**CS 4322 – Coding Assignment 8**

See Schedule for due date. You can work individually or in groups of two.

**Overview**

You have been provided Java code for a simple text editor that supports a few formatting features (bold, italics, underline). The code is organized in an MVC pattern that utilizes the Observer pattern. You will document how the MVC is implemented with a sequence diagram.



**Design**

In the download you will find 3 packages: *model, view, controller.* A high-level class diagram:

**

A full class diagram (but only shows 2 methods for each class):



**Requirements**

1. Neatly draw a sequence diagram that documents the use case where some text is set to bold. Use the template provided which lists all the classes of the instances that are involved.

Suggestions/Hints

1. Start by opening *view/TextEditorPanel* and find the *BoldActionListener* internal class. When the user presses the bold button, *actionPerformed* is called; this is where the use case begins. Select the method call, *setBold*,right-click, and choose: Open Declaration. Continue doing this for all method calls. Some will lead to the Java API, ignore those. Continue until you reach *doc.setCharacterAttributes(start, length, style, false);* which is the line that actually updates the display and where the use case ends.
2. At some point you will come across *addStylesToRange*. Show this call on your diagram, but do not document the internals (it has details that are not important).
3. Don’t show any conditional or iterative behavior.
4. No return arrows are required.
5. No activation boxes are needed.
6. No parameters are needed nor (), just the method name

**Setup Code in Eclipse**

1. Create a folder on your drive: *CA8\_TextEditor*
2. Open Eclipse, set Workspace to the folder from previous step.
3. In Eclipse, choose: File, New, Java Project and give the name: *CA 8.* Then choose: Finish.
4. In Package Explorer, expand to find the *src* node.
5. Download *ca8.zip* from the Schedule and and unzip. Drag the three folders: *model, view, controller* to the *src* folder in the Package Explorer in Eclipse.

**Deliverable**

Submit paper copy in class on the due date.

