## **UTI 526 Object Oriented Programming**

**Research Assignment** 

Assignment Date: 22.04.2024

**Due Date: 20.05.2024** 

You are expected to study on one of the 23 design patterns catalogued in Gamma et al.'s book (Gamma et al., 1994). You should prepare a report on one of these patterns and present your study orally in the class. Use the template given in the book to prepare your study. Hence, give the pattern name and classification, intent, other name of the pattern (if exists), a scenario for illustrating the design problem, structure of the pattern, collaboration of participants and so on. However you need to revise the descriptions such that:

- During representation and documentation of the pattern, you should use UML notation instead of OMT.
- In addition to the examples given in the book, you should give at least two different examples for the implementation of the pattern. Those examples should only include Java implementations.

Find motivation scenarios from the real life as possible as you can.

Your reports and presentation should be in Turkish. Of course you may leave the pattern name and any other technical words/expressions in English.

## **Reference:**

Gamma, E., Helm, R., Johnson, R. and Vlissides, J. M. (1994) Design Patterns: Elements of Reusable Object-Oriented Software, Addison-Wesley

## **Important Notes:**

- 1. You may choose the pattern (except "Composite" pattern) which you want to study on. In this case, you should inform the course's instructor about your choice until April 29, 2024. Since assignment of patterns according to the choices will be on first come first served basis, you may provide any other substitute pattern(s) as the second choice. After that time, remaining patterns are randomly distributed to the remaining students.
- 2. The average of this assignment and the term project (with different percentages) will constitute your final grade.
- **3.** The order and date of each student's presentation will be announced later.
- **4.** Softcopy of your report and presentation should be submitted via <u>Ege Ders</u> platform: 2023 2024 Bahar Dönemi → Enstitüler → Fen Bilimleri Enstitüsü → Uluslararası Bilgisayar → Bilgi Teknolojileri ve İnternet Güvenliği → İÖ Nesne Yönelimli Programlama 540443 2324B → Hafta 10: Exception Handling → Research Assignment. You should also submit the same files to the instructor's e-mail (geylani@gmail.com) until the deadline.