# System and Unit Test Report

# Heading

Product name: Parkour Team name: Couch Surfers Sprint completion date: 3/9/2021

release date: 3/9/2021

## **Unit Tests**

Animation (Mitchell)

screen scrolling (Jeff)

character: jump, speed up, down, dash (Liangyu Shi) Change of character after pick items (Liangyu Shi)

Menus (Jeff)

Sound effects (Mitchell)

Level designs: increase in difficulty (Chris)

Achievements (Justin)

Scores (Chris) End scene (Justin) Liangyu's test videos:

 $\underline{https://drive.google.com/drive/folders/1UdNVOQs8oSAYnJ\_38QnUczNajbQ0BWTt?usp=sharin}$ 

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Jeff's test videos:

https://drive.google.com/drive/folders/19a25nuZOjHhs28u6CADnmJEAohFtL-eX?usp=sharing Justin's test videos:

https://drive.google.com/drive/folders/1xwgdGKU4Bf8m3bor787gWC9\_sYC\_CRuV?usp=sharing

Christian's test videos:

https://drive.google.com/file/d/1wP6XVD8mvA tZpgh27Ap1kKQAW99eNaK/view?usp=sharing

# **User Stories**

Sprint 1 User Stories:

- 1. As a player, I want to be able to maneuver left, right, and jump and crouch/slide so I can avoid obstacles.
  - 1.1. Create a character (3 hrs)
  - 1.2. Find images for the character (2 hr)
  - 1.3. Add movement to the character (4 hrs)
  - 1.4. Create/find sound effects (4 hrs)
- 2. As a player, I want to be able to navigate my character through a primitive side scroller so that there is a point to the game.
  - 2.1. Level design (4 hrs)

- 2.2. Level scrolling (3 hrs)
- 2.3. Create global game manager (2 hr)
- 2.4. Create a background (2 hr)

### Sprint 2 User Stories:

- 1. As a player, I want to have a challenging and fun game experience from its difficulty.
  - 1.1. Level design (4 hrs)
  - 1.2. Modifying level manager (2 hrs)
- 2. As a player, I want to have the level design to evolve fairly to create a smooth difficulty curve.
  - 2.1. Escalating difficulty (2 hrs)
  - 2.2. Add hazards (2 hrs)
- 3. As a player, I want to have a visually appealing game.
  - 3.1. Character Animations (4 hrs)

## Sprint 3 User Stories:

- 1. As a player, I want the game to save my scores and achievements so I feel accomplished.
  - 1.1. Game over + final score screen (1 hr)
  - 1.2. Achievements (2 hr)
- 2. As a player, I want an incentive to keep playing and improve my score.
  - 2.1. Track score over time (1 hr)
  - 2.2. Level design (2 hr)
- 3. As a developer, I want playtesters to critique the game.
  - 3.1. Find playtesters (1 hr)
  - 3.2. Adjust chunk spawning frequency and speed according to feedback (1 hr)

#### Sprint 4 User Stories:

- 1. As a player, I want to have a polished game that won't crash or have noticeable bugs.
  - 1.1. Debugging
  - 1.2. Finish the remaining function test
- 2. As a player, I want the loose ends to be tied up so the game feels complete.
  - 2.1. Final game testing.
  - 2.2. Polish if necessary

# Scenarios

#### Sprints 1 and 2:

- 1. User runs the game, clicks/selects with the arrow + enter keys the "Start" button
- 2. The game begins and the character begins running across platforms
  - a. The user can speed up the character with the right arrow and slow down the character with the left
  - b. The up arrow will cause the character to jump over obstacles or pitfalls

- c. The down arrow will cause the character to begin sliding and reduces the character's vertical height, so that they may slide under objects
  - i. If in midair, the down arrow will also cause the character to fall faster

### Sprints 3 and 4:

- 3. As the character runs, the score in the top left of the screen will increase relative to the distance they have travelled
- 4. Achievements will be acquired as the character plays the game, with notifications briefly showing up on screen with a description of the achievement completed
- 5. If the character makes contact with an obstacle or falls into a pitfall, the game will end
  - a. When the game ends, the player will be greeted with a menu, accurately displaying that game's score compared to the all-time high score
  - b. If a new high score is acquired that game, the menu will show the updated high score and a fanfare will play
  - c. The player may then select one of two button options:
    - i. Go back to the title screen
    - ii. Restart the game