CS 175 | Scripting Languages

Programming Assignment 3

This assignment is to make sure that you understand the basics behind the chapters covered so far. The important thing, before you start this assignment, is to understand class property attributes, inheritance, input manager and game state manager really well. The estimated time for completion is about ten hours.

In this assignment, you are given a folder called “Assignment 3” that contains the start of a simple engine. In order to get the desired behavior, you have to implement:

- The Game State Manager’s properties
- Level1 Class
- Level2 Class

Details

Assignment 3 Details:

- **We start the game in Level1**
- **If you are in level 1 you have 4 choices:**
  - **Press 2 to go to Level 2**
  - **Press “R” to restart the Level**
  - **Press “SPACE” to Exit the game**
  - **Don’t press anything and stay in Level 1**
- **If you are in level 2 you have 4 choices:**
  - **Press 1 to go to Level 1**
  - **Press “R” to restart the Level**
  - **Press “SPACE” to Exit the game**
  - **Don’t press anything and stay in Level 2**

Note: Pressing 1 in Level1 or 2 in Level2 shouldn’t do anything.

- **Every function in Level1 and Level2 classes should trace a debug output that tells the users which function is being called right now**

Sample Run:

```
Level1 Created        →   Started the application
Level1 Initialized
Level1 Updated
Level1 Updated
Level1 Updated
Level1 Updated
Level1 Updated             →   User pressed 2
Level1 Uninitialized
Level1 Destroyed
Level2 Created
Level2 Initialized
Level2 Updated
Level2 Updated          →      User pressed “R”
Level2 Uninitialized
Level2 Initialized
Level2 Updated
Level2 Updated         →       User pressed “SPACE”
Level2 Uninitialized
Level2 Destroyed
Game Exited
```

Code Details:

In this assignment, you are given certain classes to create while following a specific architecture. You are not allowed to add any code in the ".fla" file, all the code you add will be in the classes you create.

You are given multiple classes to start with which I will explain in class

- Main.as
- Engine Folder
    - Game.as
    - GameStateManager **(which you need to complete)**
    - InputManager.as
    - State.as

- GamePlay Folder
    - Level1.as **(which you need to complete)**

You need to add the correct code to the following class found in the "Engine" folder:

- GameStateManager.as

You need to add the correct code to the following class found in the "GamePlay" folder:

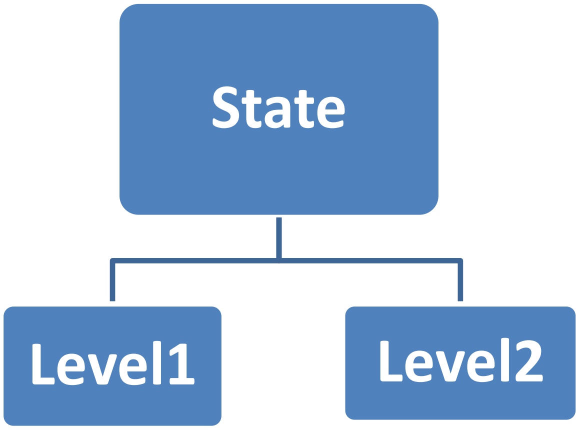
- Level1.as

You need to create the following class from scratch and put them inside the "GamePlay" folder

- Level2.as

<u>Note:</u> "Level2.as" is very similar to "Level1.as"

"**Level1**"and "**Level2**" classes inherit from the "State" class.



Comments

In this and future assignments, you are required to include:

- **A file header comment in every piece of source file. The format is shown in the "Comments.as" file given to you in the beginning of the semester and should be present at the very top of all your code.**

- **Function header for each function you create. The format is shown in the "Comments.as" file given to you in the beginning of the semester and should be present at the top of every function.**

- **Inline commenting for your code.**

What to submit

You must submit the **"ASEngine v1.0"** folder in a single .zip file named correctly (go to the class page on moodle and you will find the assignment submission link). **Do not change the hierarchy of the files inside it. Do not submit any other files than the ones listed.**

If you've forgotten how to submit files, the details about how to submit are posted in the syllabus. Failure to follow the instructions will result in a poor score on the assignment (and possibly a zero).

Special note:

The due date/time posted is the positively latest you are allowed to submit your code. Since the assignments can easily be completed well before the deadline, you should strive to turn it in as early as possible. If you wait until the deadline, and you encounter unforeseen circumstances (like being sick, or your car breaking down, or something else), you may not have any way to submit the assignment on time. Moral: **Don't wait until the last day to do your homework.**