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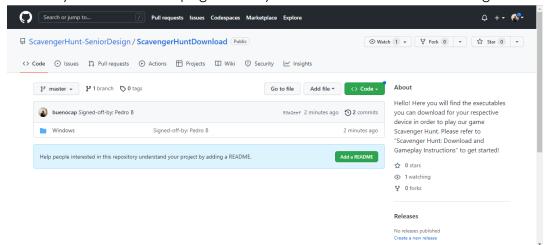
DOWNLOADING GAME FILES

To begin playing Scavenger Hunt you first will need to download the correct file for your computer.

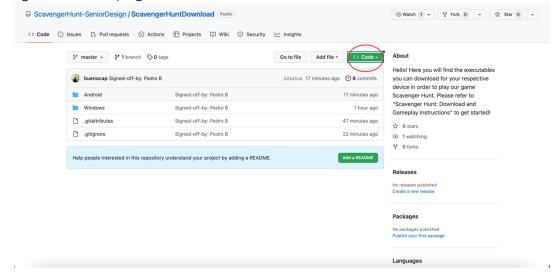
Please look at the following section to learn how to download the correct game file.

DOWNLOADING FOR PC

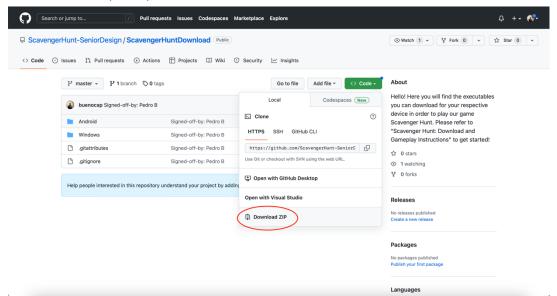
1. **Visit** https://github.com/ScavengerHunt-SeniorDesign/ScavengerHuntDownload . This link will take you to our GitHub page where you will be able to download the game.



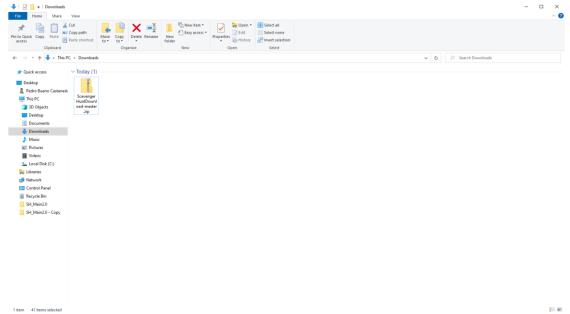
2. Click on the green button that says, "<> Code". This button can be found near the top right of the webpage.



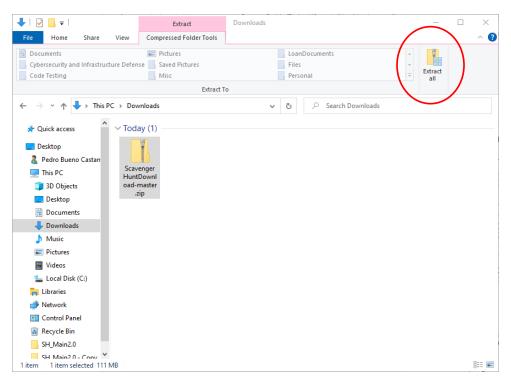
3. **Click on download "Download ZIP".** Allow a couple of seconds to a few minutes for your browser to completely download the ZIP file. *`



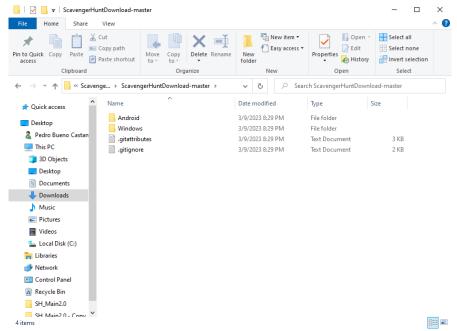
4. **Locate your file explorer**. Once you have done so navigate to the "Downloads" folder. This is where the ZIP file that was just downloaded should be located by default (unless otherwise specified).



5. **Extract files**. Once all your files have been extracted from the ZIP file, navigate over to the newly extracted folder; it should be under the same name as the ZIP file.



