room invitations without authenticated token | Nil | HTTP\_401\_UNAUTHORIZED | HTTP\_401\_UNAUTHORIZED | Pass |
| Invite valid user to room | {  “Invitees”: [“kaiseong”]  } | HTTP\_200\_OK | HTTP\_200\_OK | Pass |
| Invite invalid user to room | {  “Invitees”: [“tom”]  } | HTTP\_404\_NOT\_FOUND | HTTP\_404\_NOT\_FOUND | Pass |
| Fetch transactions with authenticated token | Nil | HTTP\_200\_OK | HTTP\_200\_OK | Pass |
| Fetch transactions without authenticated token | Nil | HTTP\_401\_UNAUTHORIZED | HTTP\_401\_UNAUTHORIZED | Pass |
| Generate transactions for a room | {  "name": "drinks",  "shouldPay": "ks123",  "date": "20/10/2022",  "amountToPay": 5,  "payers": [  "amabel123",  "zh123",  "eldrick123",  "harish123"  ]  } | HTTP\_200\_OK | HTTP\_200\_OK | Pass |
| Update transaction to paid | Nil | HTTP\_200\_OK | HTTP\_200\_OK | Pass |

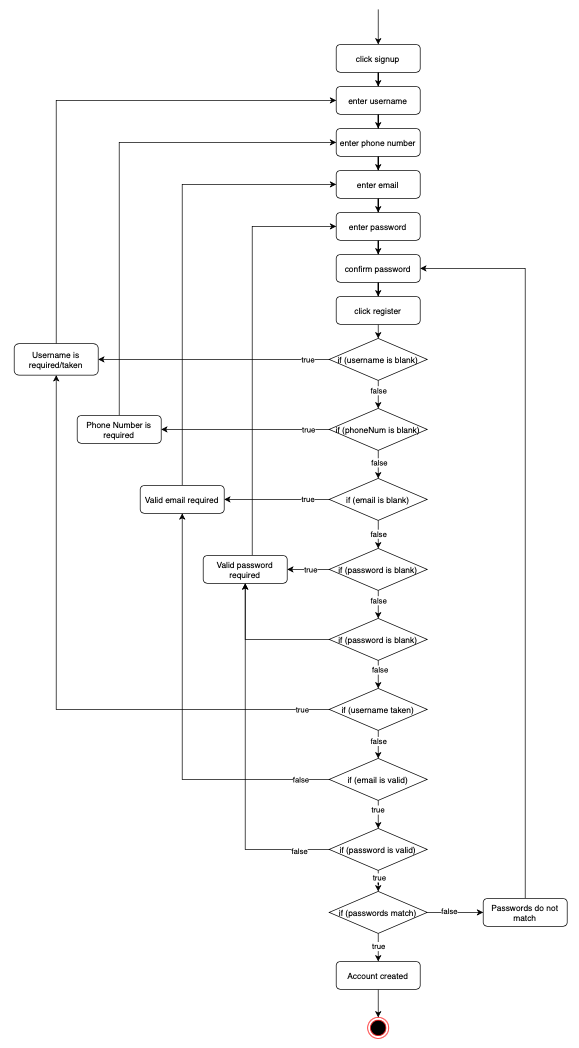
1. **Frontend Test Cases**

4.1 White Box Testing

Sign up/Create new user

| **Test Scenario ID** | | Register-1 | | | | **Test Case ID** | | Register-1A | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case Description** | | Registration – Positive Test Case | | | | **Test Priority** | | High | | |
| **Pre-Requisite** | | Stable Internet Connection | | | | **Post-Requisite** | | NA | | |
| **Test Execution Steps:** | | | | | | | | | | |
| **S.**  **No** | **Action** | | **Inputs** | **Expected Output** | **Actual Output** | | **Test Device** | | **Test Result** | **Test Comments** |
| 1 | Launch application | | - | Login Page | Login Page | | Android Emulator | | Pass | [Aloysius 5/11/2022 4:14 PM]: Launch successful |
| 2 | Click signup | | - | Register page | Register Page | | Android Emulator | | Pass | [Aloysius 5/11/2022 4:14 PM]: Load successful |
| 3 | Sign up with valid credentials | | Username not taken  Valid Email address  Password meets requirements | Login page | Login Page | | Android Emulator | | Pass | [Aloysius 5/11/2022 4:14 PM]:  Load successful |

