

Acceptance Testing

Legend

Black Text: How the app is used (high-level usage)

Blue Text: What interactions would need be simulated

Red Text: What we are confirming with the interactions

Levels User Story

A player is automatically entered into a randomly generated level once they choose a new game.

Open the game application, and select the “New Game” button, select a difficulty level button, then press the “Play” button to start. Then, once the game has started, press the pause button and then go back to the main menu by pressing the “Main Menu” button in the pause menu. Press the “New Game” button, select the same difficulty and press play again.

Ensure that the player starts on level 1

Ensure that the player starts the level with 12 health points

Confirm that the starting level will now be different from the previous map of the first level.

A player can move around and explore the level on the game screen.

Player taps on the screen (avoiding the HUD and UI) to move around the map.

Confirm that the player can move and see the level’s terrain and background.

Player enters a new level by tapping the wooden door.

Explore the game level by tapping on the grass for your player to move to that location.

Continue exploring and avoiding / attacking enemies until you find the door placed in the level. Tap on the door to enter the next level.

Confirm that the player can tap the wooden door.

When tapped, confirm that the player entered a new level.

Confirm the level counter is incremented by 1.

Confirm the new level is different from the previous one by checking if the new level has a new layout, new wooden door location and new enemy locations.

The player finishes the game by tapping the final door (Level 5 on Easy, 10 on Normal, 15 on Hard) and is directed to the endscreen.

Navigate through each level until you reach the last level for the difficulty setting that was selected. Once the player taps the door of the final level, the game should end and the game end screen should appear where the player is awarded an additional 2 maximum health points. The option to go back to the main menu should appear as well. The end game screen should display a message saying "You Escaped!!!"

Confirm the game ends when the final door is tapped.

Confirm the end game screen displays the appropriate message.

Confirm the main menu screen appears once the main menu button is tapped.

Game Menu User Story

Player starts a new game and they can select a difficulty for the new game.

Start the application and the main menu screen should appear. From the main menu, tap on the new game button. A prompt should appear that asks the player to select the difficulty of the game. Tap on the desired difficulty level, and a story for the game will be displayed, along with a "Play" button to start the game.

Confirm that the button with the label "New Game" exists.

Confirm that the tap event registers for the "New Game" and displays a new set of buttons labeled: "Easy", "Normal" and "Hard".

Confirm that audio preferences have not been lost when selecting new game

Confirm that tapping on the difficulty leads to a story screen and tapping "Play" leads to the game screen.

Player sees the pause menu when pressing the pause button in game.

From a game level, tapping on the pause button in the top right hand corner of the screen during gameplay, should pause the game and open the pause menu.

Confirm that all elements of the game are paused/frozen. No movement/action should be allowed.

Confirm that the paused screen appears in the middle of the game with options of muting game sound, music, resuming the game, and going back to the main menu.

Confirm the correct screen is displayed when the player taps an option in the middle.

Player taps a button to mute sound or music.

From the pause menu, the sound and mute buttons should appear in the middle of the screen. Then tap the mute sound/music button, which should silence/mute the sounds/music from the game and update the buttons icon on the screen to indicate that it was pressed.

Confirm that no music/sound continues playing when the appropriate button is tapped.

Confirm that music/sound is not played anywhere in the game, not just the game screen itself, but all other screens as music/sounds is a global system throughout the game.

Confirm that all sounds/music will resume when the player taps the appropriate buttons again.

Confirm that if you change your audio preferences, and close the game, that it will reopen with the saved preferences.

Player taps the resume game button from the pause menu.

From the pause menu, tap on the resume (play icon) button in the middle of the screen.

Confirm that the pause screen closes

Confirm that enemy movement continues

Confirm that the player is able to move freely again.

Confirm that all game elements have not changed in the database, such as the player max life, player current health, and the current level.

The player can return to the main menu by pressing the “Return To Main Menu” button.

From the pause menu, tap on the return to main menu button in the pause menu.

Confirm that the main menu screen is displayed when the main menu button is tapped.

Confirm that all game elements such as maximum health, current level, etc are saved/updated in the database for when the player wants to continue the game.

Confirm the database is not corrupted with new data or overrides the incoming save data.

The player can see the instructions page by tapping the “Instructions” button.

From the main menu, tapping the “Instructions” button once will change the screen to the instructions page, where there is a summary of how the game is played.

There also should be an option to go back to main menu

Confirm that once the instructions button is tapped, the screen displayed is the instructions page.

Confirm that instructions appear on the screen.

Confirm the main menu screen will appear if the main menu button is tapped.

The player can view the credits by pressing the “Credits” button.

In the main menu, tap on the “Credits” button to transition to the credits screen.

Ensure there is an option to go back to the main menu

Confirm that once the credits button is tapped, the screen displayed is the credits page.

