

CS-224 Object Oriented Programming and Design Methodologies

Assignment 05

June 27, 2018

1 Guidelines

You need to submit this assignment on **4th of July at 12 pm (Noon)**. Some important guidelines about the assignment are as following:

- You need to do all the assignments alone
- If a TA has not been assigned to you, get one assigned
- You will submit your assignment to the TA
- You can ask the TA for help, but not for solution. They will guide you towards the answer but not give you the answer.
- You need to follow the best programming practices as given in the accompanying document. Failure in doing so will have your marks deducted
- Submit assignment on time; late submissions will not be accepted
- Some assignments will require you to submit multiple files. Always Zip and send them
- It is better to submit incomplete assignment than none at all.
- It is better to submit the work that you have done yourself than what you have plagiarized.
- It is strongly advised that you start working on the assignment the day you get it. Assignments WILL take time.

- Every assignment you submit should be a single zipped file containing all the other files. Suppose your name is John Doe and your id is 0022 so the name of the submitted file should be JohnDoe0022.zip
- DO NOT send your assignment to your instructor, if you do I will just mark your assignment as ZERO for not following clear instructions.
- You can be called in for Viva for any assignment that you submit

2 Background

For this assignment, it is recommended that you have done the previous assignment and have a good understanding of how to setup SDL and display images on screen.

If you are able to run the code given with the assignment, you will be able to see the image of character 'A' in the middle of the screen.

3 Task

Every character in the given image file is of dimension 44 x 48.

There are 3 button components each of size 64x64.

You have a Character class defined which draws one character but it will always draw this one character. You will need to make changes to the code so that it draws the right character as given in the image file (case included).

You will then create a Word Class, to which you will pass a string. The Word class will use the Character class to display the text.

You will then create a Button class that will use the Word class to draw a button with text. The button needs to change in size as according to the text given.

The button needs to be in the center of the screen and text needs to be in the center of the button. If you change the size of the screen, the button should remain centered.