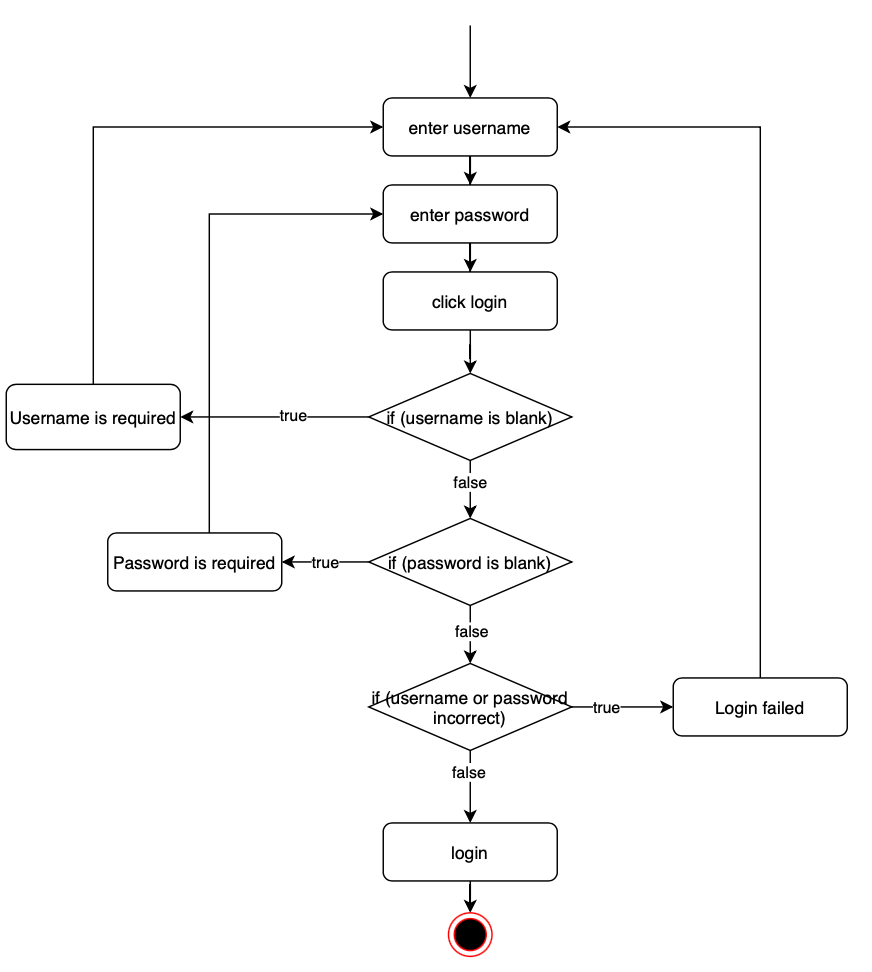
| **Test Scenario ID** | | Register-2 | | | | **Test Case ID** | | Register-2A | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case Description** | | Registration – Negative Test Case | | | | **Test Priority** | | High | | |
| **Pre-Requisite** | | Stable Internet Connection | | | | **Post-Requisite** | | NA | | |
| **Test Execution Steps:** | | | | | | | | | | |
| **S.No** | **Action** | | **Inputs** | **Expected Output** | **Actual Output** | | **Test Browser** | | **Test Result** | **Test Comments** |
| 1 | Launch application | | - | Login Page | Login Page | | Android Emulator | | Pass | [Aloysius 5/11/2022 4:20 PM]: Launch successful |
| 2 | Click signup | | - | Register page | Register Page | | Android Emulator | | Pass | [Aloysius 5/11/2022 4:21PM]: Load successful |
| 3 | Enter invalid username, everything else valid | | Username that has been taken | Username taken | Username taken | | Android Emulator | | Pass | [Aloysius 5/11/2022 4:21PM]: Invalid Username blocked |
| 4 | Enter invalid email address, everything else valid | | Email that is not of the format “x@x.x” | Invalid email | Invalid email | | Android Emulator | | Pass | [Aloysius 5/11/2022 4:24PM]: Invalid email blocked |
| 5 | Enter invalid password, everything else valid | | Password that does not have either:   1. 8 chars 2. Mixed case 3. Alphanumeric 4. Symbol | Invalid password | Invalid password | | Android Emulator | | Pass | [Aloysius 5/11/2022 4:26PM]: Invalid password blocked |
| 6 | Enter 2 different passwords, everything else valid | | Enter a password that does not match in “Confirm Password” | Passwords do not match | Passwords do not match | | Android Emulator | | Pass | [Aloysius 5/11/2022 4:27PM]: Password mismatch blocked |



