

Assignment-Game

This is a 3rd person controller, 3D challenge game, based on a scenario in which the goal is to build an object from tools and components found in the immediate vicinity. The player character may be a person, vehicle, animal, monster, etc... but it must include animations.

Level1/2

begins with the player standing inside a well-lit forest. The goal is for the user to collect the appropriate tools and components to build an object before the timer runs out. The object under construction may be a campfire, tent, dam, house, or something similar that fits your scenario.

- o There are work areas, tools, components etc. positioned around the forest between the various vegetation.
- o Some of the tools are rotating and/or glowing or highlighted in order to attract the user's attention. This should be achieved through the Unity animation tool.
- o The player should control the 3rd person controller with the arrow keys.
- o Include a prompt for the user to pick up the rotating/ glowing tools.
- ☐ The player should pick up the tool by colliding with the tool object. On collision, the tool object should disappear, a (collection) sound is played, and an inventory of tools is updated in the Heads Up Display (HUD).

The user should collect at least 3 different tools.

When all tools are collected, the user is then prompted to collect components for the object which, like the tools, are placed around the forest and are rotating/ glowing. Components can be planks of wood, canvas for a tent, wood for a fire, poles or similar.

Again the user is kept informed of his/her progress through the HUD. There is an opportunity here to gain marks by developing an informative image based display that lets the user know how many tools are left to collect and a separate counter to inform the user how many components are left to collect.

- o When the user has collected all of the tools and components, then the object under

construction appears in the forest.

Use sound effects and animation with some visual effects when the object appears.

When the user touches the object, he/she is taken to Level 2 (include a prompt so that the user knows to touch the object).

o A countdown timer is clearly visible on the HUD. When the timer reaches zero, the 'Game Over' scene is loaded. The timeframe must allow for the game to be achievable yet challenging.

Level 2 has slightly more difficult game play than Level 1. Students may copy their Level 1 scene and name it Level 2.

- Constraints on game play

- o The user should not be allowed to collect components until they have collected all of the tools for that level.

- o The object under construction should not appear until all items are collected in the correct order.

- o The level can only be completed by touching the constructed object or by the timer running out.

- o For the sake of testing, the main menu should include a link to all scenes.