Week 8

CS2212
Introduction to Software Engineering

Announcements & Project Info.

Some images and content from Software Engineering: A Practitioner's Approach 9th Edition By Roger Pressman and Bruce Maxim

Design Documentation Due

- Was due on March 6th at 11:55pm.
- Make sure to submit it on OWL if you have not already done so.

Upcoming Due Dates

- **Implementation** and **Testing** components due the **week of April 3rd to 6th** based on the date of your acceptance testing with your TA.
- Your Implementation and Testing components must be submitted within 24 hours of your acceptance testing.
- You can use late coupons on the submission of these components on OWL but not for the acceptance testing meeting it's self.
- Keep in mind Implementation and Testing are two different components and each needs it's own late coupons, so to push both back by 2 days would take 4 coupons.

Upcoming Due Dates

- The **Project Management** component is due on **April 6th at 11:55pm**
- Need to submit PDF of all meeting notes and team contract.
- Only one team member needs to submit the PDFs.
- This component will also be marked based on your use of Bitbucket, Confluence, and Jira.
- See Project Management component on OWL assignments tab for more details.

Upcoming Due Dates

- The **Peer Review** component is due on **April 6th at 11:55pm**
- This is an individual component and each team member must submit their own copy.
- Must fill out an Excel sheet template provided in Peer Review component description (found on the OWL assignments tab).

Implementation & Testing

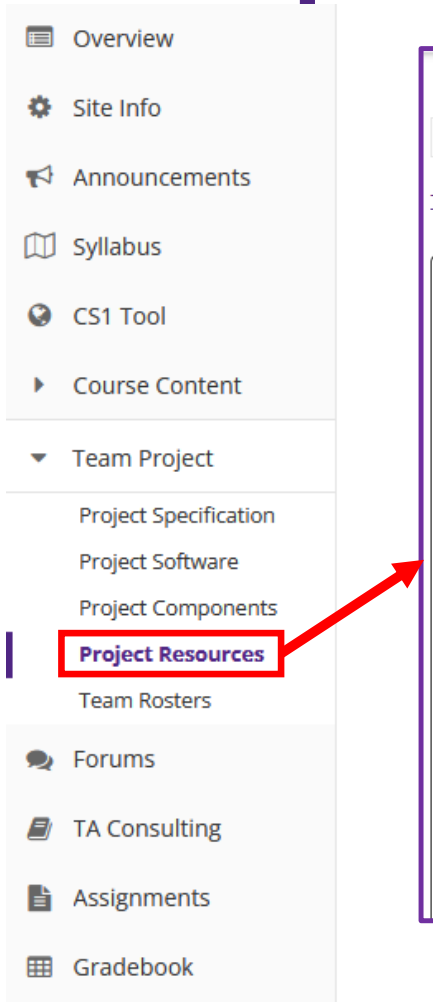
- Have about a month to implement the project and test it.
- What is expected is a prototype that fulfills the requirements in the project specification.
  - Does not have to be bug free or perfect but should have the bare minimum for each functional requirement and your one extra feature.
  - Non-functional requirements should also be considered such as having an easy to use UI (does not have to be beautiful, but should be useable).
- Should also contain:
  - JavaDoc comments for all public methods and classes. Do not need to document autogenerated code (e.g. from GUI builder).
  - Other traditional Java comments inside methods, etc. as needed.
  - JUnit tests for all public methods in core classes (not GUI).
  - Detailed README file that explains both how to build and use the software.

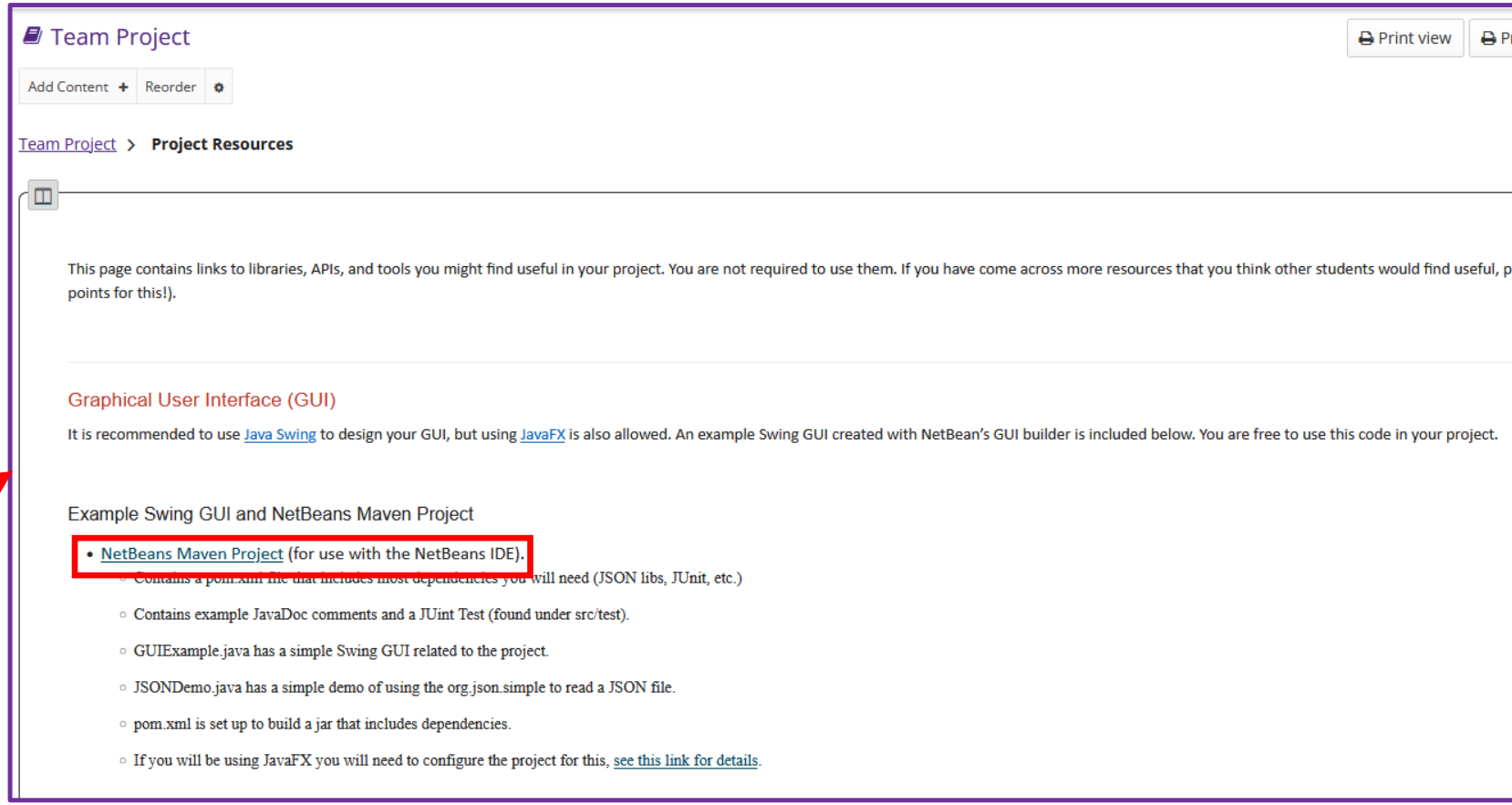
Implementation & Testing

Some Advice:

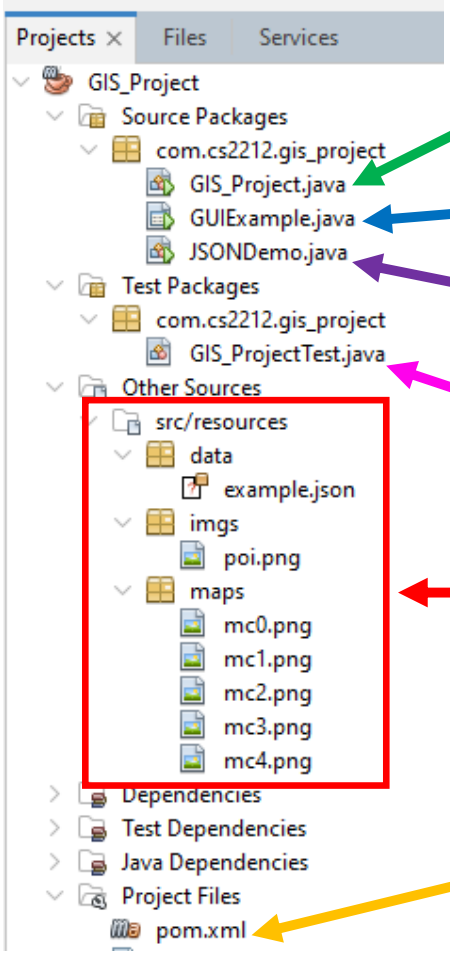
- In the past students have stated that it was very helpful to have everyone in one room working on the code. This allows the team to provide help to each other live and discuss any design changes immediately if a problem is encountered.
- Leave enough time to integrate and test your code. Do not start putting together your team members code right before the due date. Also allow enough time to merge branches and deal with conflicts.
- Focus on important functional requirements, don't get caught up in nice-to-haves, unneeded extra features, or GUI.
- It is ok if you have to make some design changes when implementing your project. This is normal and expected. You don't have to follow your design document 100%, but it should still be clear how you got from that documentation to your current design. You may go back and update the documentation on Confluence, but this is not required and will not be regraded.

Example NetBeans Project and GUI





Example NetBeans Project and GUI



Hello World Example
(used in JUint Example and has JavaDoc Comments)

Simple Swing GUI Example
(also shows loading images)

Simple JSON Example
(using org.json.simple)

Example JUnit Test
(tests GIS_Project.java)

Project Resources
(JSON files, images, etc.)

