National University of Computer and Emerging Sciences Chiniot-Faisalabad Campus



**game-APPLICATION TESTING**

Software Quality Engineering

### Semester Project

### Task 4

### BS (SE) 5A

## Team Name: zzwave-testing

## Team Member’s:

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# **Test Cases For GUI: -**

## Title Screen Navigation:

Test Case 1: Verify that pressing Space starts the game from the title screen.

Test Case 2: Confirm that pressing Esc opens the game menu during the title screen.

## Gameplay:

Test Case 3: Check if pressing A moves the character left.

Test Case 4: Ensure that pressing D moves the character right.

Test Case 5: Confirm that pressing W makes the character jump.

Test Case 6: Verify that Space is used for character rolling.

Test Case 7: Check if holding Shift makes the character run faster.

Test Case 8: Ensure that pressing Shift and Space simultaneously triggers a specific action.

## Pause Menu:

Test Case 9: Check if pressing Esc opens the pause menu during gameplay.

Test Case 10: Verify that using arrow keys navigates through the pause menu options.

Test Case 11: Confirm that pressing Space selects a menu option.

Test Case 12: Ensure that pressing Esc again closes the pause menu and resumes gameplay.

## In-Game Interactions:

Test Case 13: Check if pressing Space interacts with objects in the game world.

Test Case 14: Verify that holding Shift while interacting with an object triggers a different action.

## Character Actions:

Test Case 15: Check that pressing W twice enables double jumping.

Test Case 16: Verify that pressing A and D alternately results in character strafing.

Test Case 17: Confirm that pressing S while running triggers character rolling.

## Settings Menu:

Test Case 18: Verify that navigating to the settings menu from the title screen using arrow keys works as expected.

Test Case 19: Check that the settings menu allows adjusting volume and graphics settings.

Test Case 20: Confirm that pressing Esc in the settings menu returns to the title screen.

## Character Abilities:

Test Case 21: Check that pressing a specific key activates a character ability, e.g., a special attack or gadget.

## Stamina Management:

Test Case 22: Verify that Shift manages character stamina during running.

Test Case 23: Confirm that stamina is consumed accurately during character actions.

## Precise Movements:

Test Case 24: Check for precise character movements when navigating tight spaces or platforms.

## Advanced Gameplay Mechanics:

Test Case 25: Test simultaneous keypresses for advanced gameplay actions, such as dodging left and right.

## Advanced Navigation:

Test Case 26: Verify precise vertical movement for climbing and descending ladders or ropes.

## Advanced Interaction:

Test Case 27: Test Space for grabbing ledges and climbing walls.

## Error Handling:

Test Case 28: Check how the game handles invalid or unintended keypresses, e.g., spamming inputs.

# **Gherkin For GUI: -**

Feature: RedRunner Game Input Manager

Scenario: Title Screen Navigation

Given the game is at the title screen

When the player presses Space

Then the game should start

Given the game is at the title screen

When the player presses Esc

Then the game menu should open

Scenario: Gameplay

Given the game is in progress

When the player presses A

Then the character should move left

Given the game is in progress

When the player presses D

Then the character should move right

Given the game is in progress

When the player presses W

Then the character should jump

Given the game is in progress

When the player presses Space

Then the character should roll

Given the game is in progress

When the player holds Shift

Then the character should run faster

Given the game is in progress

When the player presses Shift and Space simultaneously

Then a specific action should be triggered

Scenario: Pause Menu

Given the game is in progress

When the player presses Esc

Then the pause menu should open

Given the pause menu is open

When the player uses arrow keys to navigate menu options

Then the options should be selectable

Given the pause menu is open

When the player presses Space

Then a menu option should be selected

Given a menu option is selected

When the player presses Esc

Then the pause menu should close, and gameplay should resume

Scenario: In-Game Interactions

Given the game is in progress

When the player presses Space

Then the character should interact with objects

Given the character is interacting with an object

When the player holds Shift

Then a different action should be triggered

Scenario: Character Actions

Given the game is in progress

When the player presses W twice

Then the character should double jump

Given the game is in progress

When the player presses A and D alternately

Then the character should strafe

Given the game is in progress

When the player presses S while running

Then the character should roll

Scenario: Settings Menu

Given the game is at the title screen

When the player navigates to the settings menu using arrow keys

Then the navigation should work as expected

Given the settings menu is open

When the player adjusts volume and graphics settings

Then the settings should be changeable

Given the settings menu is open

When the player presses Esc

Then the game should return to the title screen

Scenario: Character Abilities

Given the game is in progress

When the player presses a specific key

Then a character ability should be activated

Scenario: Stamina Management

Given the game is in progress

When the player holds Shift

Then character stamina should be managed during running

Given the game is in progress

When the character performs actions

Then stamina should be consumed accurately

Scenario: Precise Movements

Given the game requires precise character movements

When the player navigates tight spaces or platforms

Then the character should move precisely

Scenario: Advanced Gameplay Mechanics

Given the game has advanced gameplay mechanics

When the player performs simultaneous keypresses

Then advanced actions should be triggered

Scenario: Advanced Navigation

Given the game requires advanced navigation

When the player climbs and descends ladders or ropes

Then vertical movement should be precise

Scenario: Advanced Interaction

Given the game requires advanced interactions

When the player uses Space for grabbing ledges and climbing walls

Then the interactions should work as expected

Scenario: Error Handling

Given the game is in progress

When the player makes invalid or unintended keypresses

Then the game should handle them appropriately, e.g., avoid spamming inputs