Confirm that all of the credits (all developers and all the assets) appear on the screen.

Confirm the main menu screen will appear when the main menu button is tapped.

The player can close the game by pressing the “Exit” button.

Player taps the exit button in the main menu.

Confirm that the all music/sounds stop playing

Confirm that we reach the tablet’s home screen instead of the game screen.

Ensure we do not have access to any game elements in the home screen of the tablet.

Confirm that a user's input does not affect the game in any way but affects the tablet's controls now.

Player can resume a previous, uncompleted, game.

Player reopens the app “Escape from Icarus” and sees the main menu, then selects the “Continue” button.

Reopen the game and confirm the maximum player life, current level, audio preferences, and difficulty settings have not changed.

Confirm all other game elements work as if there was a new game just initialized.

Characters User Stories

The characters can collide with obstacles in the environment.

From the game screen, tap on the screen to navigate the player to a health pickup (heart) and see it disappear. Tap on the screen to navigate the player at the walls. Tap on the screen to navigate the player to an obstacle. Tap on the screen to lead the enemies into an obstacle.

Confirms the player can walk not walk through health pickups.

Ensure the player health increases or remains the same (at max health) after a health pickup.

Confirms the health pickup disappears after being picked up by a player.

Confirms the player and enemies cannot go on top of walls.

Confirms the player and enemies cannot go over or on top of the obstacles (other than pickups) on the map.

Enemies have their own movement routines.

From the game screen, observe enemy behavior.

Ensure that slime enemies exist in the level.

Ensure that skeleton enemies exist in the level.

Ensure there is a level boss guarding the door in each level.

Ensure enemies are moving and chase the player when they are close.

The player and enemies can attack each other.

From a game level, the player taps on the enemy character, attacking until they are dead. Leave the player beside an enemy character until the health reaches 0.

Confirm that the player's input on an enemy object will "Attack" the enemy. Meaning the enemy object's health points will be decreased.

Confirm that the player character is right next to the enemy when attacking the enemy.

Ensure that the player character is also losing health points since the player character is right next to the enemy, as that is how enemy attacks work.

Confirm that once the enemy's health reaches 0, they die and they disappear from the level.

Confirm that once the player's health points is 0, they die and the game ends so a game screen appears.

Movement User Stories

The player can move by tapping an unoccupied ground tile.

Tap an unoccupied ground tile such as a grass, flower or small rock texture to begin movement of the player to the tapped location. Tapping on another location will update the player's path towards the last valid movement location.

Confirm that the tap is registered as a movement event.

Confirm that the main character goes to the correct destination which matches the input touch of the player.

Ensure the main character cannot walk into or through walls, cannot move/go through enemies, into rocks and other obstacles.

The player can not walk into walls.

Tap on a wall to try to move onto or through a wall.

Ensure the main character does not go into a wall when movement input is detected.

Ensure the main character is not stuck when they reach the wall.

The player can not walk through an enemy or object.

Tap an enemy character/object.

Ensure the main character does not go into or through an enemy when movement input is detected.

Ensure the main character is not stuck when they reach the enemy.

Confirm that the main character loses health points when they are next to an enemy.

The player can move through doors in levels.

Tap on a wooden door to try to get to the next level.

Ensure that movement onto a wooden door does not make our character get stuck on the door.

Confirm that once the player reaches the door, the next level begins.

Ensure that the main character cannot move to and stand on a wooden door. (The door location should start a new level).

Ensure the level counter is incremented by one on the new level.

Confirm previous level's game elements disappear from the screen.

The player can move to and get health pickups.

Tap on a health pickup to restore health points to the main character.

Ensure the player health points increase by a random amount when the player moves onto the health drop on the ground.

Confirm that the health drop is removed/disappears from the ground once the player "Consumes/Moves" onto the health drop.

Ensure the player isn't stuck after consuming the health drop.

Confirm that health restore doesn't go over the maximum health limit, and have a buffer over the maximum health limit.

Enemy characters move towards the player once the player is in their field of view.

Navigate towards an enemy.

Confirm the enemy moves toward the player once the enemy sees the player in their field of view.

Ensure that the enemy follows the same rules as player movement, so they cannot move through walls, terrain obstacles, health-pickups, doors, etc.

Confirm the enemy stops following the player once they lose sight of the player.

Checkpoint User Story

The game saves the current level the player is on and the difficulty level of the game whenever you exit the game.

Start a game by tapping the “New Game” button and selecting a difficulty. Navigate to a door on the map and go to a new level. Tap on the pause button then tap on the main menu button. Tap on the continue button. Tap the pause button then the main menu button again. Tap on the Exit button and reopen the game and tap the continue button Repeat for the other difficulties.

Confirm the difficulty is still the same as how it was when you left the game.

Confirm the current level is still the same as when you left the game.

Ensure the previously saved state is overridden when the player taps a new game.

