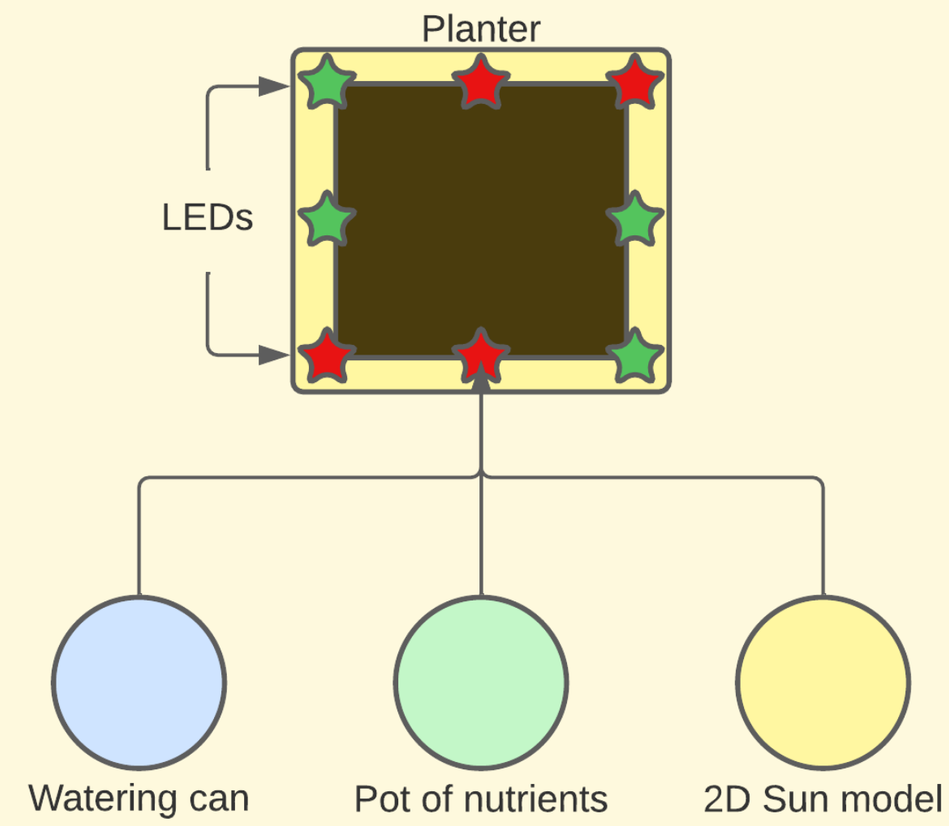
Gardening sim controller
Comp 140- LW260328

Hardware design diagram:

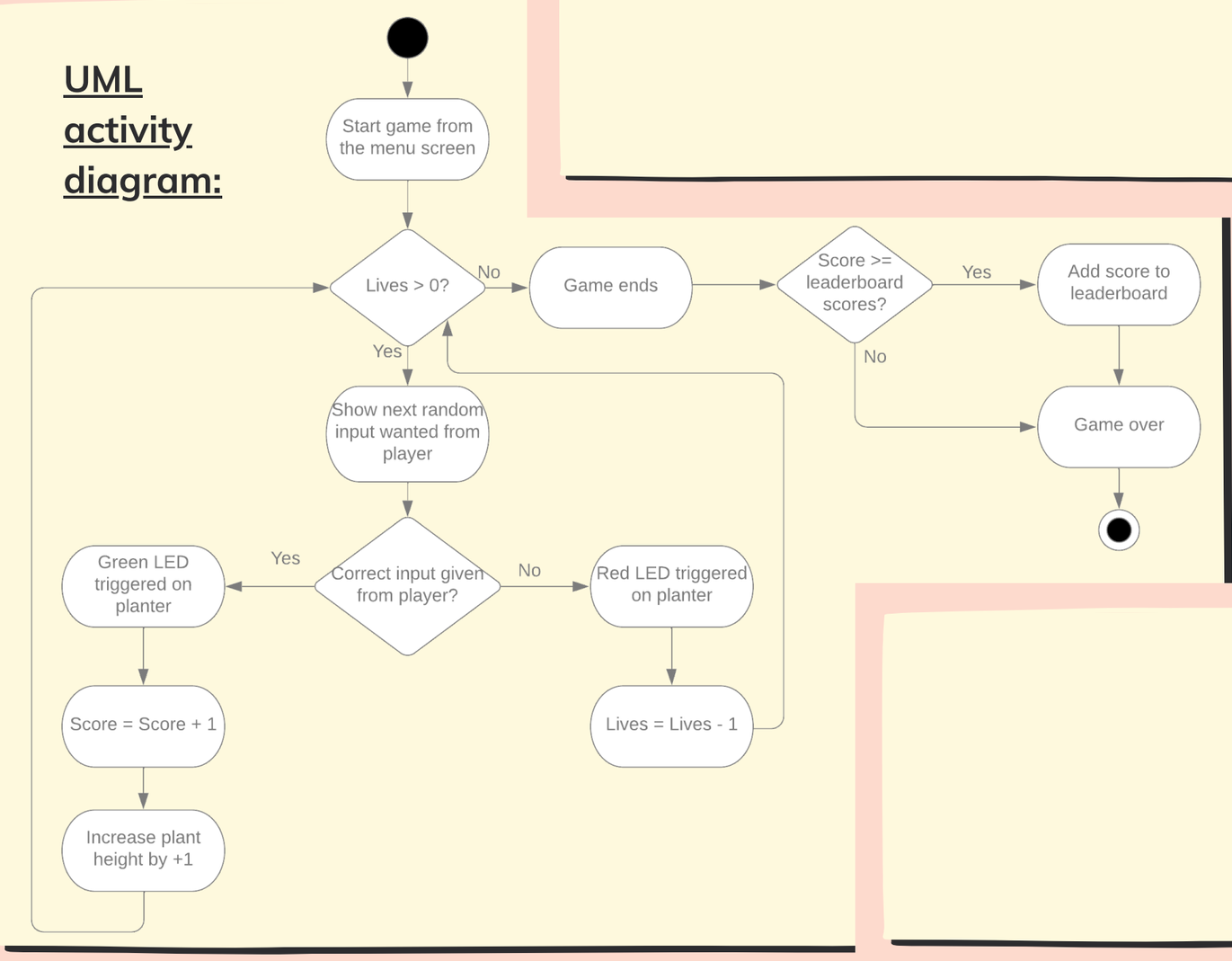


Hardware design outline:

As I have three types of sensors, each of them are going to be encased in or attached to the corresponding models which will be 3D printed. For these, I'm going to have a moisture sensor for the watering can, a button on the pot of nutrients, and a thermal sensor on the sun.
There are going to be several LEDs going around the planter which will be green or red. These will be triggered to turn on or off depending on if the player input was correct.
In order to make my controller more portable and appealing to look at, I'm going to make the planter box hollow with access to the bottom section of it. This will allow me to hide the Arduino and breadboard inside

Software design:

UML activity diagram:



Controller overview:
My gardening sim controller is about helping a plant grow as big as possible by providing it with its basic need in order for it to grow. The player will have to pay attention to the game screen to see what randomly generated input is requested next to help the plant grow, those of which will be in the form of a watering can, a pot of nutrients, or a sun. With all three using different sensors, it will create a fast paced game similar to 'bop-it'. To aid the controllers, the game is going to have a 2D interface in which the player can see the growth progress of the plant, their current score, and the next input required by the player.

Pseudocode example:

//code here

UML class diagram:

put hereeeee!!