6. **Open folder.** You may see the same folder name once again. Open the folder. You should now see three separate folders each named with their associated device. Click on the one named, "Windows".



- 7. **Double-click on ScavengerHunt** You will see several other files, but Scavenger Hunt will be the main executable to run the game.
- 8. **Allow the file to be opened.** Since you downloaded our game from the internet, your device may ask you if you would like to open the file.

Enjoy the game! If you have any questions on how to play or learn more about what
features Scavenger Hunt has to offer head over to the table of contents to easily find the
section of interest.

*Download speeds may vary depending on your internet connection.

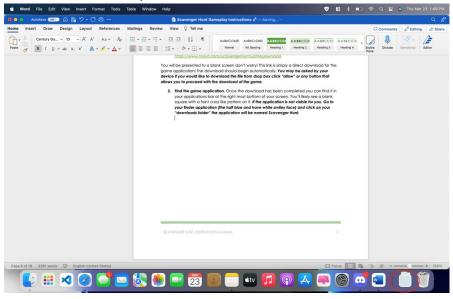
DOWNLOADING FOR MAC

This section covers the downloading procedure to get the game running on a MacBook. **Note:** Scavenger Hunt is playable on both Intel and Apple Silicon versions.

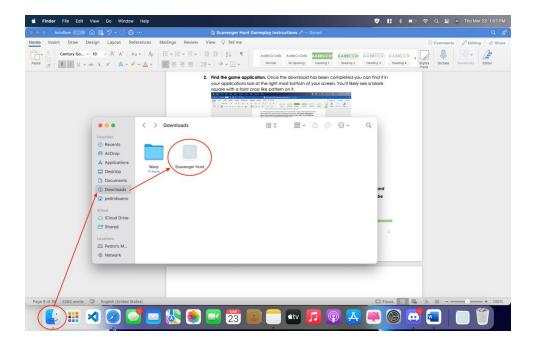
 To get started click on following link: https://tinyurl.com/ScavengerHuntV2

You will be presented to a blank screen, don't worry! This link is simply a direct download for the game application! The download should begin automatically. You may be asked by your device if you would like to download the file from the drop box click "allow" or any button that allows you to proceed with the download of the game.

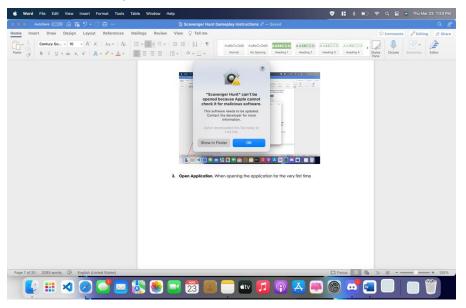
2. Find the game application. Once the download has been completed you can find it in your applications bar at the right most bottom of your screen. You'll see a blank square with a faint cross-like pattern on it.



If the application is not visible to you. Go to your finder application (the half blue and half white smiley face) and click on your "downloads" folder the application will be named Scavenger Hunt.

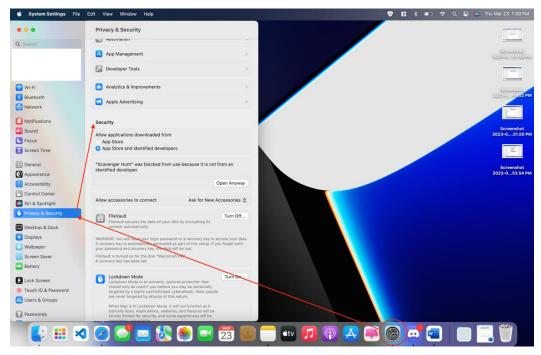


3. Open Application. When opening the application for the very first time you will receive a warning. This is normal. Since our application is still in testing, we don't have the needed certificates and signatures to be verified as an identified developer.

