ISU Game Proposal Javier A.

Description of Game

I will be attempting to make a Java version of the dinosaur game included with chrome (chrome://dino). The objective of the game is simple, avoid the obstacles and try and obtain a high score. The obstacles are cacti. The way to avoid the obstacle is to jump. It is an endless runner, meaning that you are just trying to achieve the highest score you possibly can.

Concepts that will be used to create the game

Sprites

From my previous attempt of my other game, I know how to use sprites and load them into the game. I will use sprites downloaded from the Internet.

Draw

I also learned from my previous attempt, that I can use drawing instead of using sprites for certain things. I will probably use this for the floor or the sky.

If Statements

If statements will be used for collisions, checking if Booleans equal certain values. I also learned, that they are used for checking button inputs and will be essential to my game.

Classes

Classes will be used for containing information, hitboxes and sprites. This will be extremely useful for keeping my code organized and will be useful for perhaps needing multiple instances of a game object.

Loops (Timer)

I learned from my previous game attempt that, instead of using a loop for the main game and graphics, etc. a timer is used that is included in the javax.swing module. This will be what runs the main game and constantly refreshes the sprites, and values.

Variables

I will use a variety of variables all throughout my program. I will use Booleans, int, etc. They will hold various information and will be changing as the player moves.

Methods

Methods will help for not only functionality but organization. Certain methods will be used for doing certain tasks so, that the code isn’t all messy. They also help to section off code and make it easier to program a certain part of the program.

My Plan on Programming it

I now have gained experience through my previous game attempt. I now have an understanding of the actionListener, sprites, buttons and basic movement. For my new game I will need to learn how to implement gravity and a limit so, that player can’t just fly up infinitely or sink down infinitely. I will also need to figure out how my particular movement system will work since, only the y value will change (you can only jump in the game). The next thing to work on from there, would be randomizing the obstacles since I plan on adding two, and having different chances of each one spawning. From there It would be adding score and maybe additional settings, options or maybe even obstacles.

Proposed Timeline

1. Add movement
2. Add gravity to player object
3. Add collisions
4. Add sprites to hitboxes
5. Add randomized obstacle spawning
6. Add death/what happens when the player dies
7. Add score
8. Add any extra features, obstacles, etc.

\*Note: This is my second ISU game proposal, this one if for the game I am handing in. I will also include the previous ISU game proposal, since a lot of the concepts were the same with some changes to how the game will function, etc. It can also be used to reference certain concepts I have learn making the first game.