

4/3 Lecture Notes

🕒 Created	@April 3, 2025 1:18 PM
📅 Class	CSS 342

Important Things to do for Coding Big Projects

- Comments to help yourself and others to understand the code (more readable)
 - However, we want to write as few comments as possible
- Organization

Comments

- If there is a constant number that is always appearing, you have to comment where this number comes from.
 - Like where does this number and why was it picked? Put a comment there to let everyone and yourself know where this comes from. Even if it was picked randomly.

Coding Style

- Java has a specific style, however, CPP has many styles. For this class, just as long as it's consistent, then that's fine. Just be consistent with different cases like camelCase or different cases.
 - However, if there is a different style of casing, put a comment there explaining why.

Git and GitHub

- What does Git and GitHub do?
 - **Version Control** - keep track of changes. Be able to revert back to an old save while also managing changes.

- Widely used in industry and open-source projects
- Easy to track progress (called commits)
- Easy to track features (branches)
 - Branches are versions where they aren't related and you can make a copy of a code and try a piece of code and if you like the code, you can push it back to the main branch. However, if you don't like it, then you don't have to push it back to main.
 - **Branch** - just another copy of your code.
- Easy to collaborate with others (GitHub)

Commit - Key Concept

- Commits are different versions, basically copies of your work. You can move on and continue changing things, but you can go back and change again.



Git vs GitHub

- **Git** - runs on your machine and keeps track of changes
- **GitHub** - a cloud version of whatever is on your machine. It's a website that stores your things, and that's it. It's easy to manage.
 - Also served as a safety, you can upload everything online if you lose your laptop.

Repository (Repo)

- Repo - A collection files from a project. It's just a folder.

Key Terms from Git/GitHub

- **Repository** - Collection files from a project
- **Commit** - A snapshot of the repo at the certain time
- **Branch** - a line of development, consisting of a series of commits
- **Push** - pushing everything from your laptop to the GitHub or the online cloud version.

Creating Git from your Files

- Create a Git Repo from Version Control on the top of the screen, and then right click on main and then add. Once it is green, that means it is saved.
- Once you've committed, the file will change to black. And once you change the file again, it'll turn blue to let you know that there are changes that need to be committed.
- **All the source files need to be committed!**
- Now that all the files are being kept in track, you need to create a GitHub.
 - The GitHub is referred to as a remote repository that can respond to your own laptop.