

## MIDTERM ASSIGNMENT

**Subject :** Classes, objects, encapsulation, inheritance, and polymorphism.

**Instructor:** Dr. Selim Yılmaz (selimyilmaz@mu.edu.tr) & Dr. Özgür Kılıç (ozgurkilic@mu.edu.tr)

**Out Date:** 05/03/2021 23:59:59

**Due Date:** 05/17/2021 23:59:59

DECLARATION OF HONOR CODE<sup>1</sup>

Student ID ..... 190709056 .....  
Name ..... Gökhan .....  
Surname ..... MDTL U .....

In the course of Introduction to Object Oriented Programming (CENG 1004), I take academic integrity very seriously and ask you to do as well. That's why, this page is dedicated to some clear statements that defines the policies of this assignment, and hence, will be in force. Before reading this assignment booklet, please first read the following rules to avoid any possible violation on academic integrity.

- This assignment must be done individually unless stated otherwise.
- You are encouraged to discuss with your classmates about the given assignments, but these discussions should be carried out in an abstract way. That is, you cannot copy code (in whole or in part) of someone else, cannot share your code (in whole or in part) with someone else either.
- The previous rule also holds for the material found on the web as everything on the web has been written by someone else.
- You must not look at solution sets or program code from other years.
- You cannot share or leave your code (in whole or in part) in publicly accessible areas.
- You have to be prepared to explain the idea behind the solution of this assignment you submit.
- Finally, you must make a copy of your solution of this assignment and keep it until the end of this semester.

*I have carefully read every of the statements regarding this assignment and also the related part of the official disciplinary regulations of Muğla Sıtkı Koçman University and the Council of Higher Education. By signing this document, I hereby declare that I shall abide by the rules of this assignment to prevent any violation on academic integrity.*

Signature, .....

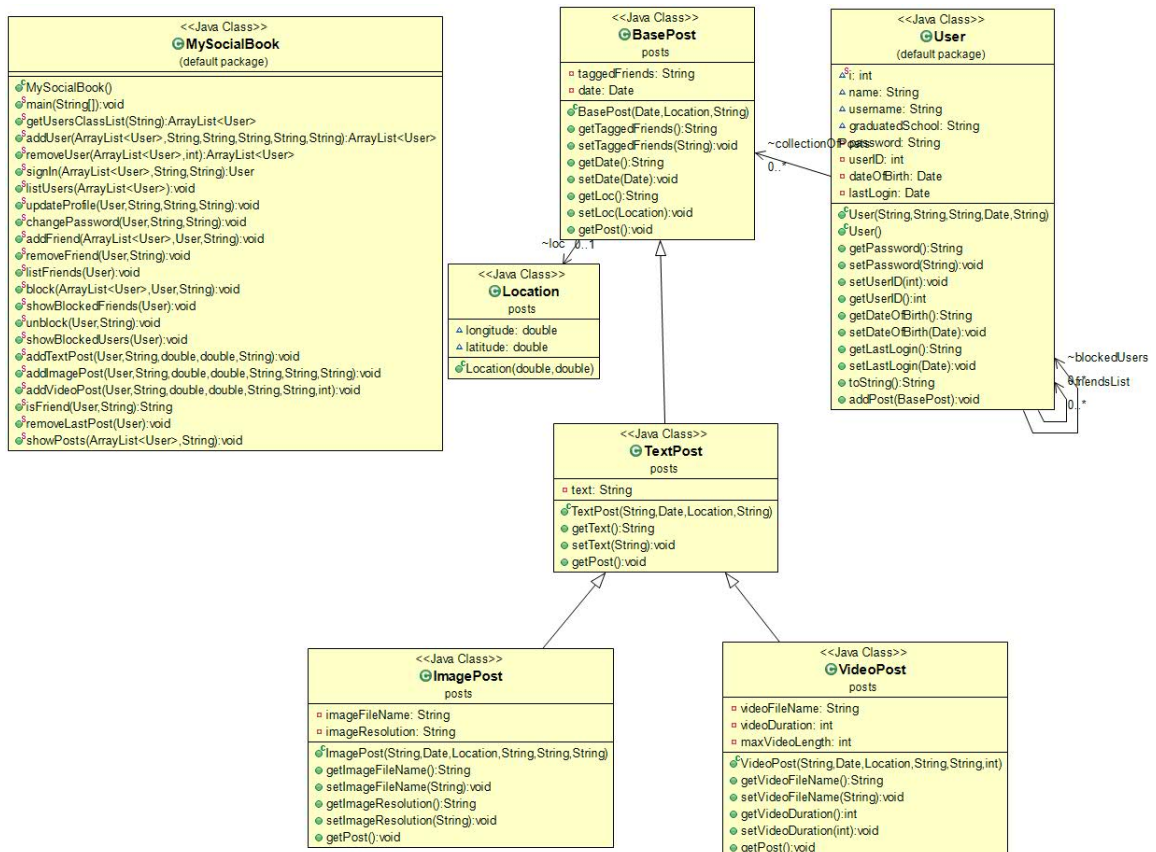
<sup>1</sup>This page should be filled and signed by your handwriting. Make it a cover page of your report.

# MySocialBook

Gökhan Mutlu

May 17, 2021

## 1 The role of classes



Classes were created as three main elements which are User, Post and MySocialBook.

### **MySocialBook Class**

This class is the main class of the program. All commands requested from the system are available as functions in this class. The user list of the system is created here. In addition, it performs the necessary operations by reading the necessary commands from “commands.txt”.

### **User Class**

User class contains basic information about users, as well as a list of friends, blocked users, and a list of posts. The role of this class works when we create a user object by taking user information from txt. In this way, it is possible to access the information of the user we want at any time.

### **Post Classes**

Post classes contain a total of four classes, one of which is the base class. The base class contains three attributes found in other subclasses, including location, share date, and tagged friends. The base class includes three attributes, including location, share date, and tagged friends. Three subclasses which are TextPost, Image Post and VideoPost have these attributes by inheritance. These three subclasses also have their own attributes. The role of BasePost, the base class, is to add any type of post to the list of posts in the User class.

## **2 The functionality of each method**

The functionality of each method in the classes exists as comment lines in the code.

## **3 General idea regarding the assignment**

The assignment has a layout created in terms of understanding the basics of Object-Oriented Programming. I had problems with homework because I had difficulty understanding certain things in Object-Oriented Programming. but I think homework is good in terms of measuring the basics of Object-Oriented Programming.

## 4 The contribution of this assignment on me

I think the assignment reflects well what object-oriented programming is like. as I said, I've had problems some places, which may be because I'm just new. I believe that it provides me to go over issues that I have problems with and improve myself on these issues. I think it's a good assignment to learn the paradigm of Object-Oriented Programming.