Current level count resets to 1, boost and difficulty is permanently saved until new game

Tap on the continue button and navigate the player to an enemy and leave it until the health points become 0. Tap the “Yes” button on the “Game Over” screen. On the game screen, navigate to all the doors until you reach the endscreen. Tap the “Menu” button on the endscreen then the “Continue” button on the main menu.

Confirm your health point increments by 2 when you reach the end screen and continue the game.

Confirm both reaching the end screen and game over resets the level to 1 when you continue.

Game Story/Instruction

The player can access instructions on how to play the game.

From the main menu, tap the “Instruction” button to navigate to the instruction screen.

Confirm the instructions screen displays correctly when the “Instructions” button is pressed.

Confirm all text (instructions) appear on the screen.

Ensure that the main menu button appears and works as expected.

The player can read the lore/story when starting a new game.

From the main menu, tap the “New Game” button. Then select a difficulty, and the story screen should appear. Tap the “Play” button to start the game.

Confirm the story page is visible when starting a new game.

Confirm the “Play” button once tapped will start the game.

Music/Sound Effects

There is music playing from the main menu screen.

Player taps the “Escape on Icarus” app in the android drawer or app home page.

Or

If Player is currently playing the game, in the game screen/state. Player taps on the “Pause” button, then taps on the “Return To Main Menu” button.

Confirm that the main menu music is audible and currently playing.

Confirm that it is the correct main menu music, and not other music.

Confirm the music loops continuously.

There is music playing in the levels of the game.

Player taps on the “New Game” button, then selects a difficulty then taps the “Next” button to start the game.

Or

If the player has a previous save/played the game before. Player taps on the “Continue” button.

Confirm that the game music is playing when the user is playing the game.

Confirm that it is the correct game music, and not other music.

Confirm the music loops continuously.

There is music playing when the player dies/fails the game.

From a level in the game, allow any nearby enemies to attack the player until the player’s health is at 0.

Confirm player health points is 0.

Confirm that the death/failed game screen displays.

Confirm no game elements are active such as movement, attacking, etc.

Confirm that the death/failed game music is audible.

Confirm it's the correct music and not the other music.

There is music playing when the player wins the game.

From the final level of the game, the player taps the final wooden door in the level.

Confirm the win/success screen is displayed.

Confirm no game elements are active such as movement, attacking, etc.

Confirm that the success/win music is audible.

Confirm that it is the correct music and not the other music.

The player can tap a button to mute the sound or music.

In the pause menu, tap the mute sound/music button, the music of the game should be silenced/muted.

Also music/sound mute buttons will also appear in the middle of the screen.

If either option is tapped, the appropriate screen should be displayed.

Confirm that no music/sound is playing when the appropriate button is tapped.

Confirm that music/sound is not played anywhere in the game, not just the game screen itself, but all other screens as music/sounds is a global system throughout the game.

Confirm that all sounds/music will resume when the player taps the appropriate buttons again.

Health

There is a HUD (Heads Up Display) that shows the player their character's health bar.

Tap the "New Game" button and then select the desired difficulty setting. Tap the "Play" button to enter the game screen. Tap on the screen to navigate to an enemy. Leave the player to get hit (about 3 seconds). Move the player away from the enemy.

Confirm the HUD is visible on the left bottom corner of the screen.

Ensure that the HUD contains the player sprite picture in a frame, a red health bar and the health in number format (should be 12/12) underneath.

Confirm that the health of the player is at the maximum value when initially entering the game.

Confirm that the HUD values update when the player gets hit. (should be less than 12)

Confirm there is a black bar underneath the red health bar.

Ensure that the black bar's size is what the red bar initially was subtracted by the size of the current red bar decreased from.

Health Pickups

Move the player towards the health pickup (represented by a heart). Tap on the health pickup.

Confirm that the player's health bar is updated when the player's health increases.

Confirm that the size of the red bar increased compared to before.

Confirm that the mini health bar above the player texture has increased in size.

Confirm that the label value (number) is more than what it was before.

Ensure the label value (number) is no more than 12.

Ensure the red bar is no bigger than what we had before the health pickup.

The player can see the health bars of the enemies.

Tap the “New Game” and then select the difficulty setting. Tap the “Play” button to enter the game screen. Tap on the screen to navigate to an enemy. Tap the enemy 2 times.

Leave the player to get hit (about 3 seconds). Move the player away from the enemy.

Confirm that the enemy has a mini health bar above the sprite.

Confirm that the player has a mini health bar above the sprite.

Confirm that the enemy’s health bar decreases when it is attacked.

Confirm that there is no longer a change in the red bar size.

Confirm there is no longer a change in the health bar label’s value.

Confirm that there is no difference in size of the player’s mini health bar.

Confirm that there is no difference in size of the enemy’s mini health bar.