

# CENG 211 PROGRAMMING FUNDAMENTALS

## HOMEWORK-5

**Due Date: 17 December 2017, 23:55**

In this homework you are expected to design and implement a simple ToDo list application. Your ToDo list app should include a whole real calendar year. The user should be able to assign mandatory and hobby activities. For example, having breakfast, lunch, dinner, taking some medications are mandatory activities. Whereas going to gym, swimming, playing video games, watching tv series are hobby activities. Both mandatory and hobby activities can be a for a single day or routine/repetitive (daily, weekly, monthly, etc.).

An example for mandatory routine activities is assigning weekly tasks. For instance, a professor can have weekly lectures to teach at certain dates and times. However, you should keep in mind that a single semester is consisted of 14 weeks. Therefore, depending on the weekly routines, the user should be able to have an option to define a deadline or not.

As usual ToDo list applications, the tasks' statuses should be added by the user. There should be 3 statuses as; "Done", "Started" and "Pending". The "Done" status should be assigned to tasks that are done. The "Started" status should be assigned for tasks that are started in the past. The "Pending" corresponds to tasks in the future that aren't done/undone yet.

In a ToDo list hobby activities have an extra option that could be postponed, while mandatory activities couldn't be postponed. If a hobby activity is postponed, then its status should be "Pending" and its start and end date should be updated accordingly.

There should be another option to set the current date. Therefore, when the user sets the current date, your application should remind the current daily tasks with an alarm. In addition, the user should be able to view any date's activity with their statuses.

## **IMPORTANT NOTES:**

- You should have at least two different packages; **domain** layer, **presentation** layer.
- You should use **INTERFACE** approach for activities and **INHERITANCE** for single/repetitive activity types.

## **SUBMISSION RULES:**

- You should create your Java project as **ID1\_ID2\_HW5** and export as **ID1\_ID2\_HW5.zip**
- You should upload your zip file **ID1\_ID2\_HW5.zip** to the CMS.
- One of the group members is sufficient to upload homework to the CMS.
- You should add an author comment to the top of each class that you implement.