Login

| **Test Scenario ID** | | Login-1 | | **Test Case ID** | | Login-1A | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case Description** | | Login – Positive Test Case | | **Test Priority** | | High | | |
| **Pre-Requisite** | | Stable Internet Connection and Already Registered | | **Post-Requisite** | | NA | | |
| **Test Execution Steps:** | | | | | | | | |
| **S. No** | **Action** | **Inputs** | **Expected Output** | **Actual Output** | **Test Browser** | | **Test Result** | **Test Comments** |
| 1 | Launch application | - | Login Page | Login Page | Android Emulator | | Pass | [Aloysius 5/11/2022 4:33 PM]: Launch successful |
| 2 | Enter Valid Username and Password | Valid Username and Password | Home page | Home page | Android Emulator | | Pass | [Aloysius 5/11/2022 4:34 PM]: Load successful |

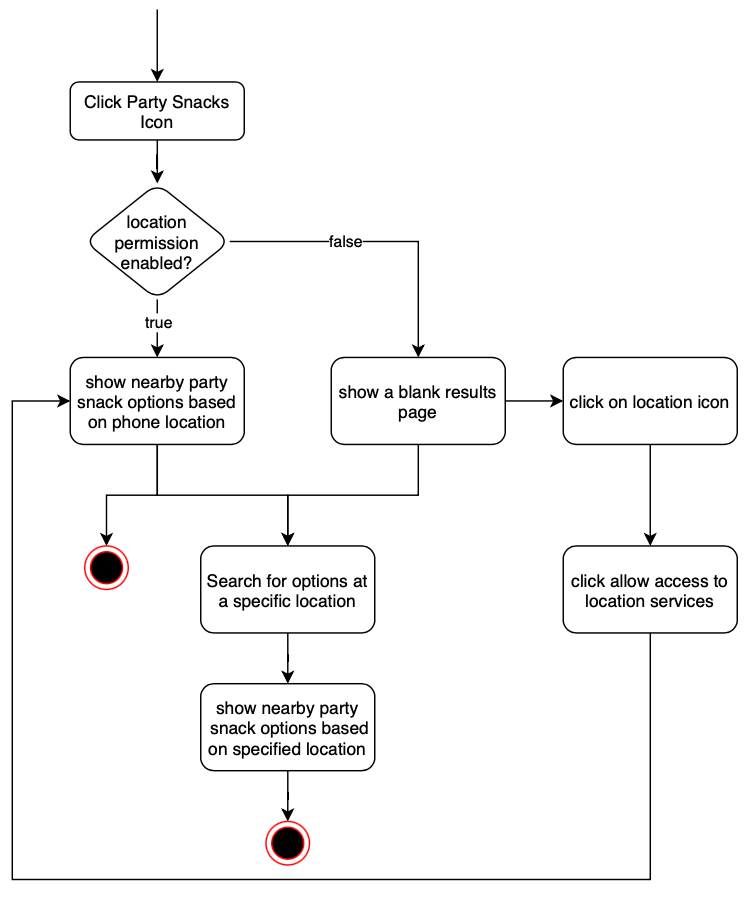
| **Test Scenario ID** | | Login-2 | | | | **Test Case ID** | | Login-2A | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case Description** | | Login – Negative Test Case | | | | **Test Priority** | | High | | |
| **Pre-Requisite** | | Stable Internet Connection | | | | **Post-Requisite** | | NA | | |
| **Test Execution Steps:** | | | | | | | | | | |
| **S. No** | **Action** | | **Inputs** | **Expected Output** | **Actual Output** | | **Test Browser** | | **Test Result** | **Test Comments** |
| 1 | Launch application | | - | Login Page | Login Page | | Android Emulator | | Pass | [Aloysius 5/11/2022 4:35 PM]: Launch successful |
| 2 | Enter invalid username and a password | | Username: hello  Password: hello | Login failed | Login failed | | Android Emulator | | Pass | [Aloysius 5/11/2022 4:36 PM]:  Invalid login attempt stopped |
| 3 | Enter valid username and invalid password | | Username: aloysius123  Password: hi | Login failed | Login failed | | Android Emulator | | Pass | [Aloysius 5/11/2022 4:37 PM]:  Invalid login attempt stopped |



