Please try the following test cases and drop your notes under each bullet point in **BLUE** color. You can see some examples below:

- Check that functionality x works.
 This functionality works like a charm.
- Check that functionality y works.
 This functionality has some flaws, the system crashes when it is tried to do operation namely t.
- Check that functionality z works.
 This functionality does not work at all.

You can add extra test cases, please insert them at where you tried at the video, but please insert them as in **RED** color, your notes are still in **BLUE**. This paper is also for noting which parts of your system does not work well, so you can create hypothetic test cases that makes your system does not response as it has to do and explain the problem.

My suggestion to you is firstly completing this document and then starting to record demo video, with this kind of approach, you can benefit from your notes that you written to this document, and your demo goes in parallel with your demo which is more consistent, but you are free to fill the checklist and record the demo in desired order, but note that your checklist and demo has to be parallel to each other.

Test Cases

- Contents of the assets folder must be same as the one provided at Piazza.
- Open the terminal at your main folder (the folder that your code needs to be compiled and run)
- Run the following commands:
 - Is -IR (Unix (MacOS, Linux etc.) or dir -S (NT (Windows)) (Must show contents of your assets folder, if not then try to show contents of your assets folder by yourself)
 - o javac -version (must be resulted same as "javac 1.8.0 xxx")
 - o java -version (must be resulted same as "java version "1.8.0 xxx"")
- Compile your code and then run it.
- Show that the game opens without any crash. Your system must also read the contents of the assets folder by itself.
- Narrate and show the scrolling functionality during your narration, you can mention it during the gameplay, you do not have to spend any extra spare time for it. If you did not implement this functionality, please state below; if you have done it, please drop your note as mentioned at beginning of the checklist.

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Show the title and icon of your game.

This functionality works like a charm.

Show that music is playing in loop at title screen.

This functionality works like a charm.

Show that user can exit with ESC key and open the game again.

This functionality works like a charm.

 Show that user can go to the background selection screen by pressing the ENTER key, change background and crosshair, then press ESC key to go back to the title screen.

This functionality works like a charm.

If your code can go from background selection screen to title screen, press ENTER
again to go background selection screen again, and show that background screen
resets itself.

This functionality works like a charm.

• Show that music is still playing in loop where it has been left during background selection screen.

This functionality works like a charm.

Show that arrow keys can navigate between backgrounds and crosshairs.

This functionality works like a charm.

• Select one of the crosshair and background and then proceed with ENTER key.

This functionality works like a charm.

Show that your game will not start until intro effect finishes.

This functionality works like a charm.

 Show that cursor is changing with crosshair, and it returns normal after moving the mouse out of the window and returning to crosshair when it is in the game window.

This functionality works like a charm.

 Narrate and play each level until to the finish and start again from first level by pressing the enter key.

This functionality works like a charm.

• Show that playing again from the end of the game does not plays the sound effect again.

I forgot to add this functionality.

• Play each level again and press the ESC key to return to the title screen.

This functionality works like a charm.

• Start the game with different crosshair and background (if your game could not be succeeded from the step above, just close the game and open it again).

This functionality works like a charm.

Play the game and lose one of the levels, then press ENTER to play again.

This functionality works like a charm.

 Play the game and lose one of the levels, then press ESC to return to the title screen.

This functionality works like a charm.

• Show that your game cannot shoot after each situation (end of level by success or fail, end of the final level), you do not have to show it separately, it is enough to

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show it during the game play at the steps above, it is also enough to show it during the game play for the following steps. (Until (1) finishes)

I forgot to add.

• Show the sound effects of the game (rifle, game over, game win, level complete, duck is hit and falling etc).

This functionality works like a charm.

• Show that ducks are reflecting while they hit to the edges (or corners), you must show each reflection for each duck.

This functionality works like a charm.

• Show that ducks are getting in between background and foreground objects.

This functionality works like a charm.

Show that one rifle can hit more than one duck.

At my case, hitting one duck was easier. I did not add this functionality.

• Show that continuing to the next level (or starting again, exiting etc.) stops the sound effect at the end of the level immediately.

This functionality has flaws: for rifle sound I forgot to stop but level over sound works right.

Show the texts during game play (flashing and steady ones).

This functionality works like a charm.