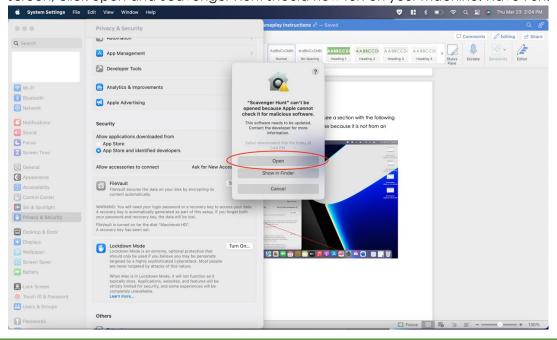


4. Go to settings. In order to allow Scavenger Hunt to run on your MacBook you will need to go to the following System Settings > Privacy & Security > Security.

a. Click Open Anyways. If you scroll down, you will see a section with the following message: "Scavenger Hunt" was blocked from use because it is not from an identified developer.

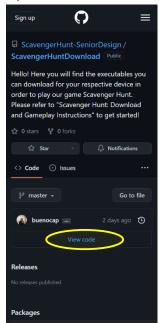


- **5. Enter Password.** Once you click "Open Anyway" you will be prompted to enter your Sign In password for your MacBook or fingerprint if you have TouchID enabled.
- **6. Click Open.** After entering your password, you will be prompted with another warning screen, click open and Scavenger Hunt should now run on your machine. Have Fun!

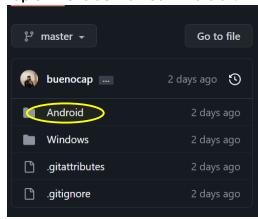


DOWNLOADING FOR ANDROID

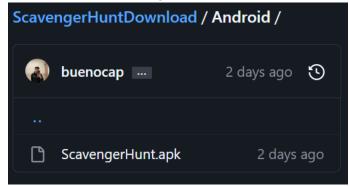
- 1. **Visit** https://github.com/ScavengerHunt-SeniorDesign/ScavengerHuntDownload . This link will take you to our GitHub page where you will be able to download the game.
- 2. Tap on "View code" as shown below:



3. Tap on the folder named "Android".



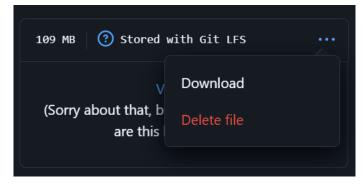
4. Tap on the file "ScavengerHunt.apk".



5. Tap on the "..." icon as shown below:

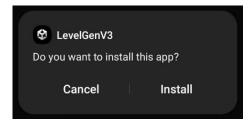


6. **Choose "Download".** Allow a couple of seconds to a few minutes for your browser to completely download the .apk file.*

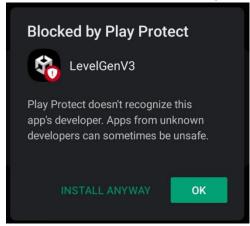


7. Open file. Since our game is downloaded from the internet you will need to change your phone's trust settings to allow our game to run. In general, you may need to navigate as follows: go to settings → security → Install unknown apps. You may either need to tap a switch to enable unknown app installation or choose the specific source from which you want to allow unknown app installation (the source chosen should be the source for all internet downloads).

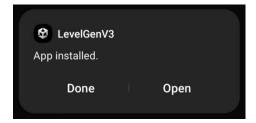
8. Once you have allowed for unknown app installation, go ahead, and install the app.



9. You may encounter the following screen. Choose "INSTALL ANYWAY".



10. The app should now be installed.



* Download speeds may vary depending on your internet connection.

GAMEPLAY INSTRUCTIONS: ANDROID DEVICES

STARTUP

- 1. Once the application has been installed, go ahead, and click the game's icon to open the game.
 - The first screen you should encounter is the main menu screen.
- 2. On the main menu, there should be 5 buttons to choose from:
 - "New Game": starts a new game session.
 - "Continue": continue an unfinished game session.
 - "Exit": Exits the application.
 - "Options": view and modify audio and camera controls.
 - "Controls": view controls necessary for gameplay.

STARTING A NEW GAME

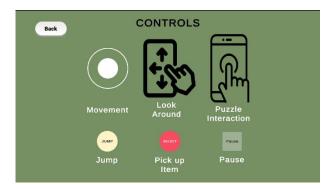
- 1. Start a new game by tapping on the "New Game" button.
 - You will be taken to a level selection screen.
 - Note: Depending on whether an existing game session has not been finished, you may be asked to confirm that a "new game" is desired, thus erasing any previous saved game session data and starting a new game.
- 2. You will be presented with 3 different difficulty options. These determine the number of items to be found and the size of the map.
- 3. To begin, choose "Easy".
- 4. A loading screen should appear. Once the loading bar has reached 100%, the game should begin.

