

Assignment for Week 10 User Interactions: Part 2

This part of the homework is extra credit !!!

Goals

In the second part you will modify the program by implementing GUI and graphics view of the program state and adding interactive user controls in the form of buttons and mouse manipulations.

Use what you learned from the Lab 10 to make your game interactive. You may do the following, or add other features we may not have thought about:

- Show the state of the game in a GUI: the original number of objects to be released, how many were released so far, and how many hits were recorded.
- Allow the user to start the game through a GUI action button, and to select the number of objects for a new game in a `TextView`.
- Animate the movement of the object during the game by painting and erasing it, with a pause between a paint and next erase. (Think why the pause cannot be between erase and paint.)
- Add mouse actions to the game and use the mouse click instead of the random shot to destroy the moving objects.
- Make the slider respond to user's interactions by setting the speed immediately upon the change.
- Modify the trajectory of the falling (rising) object, so it moves a little bit horizontally as well — at random.
- Add special effects when the hit s registered - the object disintegrates, a sound is heard, or the color changes, or anything you may find amusing happens.
- Display statistics over all games played during this session.

We do not expect any of you to do all of this. However, the reason we made the list is to show you that with your knowledge of programming, all of these tasks are do-able, given sufficient time and motivation.

Have fun.

Make sure you document and test what you design.