CHECKLIST OF BBM104 SPRING 2025 PROJECT ASSIGNMENT 4

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 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 make your system not respond as it has to and explain the problem.

Test Cases

- Contents of the assets folder must be same as the one provided at Piazza.
  Exactly the specified current assets folder is being used.
- Open the terminal at your main folder (the folder that your code needs to be compiled and run)
  It opens without any problems.
- Run the following commands:
  - javac -version (must be resulted same as "javac 1.8.0_xxx")
    My javac version is javac 1.8.0_431.
  - java -version (must be resulted same as "java version "1.8.0_xxx"")
    My javac version is javac 1.8.0_431.
- Compile your code and then run it.
  It compiles without any problem.
- Show that the game opens without any crash. Your system must also read the assets by itself.
  The game opens smoothly with no crashes.
- Show that Player movement and shooting works correctly. The player tank should be correctly controlled with the movement buttons and it should fire correctly with the "x" button. Firing should not look erratic(no shooting rapid fire with no wait time). Tank movement should be accompanied by a simple animation of the tank using the images provided.
  Player movement and shooting have been tested and confirmed to work correctly, with smooth movement animations and a proper firing delay to prevent erratic rapid fire.

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Link of the Demo Video : https://www.youtube.com/watch?v=FCB-fJyN0u4

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- Show that Enemy movement and shooting works correctly. Enemies should move randomly or semi randomly and they should shoot at semi random intervals. Keep in mind that tanks should not move too erratically(constantly changing directions multiple times in a single second) and they should not be able to fire again right after firing. Enemies should spawn correctly. Enemy tanks have been verified to spawn correctly, move in smooth semi-random paths without erratic direction changes, and fire at semi-random intervals with proper cooldowns between shots.

- Show that bullets behave correctly. Bullets should hit and destroy the correct type of tanks depending on who fires them. Bullet hit should be accompanied by appropriate explosion image. Bullets now correctly detect collisions with opposing tanks, destroy the appropriate targets, and display the proper explosion image upon impact.

- Show that walls are implemented. Walls should prevent tanks from passing through and cause bullets to disappear. There should be walls surrounding the map and inside the area itself.(You can place them as you wish) Walls have been placed around the map and within the play area to block tanks from passing through and make bullets disappear upon collision.

- Scoring works correctly and lives decrease as necessary. Scoring has been verified to update correctly—each time an enemy is destroyed the score increases by 100—and the player's lives decrease appropriately each time they take damage.

- Pause menu works correctly. Game can be resumed or closed or restarted Pause menu works correctly, allowing the game to be resumed, closed, or restarted.

- Game Over triggers correctly and Game Over Menu works correctly. Game can be closed or restarted. The game correctly enters the Game Over state and displays a menu where the player can choose to exit or restart.

- 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. At the 1:40 mark of the video, I said that pressing Esc opens the game, but it actually closes it by mistake.

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INCOMPLETE PARTS

- When the enemy tank collides with the player tank, they cannot pass through each other, but no explosion occurs.
- I used the files as if there were an assets folder inside the src directory; the example file path should be **file:assets/whiteTank1.png**.
- Bullets do not collide in mid-air.
- Enemy tanks do not collide with each other.
- Enemy tanks cannot hit each other.
- When the player tank is colliding with a wall or other tanks, the wheel rotation animation is not displayed.
- No limit has been placed on the maximum number of enemies that can spawn.

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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.
- 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.

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