GAMEPLAY

OBJECTIVE OF THE GAME

The goal of the game is to be able to find all the scavenger hunt items in as quick a time as possible. The items you must find are indicated by the item bar at the bottom of the screen. These are scattered across the map. Aside from items, there are also portals to "puzzle rooms" that you may enter from which puzzles can be solved to get "bonus items" that will help you to finish the game more quickly.

CONTROLS



The controls reference shown above can be found by tapping on "Controls" via the main menu.

- 1. Use the touchpad to move around:
 - a. Drag up to move forward.
 - b. Drag down to move backwards.
 - c. Drag to the left to move left.
 - d. Drag to the right to move right.
- 2. To move the camera, begin by placing your finger in the middle of screen, away from any buttons or the item bar.
 - a. Drag left to rotate the camera left.
 - b. Drag right to rotate the camera right.
 - c. Drag up to rotate the camera upwards.
 - d. Drag down to rotate the camera downwards.
 - e. Continue dragging upwards and you should notice that the camera is locked perpendicular to the ground. The same should be true when you keep dragging downwards.
- 3. Not all items needed to be found may be visible in the item bar. To view additional items, drag across the item bar to scroll through.
- 4. An item swap feature exists such you can reorganize the item visible in the item bar.
 - a. Tap on an item in the item list. It should be highlighted.
 - b. Next, tap on an item in the item bar. The two items should swap places.
 - c. You may also swap the location of two items in the item list or two items in the item bar using the same method.
 - d. Tap on the "Close List" button to close the item list (same location as the "Open List" button).
- 5. Find an item on the map and move the camera such that the cross hairs of the reticle align with the item.
- 6. Tap on the "SELECT" button to pick up the item. The item bar and item list should be updated to reflect the number of items left to pick up.
- 7. Tap on the "JUMP" button to jump and get a better view of the landscape.

Next, we'll go over how you can modify audio and camera controls.

- 1. Tap on the "Pause" button. A time bar should indicate how much time there is left to collect scavenger hunt items and still score points.
- 2. Tap on the "Options" button. The "Options" menu should appear.
- 3. Use the "music" slider to increase or decrease the volume of the music by dragging your finger on the slider right and left.
- 4. Use the "sound effects" slider to increase or decrease the volume of the in-game sound effects by dragging your finger on the slider right and left.
- 5. Use the camera sensitivity sliders to increase both the x and y axis sensitivities.
- 6. Tap on the "Close" button to go back to the "Pause" screen.
- 7. Tap on the "Back" button to return to the game.
- 8. Test your changes. The camera should now rotate quicker both left and right, and up and down.
- 9. Go back to the option's menu and reduce the sensitivity of only the x axis.
- 10. Return to the game and test your changes. The camera should now rotate slower when moved left and right.
- 11. Go back to the option's menu.
- 12. Tap on the square next to "Inverted controls?" Return to the game.
- 13. The camera should now rotate upwards when dragging down and downwards when dragging up.
- 14. Go back to the option's menu and disable inverted controls.

PUZZLE ROOMS

1. Find a portal (as shown below) and step inside. You are now in a puzzle room.

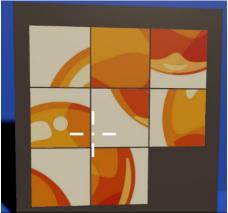


- 2. Move closer to the puzzle on the opposite end of the room and tap on the tiles to interact with them.
- 3. There are two types of puzzles that you may encounter:

a. One requires you to rotate tiles such that all pipes are connected. Tapping on a tile rotates it 90 degrees counterclockwise.



b. The other requires you to rearrange tiles to form an unbroken image. You may only move tiles that are horizontally or vertically adjacent to the empty space. The tile selected swaps places with the empty space.



- 4. Once you have completed the puzzle, a nearby chest should open. A bonus item should hover above it.
- 5. Align the cross hairs of the reticle with the bonus item and tap on the item to collect it. The bonus item will increase your walking speed.
- 6. Exit the puzzle room.

SAVE FUNCTIONALITY

You are able to exit out an incomplete game session and return with all game data saved.

