

Spring 2019 Homework 1 Due by Feb 18, 2019

CS 319 Object-Oriented Software Engineering

Q1) Weekly Meeting Hours [2 pts]

Agree on and specify regular weekly meeting hours (we suggest 2 two-hour time slots per week = 4 hours per week) with your project teammates. You get credit **only** if all your teammates specify the same meeting schedule as you do!

Q2) CASE Tool and Object Modeling [3 pts]

Assume that you are to develop a computer system as follows:

Identifying software and text similarities become important for the universities and sometimes for the patent offices.

To identify the text similarities, similarity metric is calculated between two sentences and if similarity value is below the predefined threshold, system identifies these sentences as dissimilar. Otherwise, they are announced as similar sentences and results of the similar pair sentences list will be emailed to the user. To identify code similarity, type of the programming language must be known and similar mechanism as to text similarity is implemented but this time, it is for the functions. Again, if similarity is identified between functions, similar pairwise function list will be emailed to the user. System can be used through a browser which requires to upload files to the system or through the command line for local usage.

In order to use this system, users have to register the system with a valid email address. Once they are authenticated, they have to choose which similarity type, text or software, they will use and they should give path of the files, or upload files to the system. Since system is black-boxed, users don't need to know how the similarity is calculated. However, they have to set the threshold for the similarity and if they perform code similarity, they have to enter the name of the programming language. If ever, user submits anything to compare, server will keep those files at most 1 week. Then, it automatically deletes those files. However, user can also delete their files, "rm file1 file2" or "rm all" commands will delete the files.

Draw a UML Use Case Diagram that summarizes the main use cases of the above system, using a CASE tool such as Visual Paradigm (see course page for software and license). Do **not** use generic drawing tools like PowerPoint but a proper CASE tool supporting UML.

Q3) User Interface Mockups [3 pts]

As you know, normally mockups are drawn **before** the UI is actually implemented to agree on what the UI will be like! In this exercise, just for the sake of learning a new mockup tool (see examples in course page), we are asking you to draw a mockup of the following web page:

<https://tureng.com/en/turkish-english>

Q4) GitHub [2 pts]

You are going to maintain your group projects as GitHub repositories as detailed in the [Project Description Document](#). One person from each group is to create a GitHub repository as described in this document and **every group member has to share their GitHub repository URL here**. You will get credit if all the required *branches* and *directories* have been successfully created and your instructor and TA is *invited* to the project by the time of your submission.

I hereby affirm that the work submitted in this homework is my own exclusively unless asked otherwise.

Name & Signature: