

**Gebze Technical University**  
**Department of Computer Engineering**  
**CSE 241/505**  
**Object Oriented Programming**  
**Fall 2020**  
**Homework # 7**  
**Optional Homework**  
**Due date Jan 29<sup>th</sup> 2021**  
**GUI in Java**

In this homework, you will write a Hex game in Java with a GUI. Your Java Hex Game GUI will be as following

- It uses grid layout
- It uses JButtons for each cell.
- It has Radio and Chekbox buttons for player options such as computer vs user, user vs user.
- It has TextField inputs will be for board size
- It has Jbuttons for game reset, load and save games
- It has a button for single step undo

The Java engine for Hex Game will have the following features

- A game HexGame Interface that defines all methods
- Undo feature for a single step
- Properly overridden clone method
- The rest of the features will be the same as HW4

Notes:

- Do not use anything that we did not learn in the lectures. Do not use any GUI editors, all the GUI components should be hand coded.
- Do not forget to indent your code and provide comments.
- Check the validity of the user input.
- **Test your programs very carefully at least with 10 different runs. Submit at least two saved files with the HW.**
- **Submit screenshots of your HW in a separate PDF file.**
- You should submit your work to the moodle page.