- 1. Find and collect 3 more scavenger hunt items.
- 2. Open the pause menu.
- 3. Make note of the time elapsed displayed in the pause menu.
- 4. Tap on the "Menu" button.
- 5. In the main menu, tap on the "Continue" button.
- 6. Once the game has loaded, the following should be true:
 - a. The item bar remains the same as before you exited the game, indicating that your scavenger hunt progress was saved.
 - b. The time elapsed displayed in the pause menu should have updated to reflect the total time elapsed in the current game session.

c. You should be relatively in the same location of the game map as before you exited the game.

END OF GAME

Continue to find scavenger hunt items until none remain in the item bar.

- Once all scavenger hunt items have been found, a victory screen that reads "Level Complete!" should appear. Additional information present on the victory screen is as follows:
 - a. Time Elapsed: The total amount of time taken to complete the level.
 - b. Score: This is represented by a number of stars. Grayed out stars indicate points not obtained due to not having complete the level quick enough.
- 2. Tap on the "New Game" button to play again. The difficulty selection screen should appear. This time, tap on "Medium" to play the game in medium difficulty.
- 3. Play the game as usual until you manage to collect all scavenger hunt items and arrive back at the victory screen. You may exit and return to the game at any point.
- 4. Repeat steps 2 and 3, but instead tapping on "Hard" to play the game in hard difficulty.

GAMEPLAY INSTRUCTIONS: DESKTOP DEVICES

STARTUP

- 1. The first screen you should encounter is the main menu screen.
- 2. On the main menu, there should be 5 buttons to choose from:
 - "New Game": starts a new game session.
 - "Continue": continue an unfinished game session.
 - "Exit": Exits the application.
 - "Options": view and modify audio and camera controls.
 - "Controls": view controls necessary for gameplay.

STARTING A NEW GAME

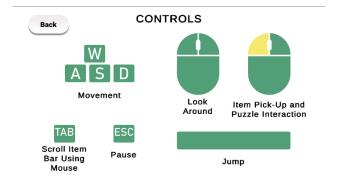
- 1. Start a new game by clicking on the "New Game" button.
 - You will be taken to a level selection screen.
 - Note: Depending on whether an existing game session has not been finished, you
 may be asked to confirm that a "new game" is desired, thus erasing any previous
 saved game session data and starting a new game.
- 2. You will be presented with 3 different difficulty options. These determine the number of items to be found and the size of the map.
- 3. To begin, choose "Easy".
- 4. A loading screen should appear. Once the loading bar has reached 100%, the game should begin.

GAMEPLAY

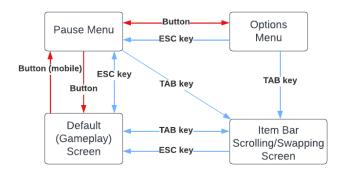
OBJECTIVE OF THE GAME

The goal of the game is to be able to find all the scavenger hunt items in as quick a time as possible. The items you must find are indicated by the item bar at the bottom of the screen. These are scattered across the map. Aside from items, there are also portals to "puzzle rooms" that you may enter from which puzzles can be solved to get "bonus items" that will help you to finish the game more quickly.

CONTROLS



The controls reference shown above can be found by clicking on "Controls" via the main menu.



- 1. Use the WASD keys to move around:
 - a. W to move forward.
 - b. S to move backwards.
 - c. D to move left.
 - d. A to move right.
- 2. To move the camera, drag your mouse in the corresponding direction of movement:
 - a. Drag left to rotate the camera left.
 - b. Drag right to rotate the camera right.
 - c. Drag up to rotate the camera upwards.
 - d. Drag down to rotate the camera downwards.
 - e. Continue dragging upwards and you should notice that the camera is locked perpendicular to the ground. The same should be true when if you keep dragging downwards.
- 3. Not all items needed to be found may be visible in the item bar. To view additional items, use the "Q" and "E" keys to scroll right or left through the items.
 - a. Alternatively, you may scroll through the items by pressing "Tab" to enable scrolling/swapping and either clicking and dragging left or right on the item bar or simply dragging left or right if using a touchpad.

