

System and Unit Test Report
FunNums
Foul Owls
December 2, 2017

Sprint 1

User Story 1 from Sprint 1: As a player, I want to have numbers bounce around the screen

Scenario:

1. Navigate to Select Game menu and open the BubbleGame
2. Player should see bubbles bouncing across the screen

User Story 2 from Sprint 1: As a player, I want to be able to touch numbers and have my sum be updated accordingly

Scenario:

1. Navigate to Select Game menu and open the BubbleGame
2. Touch one of the numbers
3. The Current Score should be increased by that number that was just touched

User Story 3 from Sprint 1: As a player, when the target is exceeded, I want the game to reset

Scenario:

1. Navigate to Select Game menu and open the BubbleGame
2. Touch numbers to purposefully exceed the target
3. A message should display saying "Current Missed, Target Reset" and the current score should reset to its value when it met the previous target

User Story 4 from Sprint 1: As a player, I would like to be able to pause the game and have a timer

Scenario:

1. Navigate to Select Game menu and open the BubbleGame
2. Touch the pause button
3. The timer should pause, as well as the game.

User Story 5 from Sprint 1: As a player, I would like to be able to return to the main menu from the game

Scenario:

1. Navigate to Select Game menu and open the BubbleGame
2. Touch the pause button
3. Touch the quit button
4. The game should now be at the main menu

Scenario:

1. Navigate to Select Game menu and open the BubbleGame
2. Let the timer run out until a game finished menu is displayed
3. Press the quit button
4. The game should now be at the main menu

Sprint 2

User Story 1 from Sprint 2: As a player, I want a balloon mini game that helps me practice

fractions.

Scenario:

1. Navigate to Select Game menu and open the BalloonGame
2. Swipe a balloon to the left or right
3. The balloon should move in the direction the player swiped.

Scenario:

1. Navigate to Select Game menu and open the BalloonGame
2. Swipe a balloon to the left of the screen, if that number satisfies the inequality
3. The score should increase by 5 when the balloon reaches the top of the screen.

Scenario:

1. Navigate to Select Game menu and open the BalloonGame
2. Swipe a balloon to the right of the screen, if that number does not satisfies the inequality
3. The score should decrease by 5 when the balloon reaches the top of the screen.

Scenario:

1. Navigate to Select Game menu and open the BalloonGame
2. Swipe balloons to the correct side of inequality for all balloons in one round (may take a few tries!)
3. The timer should increase by 15 seconds, with a message displayed that the player received bonus time

User Story 2 from Sprint 2: As a player, I want to select mini games from the main menu.

Scenario:

1. Navigate to Select Game menu and open the BalloonGame
2. The BalloonGame should start

Scenario:

1. 2.Navigate to Select Game menu and open the BubbleGame
2. The BubbleGame should start

Scenario:

1. Navigate to Select Game menu and open the OwlGame
2. The OwlGame should start

User Story 3 from Sprint 2: As a player, I want a high score leaderboard that lists top performing players.

Scenario:

1. Navigate to the Leaderboard
2. The top 10 performing players should be listed for each game

Scenario:

1. Play as a new user, or play the owl game on Austin's phone(his owl score will be reset to 1)
2. Score higher than 1 on the owl game
3. The user's score ("smit" if using Austin's phone) should be displayed on the owl leaderboard

Sprint 3

User Story 1 from Sprint 3: As a player, I would like to have an additional mini game (Flying Owl)

Scenario:

1. Navigate to Select Game menu and open the Owl Game.
2. Do nothing.
3. The owl should glide down until it lands in the water, ending the game.

Scenario:

1. Navigate to Select Game menu and open the Owl Game.
2. Drag and drop the correct tiles to the solution section to solve the equation.
3. The tiles should move to fill the equation.

Scenario:

1. Navigate to Select Game menu and open the Owl Game.
2. Tap the correct tiles to move them to the solution section to solve the equation.
3. The tiles should move to fill the equation.

Scenario:

1. Navigate to Select Game menu and open the Owl Game.
2. Move the correct tiles to the solution box to complete the equation for the desired solution.
3. The owl should fly up away from the ground.

Scenario:

1. Navigate to Select Game menu and open the Owl Game.
2. Move the incorrect tiles to the solution box then tap or drag and drop them back to the tile box.
3. The tiles should move back to the tile box.

Scenario:

1. Navigate to Select Game menu and open the Owl Game.
2. Move the incorrect tiles to the solution box.
3. The owl should continue gliding down.

User Story 2 from Sprint 3: As a player, I want the bubble game to have engaging animations and artwork.

Scenario:

1. Navigate to Select Game menu and open the BubbleGame
2. Bubble game should have background and bubble artwork implemented

Scenario:

1. Navigate to Select Game menu and open the BubbleGame
2. Bubble collisions should trigger wobbling animation effect

Scenario:

1. Navigate to Select Game menu and open the BubbleGame
2. Touching a bubble should trigger popping animation effect

User Story 3 from Sprint 3: As a player, I want the BubbleGame to have sound effects

Scenario:

1. Navigate to Select Game menu and open the BubbleGame
2. Touching a bubble should play a pop sound, or a “ding” sound if the target was reached by touching that bubble, or

Sprint 4

User Story 1 from Sprint 4: As a player, I want animations and artwork for all games and menus

Scenario:

1. Open game
2. Main menu should have an original image as background

Scenario:

1. Navigate to Select Game menu and open the BalloonGame
2. BalloonGame should have original background and balloon artwork implemented

Scenario:

1. Navigate to Select Game menu and open the BalloonGame
2. Balloons in the background should have a floating animation

Scenario:

1. Navigate to Select Game menu and open the OwlGame
2. OwlGame should have original background, owl, and tile artwork implemented

Scenario:

1. Navigate to Select Game menu and open the OwlGame
2. When correctly creating an expression that equals the target, an “owl flapping” animation should be triggered, and the owl should gain some elevation

User Story 2 from Sprint 4: As a player, As a player, I want sound effects on all of the minigames

Scenario:

1. Navigate to Select Game menu and open the BalloonGame
2. Swiping a balloon to the side should trigger a “woosh” sound
3. Correctly placed balloon should trigger a “popping” sound effect when reaching the top of the screen
4. Incorrectly placed balloon should trigger a “deflating” sound when reaching the top of the screen

Scenario:

1. Navigate to Select Game menu and open the OwlGame
2. Touching a tile should trigger a sound effect
3. Correct answer should trigger a “wing flapping” sound effect
4. When the game is over (Owl reaches the bottom of the screen), a “water splashing” sound effect should be triggered

User Story 3 from Sprint 4: As a player, I want to have instructions on how to play each minigame

Scenario:

1. Navigate to Select Game menu.
2. For each game, press the How to Play button.
3. Read the instructions on the screen, then press next to see the next instruction.
4. Press outside the box to exit or back button the instructions.

User Story 4 from Sprint 4: As a player, I want to have custom settings from the main menu

Scenario:

1. Navigate to Settings
2. Select a unchecked volume setting
3. The sampled sound should be played.

4. Select other buttons to see if the sample sound played is relative to their listed volume percentage
5. Exit the app and re-enter the app
6. The volume setting should be the previously selected volume

User Story 5 from Sprint 4: As a player, I want to increase the difficulty of the bubble game.

Scenario:

1. Play the old version of the BubbleGame and note how fast each new absolute target (target - current) can be reached no matter how many targets you have reached.
2. Play the current version of the BubbleGame and note how each reached target generates a new absolute target that is greater or equal to the previous one, resulting in hard to reach targets after you've reached many targets.
3. Notice that the current version of the BubbleGame is more difficulty compared to the old version.