## Test Plan for Snake & Ladder Project

1. **Project Overview:**

A classic Snake & Ladder game built for digital platforms. The game involves players rolling a dice and moving along tiles, with snakes bringing them down and ladders moving them up.

1. Objectives:

* User Authentication (Login, Logout, Password Reset)
* Game Room creation and joining
* Dice mechanics and movement
* Game rule validations (snake, ladder, bonus roll on 6, turn display, game end)
* Game state (reconnect/disconnect handling)
* UI Settings & Profile Update

1. Types of Testing and Order:

* Smoke Testing - Basic checks to ensure major flows work
* Functional Testing - Test game rules and flows as per user stories
* System Testing - Test complete app including UI, logic & back-end
* **API Testing -** test backend APIs for login, game state, etc.
* Regression Testing - Re-test after changes/fixes
* Performance Testing - Ensure the game doesn’t lag/crash under load
* UAT Testing - Final review from user/business POV
* Usability Testing - Test UI/UX consistency, navigation, feedback

1. Tools used:

* Front end – Selenium Java
* Api Testing – Postman for manual testing, Selenium for Automation
* Database – SQL

1. Test Envirnment:

* **Browsers:** Chrome, Firefox
* **Devices:** Laptop/Desktop

1. Entry Criteria:

* Game build is available for testing
* Functionalities are declared “ready for test” by developers
* Test data and environment are accessible

1. Exit Criteria:

* All test cases executed
* Major bugs fixed and verified
* Final feedback shared with trainer and developers
* Test summary report created

1. Deliverables:

* Test Plan
* Gherkin-based Test Scenarios
* Test Cases in Excel
* Bug Report/Tracker
* Final QA Report