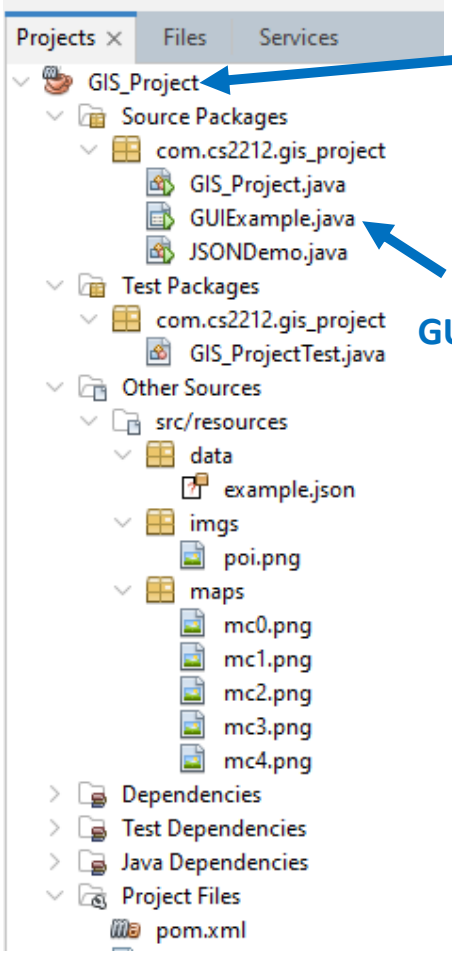
Apache Maven
pom.xml file

For details on Apache Maven see:

What is Maven:
https://maven.apache.org/what-is-maven.html

pom.xml:
https://maven.apache.org/guides/introduction/introduction-to-the-pom.html

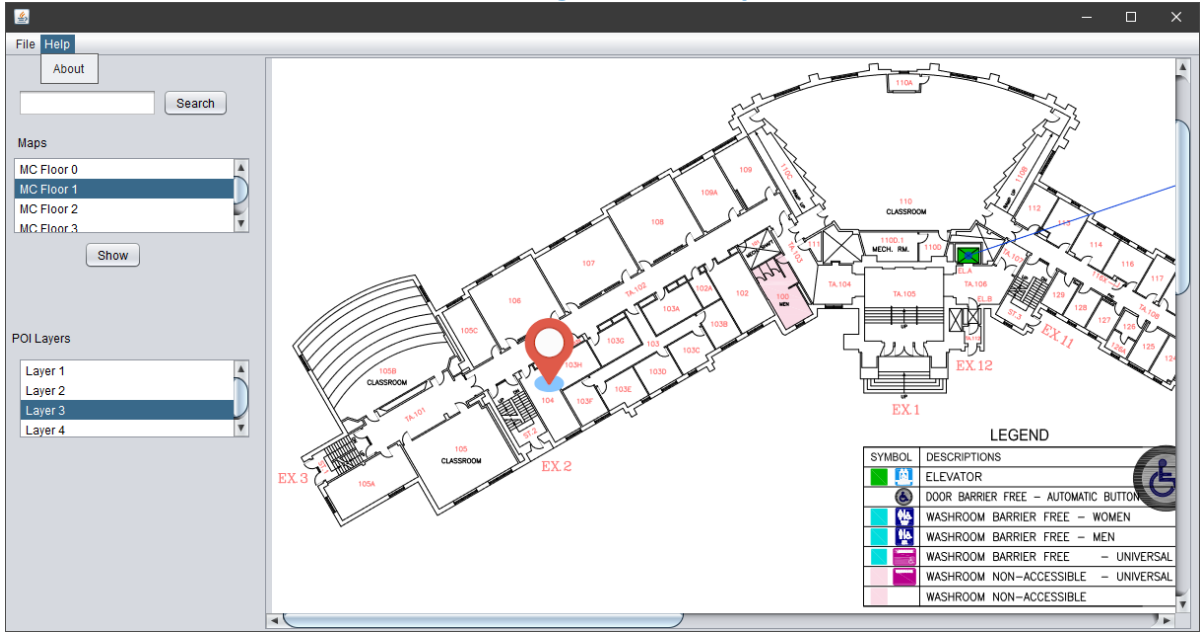
Swing GUI



1. Right Click on GIS_Project and select "Clean and Build"

2. Right Click on GUIExample.java and select "Run File"

Swing GUI Example



Example NetBeans Project and GUI

Notes:

- If you are using JavaFX some extra configuration is required, see: https://openjfx.io/openjfx-docs/#introduction
- pom.xml contains org.json, org.json.simple, and JUint libs. Should download these for you once you run “Clean and Build”. If you are using other libs you will have to add these.
- You are free to use anything in this example in your project but you are not required to.
- Same pom.xml and files should work in other IDEs.