View Party Snacks

| **Test Scenario ID** | | ViewPartySnacks-1 | | **Test Case ID** | | ViewPartySnacks-1A | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case Description** | | ViewPartySnacks – Positive Test Case | | **Test Priority** | | High | | |
| **Pre-Requisite** | | Stable Internet Connection and logged in | | **Post-Requisite** | | NA | | |
| **Test Execution Steps:** | | | | | | | | |
| **S. No** | **Action** | **Inputs** | **Expected Output** | **Actual Output** | **Test Browser** | | **Test Result** | **Test Comments** |
| 1 | Click Party Snacks icon | Grant location service permission when prompted | Party Snacks page with options based on current location | Party Snacks page with options based on current location | Android Emulator | | Pass | [Aloysius 8/11/2022 6:30 PM]: Load successful |
| 2 | Search another address | Any address | Party Snacks page with options based searched location | Party Snacks page with options based searched location | Android Emulator | | Pass | [Aloysius 8/11/2022 6:31 PM]: Load successful |

| **Test Scenario ID** | | ViewPartySnacks-2 | | **Test Case ID** | | ViewPartySnacks-2A | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case Description** | | ViewPartySnacks – Negative Test Case | | **Test Priority** | | High | | |
| **Pre-Requisite** | | Stable Internet Connection and logged in | | **Post-Requisite** | | NA | | |
| **Test Execution Steps:** | | | | | | | | |
| **S. No** | **Action** | **Inputs** | **Expected Output** | **Actual Output** | **Test Browser** | | **Test Result** | **Test Comments** |
| 1 | Click Party Snacks icon | Deny location service permission when prompted | Party Snacks page with no results | Party Snacks page with no results | Android Emulator | | Pass | [Aloysius 8/11/2022 6:32 PM]: Load successful |
| 2 | Search for an address | Any address | Party Snacks page with options based searched location | Party Snacks page with options based searched location | Android Emulator | | Pass | [Aloysius 8/11/2022 6:32 PM]: Load successful |



Room Invitation

| **Test Scenario ID** | | RoomInvitation-1 | | | | **Test Case ID** | | RoomInvitation-1A | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case Description** | | Room Invitation – Positive Test Case | | | | **Test Priority** | | High | | |
| **Pre-Requisite** | | Stable Internet Connection and logged in | | | | **Post-Requisite** | | NA | | |
| **Test Execution Steps:** | | | | | | | | | | |
| **S. No** | **Action** | | **Inputs** | **Expected Output** | **Actual Output** | | **Test Browser** | | **Test Result** | **Test Comments** |
| 1 | Click create room | | - | Create room page | Create room page | | Android Emulator | | pass | [Aloysius 8/11/2022 7:01 PM]: Load successful |
| 2 | Enter valid room details | | - All details filled  - Date in future  - Time hh:mmxm  - Invitee accounts exist | Room created successfully | Room created successfully | | Android Emulator | | pass | [Aloysius 8/11/2022 7:01 PM]: Room creation successful |

| **Test Scenario ID** | | RoomInvitation-2 | | | | **Test Case ID** | | RoomInvitation-2A | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case Description** | | Room Invitation – Negative Test Case | | | | **Test Priority** | | High | | |
| **Pre-Requisite** | | Stable Internet Connection and logged in | | | | **Post-Requisite** | | NA | | |
| **Test Execution Steps:** | | | | | | | | | | |
| **S. No** | **Action** | | **Inputs** | **Expected Output** | **Actual Output** | | **Test Browser** | | **Test Result** | **Test Comments** |
| 1 | Click create room | | - | Create room page | Create room page | | Android Emulator | | pass | [Aloysius 8/11/2022 7:02 PM]: Load successful |
| 2 | Enter invalid date, everything else valid | | Enter a date that has passed | Date entered has passed | Date entered has passed | | Android Emulator | | pass | [Aloysius 8/11/2022 7:02 PM]: Invalid date blocked |
| 3 | Enter invalid time, everything else valid | | Enter a date that is not of the format hh:mmxm | Invalid time | Invalid time | | Android Emulator | | pass | [Aloysius 8/11/2022 7:03 PM]: Invalid time blocked |
| 4 | Invite a user that does not exist, everything else valid | | Enter a username that has not been registered: “jon” | User jon doesn’t exist | User jon doesn’t exist | | Android Emulator | | pass | [Aloysius 8/11/2022 7:04 PM]: Invalid invitee blocked |

