C211 Team Projects

Due Date: Last week of class.

Project Description

You will create a project in Java with your team. Here are the requirements for the project:

- It should involve at least 3 classes written by the team members, and some testing code.

- It should involve complex data structures such as arrays and/or linked lists.

- It should have at least a minimal graphical user interface, such as we will discuss this week.

- The source code (.java files) should be uploaded to a team project in GitHub. All the participants should be added as collaborators to the project.

- The project should contain a README file describing the project aim, the source files and their purpose, the interface functionality, and anything else the user might need to run the application.

- If you use an online tutorial, cite the tutorial in the documentation, and also write down what you did add to the resources provided by the tutorial. The 3 classes mentioned above should be created in addition to the files that you obtained from the tutorial.

Project Ideas

Here are some ideas for projects. Feel free to use these or to come up with your own.

- Using a 2D array to generate a maze and let the user navigate it looking for a target.

- Implementing a card game - it could be in textual mode with a minimal interface.

- Implementing a personality quiz where you ask the user some questions with multiple choice answers, and predict something based on their answers - such as their D&D alignment.

- Writing a bulk file rename tool that lets you select a folder, display its content, and select a bunch of files to give them names based on a pattern, such as "holiday1.jpg", "holliday2.jpg", "holiday3.jpg", and so on.

- Emoji translator - inputting simple text from the user and matching substrings to a table of emojis you have created beforehand. The output would be a mixture of text and emojis.

- Elevator simulator - simulate an elevator going up and down in a building with several stores. You can let the user interact to add calls to the elevator from each of the floors of the building.

Timeline

- Week 9 - Team assignments, project discussions, GitHub accounts creation

- Week 10 - Project ideas presentation, discussion

- Weeks 11-14 - Project development

- Week 14 - Project submission and report

Project Submission

The project should be submitted via GitHub. A link to the project site should be posted to Canvas in Assignments - Project.