

## **Multi-Player, Networked Game**

### **Due Dates:**

- **Thursday April 18, 2019: GitHub repo set up**
- **Friday April 19 2019: first sprint sheet and project description**
- **Week of 4/21/2019: meet with team TA to discuss progress**
- **Week of 4/28/2019: meet with team TA to discuss progress**
- **Week of 5/5/2019: (Finals Week) Demo your project for team TA plus final documentation and source code.**

### **Description:**

This is your second team project. This project will be managed on GitHub for the remainder of the semester.

Your task is to create a multi-player game (at least 4 players). The game will be run through a server and each player will be a client. You may do this project in Java with JavaFX, using sockets and threads, or you may do this in Node.js, most likely using some open source frameworks like Express.js or Socket.IO.

**This must be an original implementation of a game and not something you found on the web. We will check.**

We will cover some Node.js and associated frameworks in class over the last two weeks in order to compare/contrast with the GUI development and threading you have done in Java/JavaFX.

Do not be intimidated to try Node.js even though we have not yet covered it. You will find it to be much more user friendly and a good thing to talk about in an interview. Since this is a team project, you definitely have enough time and resources.

### **GitHub Repository:**

Each team will create a dedicated repository on GitHub and include their teams TA. This repo is where you will push the project description, weekly sprint sheets, testing code, project code and documentation. Each team is required to use git and GitHub to manage this project. We will check along the way to make sure.

**Project Description:**

This is a one to two page document describing your teams final project. You should describe the game being implemented, languages and frameworks being used, describe how the client/server relationship will be implemented, the look and feel of the user interface and anything else you would like to include. This document should have a cover page with team number, section and members and organized and written in a professional manner.

**Sprint Sheet:**

Your team will fill out two sprint sheets for this project and submit them to your teams repository (see due dates above). Make sure that it includes your team number and names and emails of each team member. Each member of the team must have specific action items filled in. The first weeks sprint sheet should just have items that you discussed in the “this week” column and specific action items for each of those in the “next week” column.

**Weekly Team Meetings:**

You are to schedule two meetings with your teams TA (see dates above) to discuss your progress on the project. For the first week, your TA will look at the current sprint sheet and ask each team member where they are on that item and what they plan to do in the next week. **What you have done should be accessible from your repo.** You will create a new sheet together to be reviewed the following week. At the second meeting, you will review the last weeks sheet and create a new sheet together. That sheet will be reviewed when presenting your projects during finals week.

**Final Project Documentation:**

Each team will provide a final project design document. You may use the template in: [Writing an Effective Design Document](#)

or something similar. Your documentation must include an activity diagram and a UML class or component diagram. An example of activity diagrams can be found here: [what is an activity diagram](#)

**Final Presentation:**

Each team will present their project to a project manager during finals week. At the presentation, the team will demo their project and talk about what was successful and what had/has issues. Each team member is required to attend and be ready to talk about their individual action items and how they contributed to the project. If an item was not complete, you should be able to demonstrate what you tried and your methodology for trying to complete it.

**Grading:**

Your grade for this project will be a combination of your teams overall success as well as your own individual effort.

**Assignment Details:**

Late work **is not accepted**.

***This is a team project. You may share and communicate at will with your teammates but are forbidden from collaboration with other teams.***

Unless stated otherwise, all work submitted for grading *\*must\** be done individually.

While we encourage you to talk to your peers and learn from them, this interaction must be superficial with regards to all work submitted for grading. This means you *\*cannot\** work in teams, you cannot work side-by-side, you cannot submit someone else's work (partial or complete) as your own. The University's policy is available here:

<https://dos.uic.edu/conductforstudents.shtml>.

In particular, note that you are guilty of academic dishonesty if you extend or receive any kind of unauthorized assistance. Absolutely no transfer of program code between students is permitted (paper or electronic), and you may not solicit code from family, friends, or online forums. Other examples of academic dishonesty include emailing

your program to another student, copying-pasting code from the internet, working in a group on a homework assignment, and allowing a tutor, TA, or another individual to write an answer for you. It is also considered academic dishonesty if you click someone

else's iClicker with the intent of answering for that student, whether for a quiz, exam, or class participation. Academic dishonesty is unacceptable, and penalties range from a letter grade drop to expulsion from the university; cases are handled via the official student conduct process described at <https://dos.uic.edu/conductforstudents.shtml>.