 Show necessary keyboard button interactions if there is something not mentioned.

This functionality works like a charm.

Show the flying animation of all the ducks in all orientation.

This functionality works like a charm.

• Show the falling animations of all the ducks. ((1) finishes here)

I did not add falling animation.

• Show the scaling works by scaling up and down. Play the game for a while to show that every part of the game is scaled.

This functionality has some flaws: works right for scale down, but does not work for scale up.

• Show that adjusting volume changes volume of the game (I know that it is nearly impossible, but it is enough to narrate and record it, so, it is just enough to show it as I will test it again at my locale), you can do this at the same time while you are showing the scale factor for the sake of saving the time.

This functionality works like a charm.

 Close the game and show that contents are still the same by Is -IR (Unix (MacOS, Linux etc.) or dir -S (NT (Windows))

This functionality works like a charm.

• Moreover, please narrate the critical parts of your code (design), please do not narrate all of it, just narrate it for 1-2 minutes as it is just for understanding the code by your own perspective.

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INCOMPLETE PARTS

- Falling animation: I couldn't add because I might not be able to finish assignment.
- Scale Up: I have looked entire code but I could not see the problem. Scale down works flawlessly but Scale Up creates some distortions
- Heap Space Error (Exception in thread "JavaFX Application Thread" java.lang.OutOfMemoryError: Java heap space): I searched how to fix this error, but I couldn't find a solution. I guess I get this error sometimes because my code is inefficient. It's also hard to guess when I got it. I don't know when I will get it. In order to complete my code on time, the loadGameScreen1(), loadGameScreen2(),, loadGameScreen6() methods have almost 95% repetitive codes. So I might be getting this error because of this. I have tried running the code with "java -Xmx<space>G DuckHunt" I recorded demo video with "java -Xmx512G DuckHunt".

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RESTRICTIONS

- Your demo **must contain sound**, you can use Zoom's video recorder for this purpose, be sure about that you are sharing your **whole screen**, **not just the application**.
- Your demo video cannot be longer than five minutes, four minutes for the GUI and one minute for code, (3-4 minutes for the game and 1-2 minutes for the code is also OK but the total length of your video cannot be longer than five minutes) it cannot exceed five minutes even a little second, and your video must be in real speed, please do not speed up or down your videos.
- Everything about your **demo video must be in English** (you do not have to set your system language to English for sure). Your video must be fluent. It is not assumed that you are a native speaker, but it is known that your English level is at least B1+ (according to prep class), so, it is requested from you to speak at least as a B1+ speaker, little mistakes about your speech are going to be discarded but avoid mistakes as much as you can.
- **Do not do these operations too fast or too slow,** make them at the speed that a normal user (who is not very familiar with your system and tries to read texts) does.
- Show the things that make your system crash or things that you couldn't done in demo properly but show them after the requirements of the demo finishes, you can skip some of the requirements by saying that you did not implement it, so that your demo video becomes more fluid, less erroneous, but note that you must show your erroneous parts at the end.
- If your game fails one of the steps, please open the game where it must be according to failed step's result and continue from there.
- Preferred screen resolution and scale for Windows 10 or later is 1920x1080 with scale
 of 1.25, you can select the same for the Linux systems too, for the MacOS, you can use
 the preferred specifications of your system, but it would be good if you can use your
 MacBook's own screen instead of any external screens.
- You must both narrate your GUI and code.
- It is your own responsibility to show all the functionality of your system, so if you have not mentioned about a functionality that is a request of this project or part of your extra feature, your code may be graded as low as zero for that part as there is no working example. So, please do not feel limited with given conditions, show your all work to get full credit, that means, if you have not shown a concept at your demo video, you will not have any right to say that "But it worked on my machine!", because this demo video is a chance for you to show that your code works on your machine well, but note that you can still have right to objection for the parts that are not mentioned at PDF, Piazza Notes, Q&As; say that there is a bug at a functionality and it is neither mentioned at PDF, Piazza, Q&A, nor mentioned during your implementation and you did not notice that it does not work on other machines, then for sure you can object for it by clipping a video that shows it works on your machine.
- It is your own responsibility to follow all things about this homework, PDF, Piazza, Q&A etc. So, you assumed that aware of everything mentioned at there.

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