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:
https://drive.google.com/drive/folders/1UdNVOQs8oSAYnJ_38QnUczNajbQ0BWTt?usp=sharing
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
Mitchell's Videos:
https://drive.google.com/file/d/1WMaYkfeSYeS6r8ehSukgvZM0HIyL3vq7/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. 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. 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