- 4. An item swap feature exists such you can reorganize the item visible in the item bar. To swap items, first press "Tab".
 - a. Click on an item in the item list. It should be highlighted.
 - b. Next, click on an item in the item bar. The two items should swap places.
 - c. You may also swap the location of two items in the item list or two items in the item bar using the same method.
 - d. Press the "Tab" key to close the item scrolling/swapping screen.
- 5. Find an item on the map and move the camera such that the cross hairs of the reticle align with the item. Once your crosshair is over an item, you'll see it turn green.
- 6. Left-click to collect the item. The item bar and item list should update to reflect the number of items left to pick up.
- 7. Press the space bar to jump and get a better view of the landscape.

Next, we'll go over how you can modify audio and camera controls.

- 1. Press the "Esc" key to access the pause menu. A time bar should indicate how much time there is left to collect scavenger hunt items and still score points.
- 2. Click on the "Options" button. The "Options" menu should appear.
- 3. Use the "music" slider to increase or decrease the volume of the music by clicking and dragging on the slider right and left.
- 4. Use the "sound effects" slider to increase or decrease the volume of the in-game sound effects by clicking and dragging on the slider right and left.
- 5. Use the camera sensitivity sliders to increase both the x and y axis sensitivities.
- 6. Click on the "Close" button or "Esc" to go back to the "Pause" screen.
- 7. Click on the "Back" button or press "Esc" to return to the game.
- 8. Test your changes. The camera should now rotate quicker both left and right, and up and down.
- 9. Go back to the option's menu and reduce the sensitivity of only the x axis.
- 10. Return to the game and test your changes. The camera should now rotate slower when moved left and right.
- 11. Go back to the option's menu.
- 12. Click on the square next to "Inverted controls?" Return to the game.
- 13. The camera should now rotate upwards when dragging down and downwards when dragging up.
- 14. Go back to the option's menu and disable inverted controls.

PUZZLE ROOMS

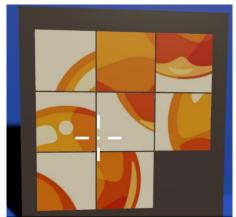
1. Find a portal (as shown below) and step inside. You are now in a puzzle room.



- 2. Move closer to the puzzle on the opposite end of the room and click while the cross hairs of the reticle are on a tile to interact with it.
- 3. There are two types of puzzles that you may encounter:
 - a. One requires you to rotate tiles such that all pipes are connected. Tapping on a tile rotates it 90 degrees counterclockwise.



b. The other requires you to rearrange tiles to form an unbroken image. You may only move tiles that are horizontally or vertically adjacent to the empty space. The tile selected swaps places with the empty space.



4. Once you have completed the puzzle, a nearby chest should open. A *bonus* item should hover above it.

- 5. Align the cross hairs of the reticle with the bonus item and click to collect it. The bonus item will increase your movement speed.
- 6. Exit the puzzle room.

SAVE FUNCTIONALITY

You are able to exit out of an incomplete game session and return with all game data saved.

- 1. Find and collect 3 more scavenger hunt items.
- 2. Open the pause menu.
- 3. Make note of the time elapsed displayed in the pause menu.
- 4. Click on the "Menu" button.
- 5. In the main menu, click on the "Continue" button.
- 6. Once the game has loaded, the following should be true:
 - a. The item bar remains the same as before you exited the game, indicating that your scavenger hunt progress was saved.
 - b. The time elapsed displayed in the pause menu should have updated to reflect the total time elapsed in the current game session.
 - c. You should be relatively in the same location of the game map as before you exited the game.

END OF GAME

Continue to find scavenger hunt items until none remain in the item bar.

- Once all scavenger hunt items have been found, a victory screen that reads "Level Complete!" should appear. Additional information present on the victory screen is as follows:
 - a. Time Elapsed: The total amount of time taken to complete the level.
 - b. Score: This is represented by a certain number of stars. Grayed out stars indicate points not obtained due to not having completed the level quick enough.
- 2. Click on the "New Game" button to play again. The difficulty selection screen should appear. This time, click on "Medium" to play the game in medium difficulty.
- 3. Play the game as usual until you manage to collect all scavenger hunt items and arrive back at the victory screen. You may exit and return to the game at any point.
- 4. Repeat steps 2 and 3, but instead click on "Hard" to play the game in hard difficulty.