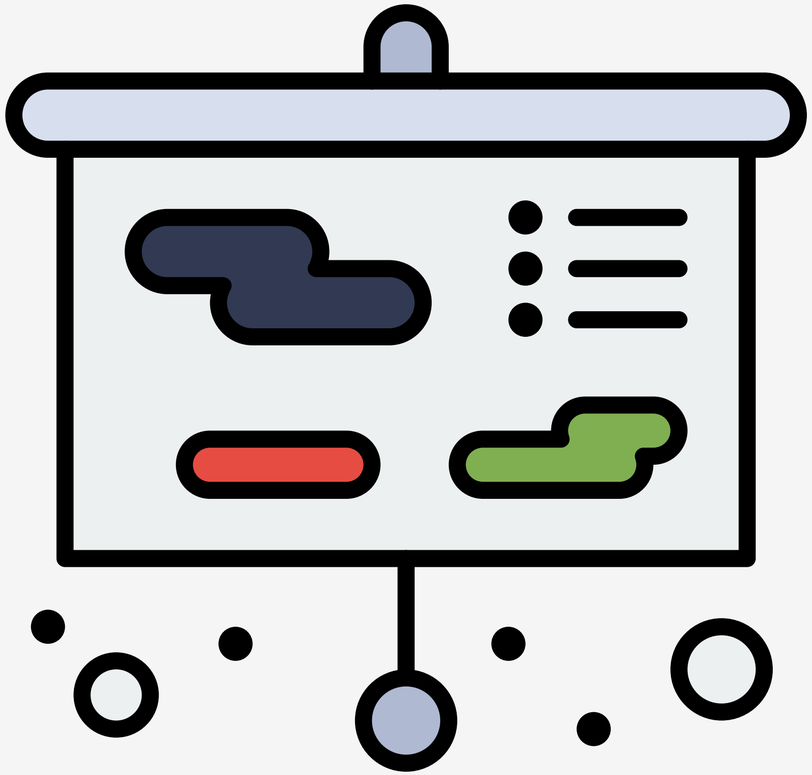
INTRODUCTION TO JAVASCRIPT

Lecture 1

MICHAEL EISENBRAUN

TODAY'S TOPICS



- Course Introduction
- Overview of IMDAC
- Update Developer Tools
- Git & GitHub
- Participation: Git JavaScript

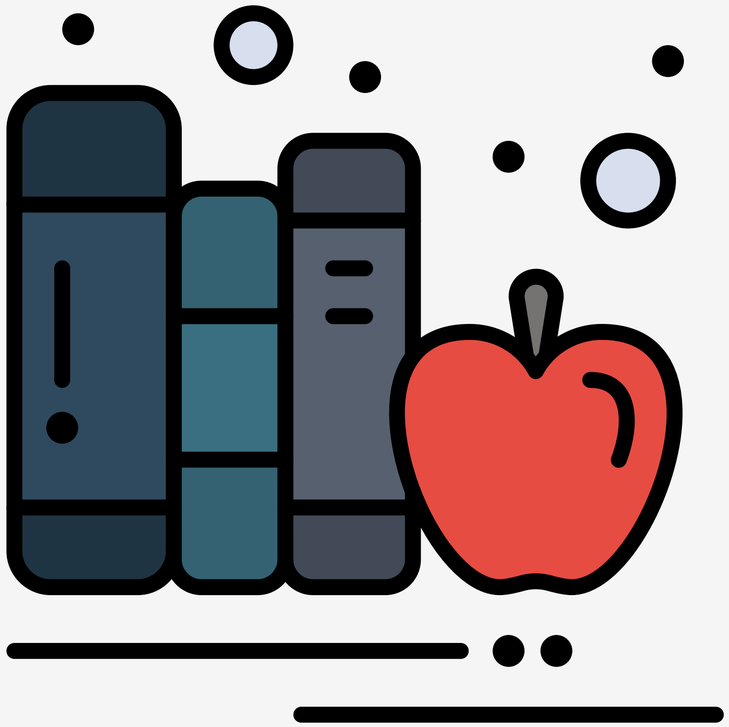
ANNOUNCEMENTS

- Sign-in Sheet

COURSE INTRODUCTION

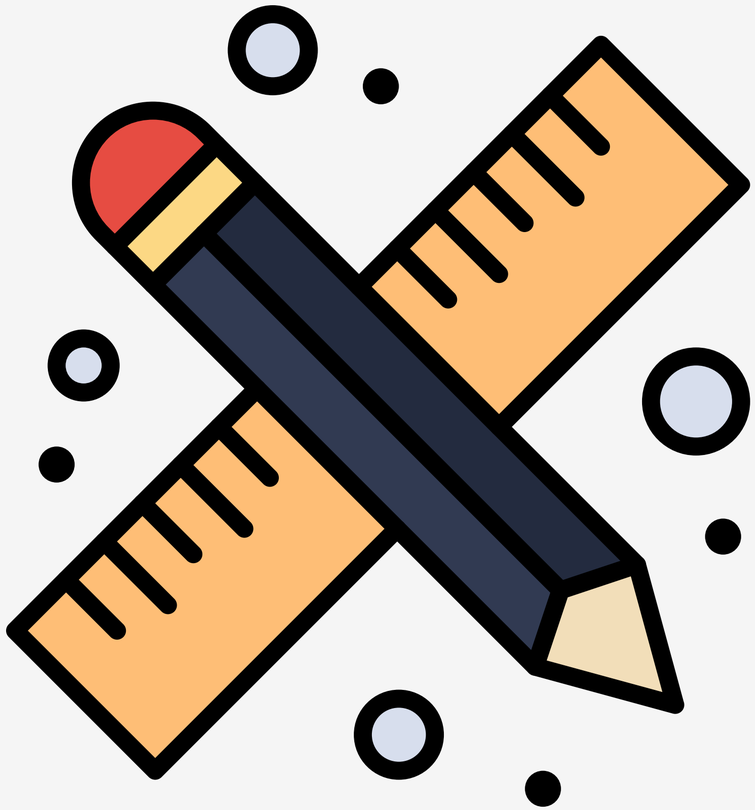
But... Didn't we already learn Javascript?!?

COURSE TOPICS



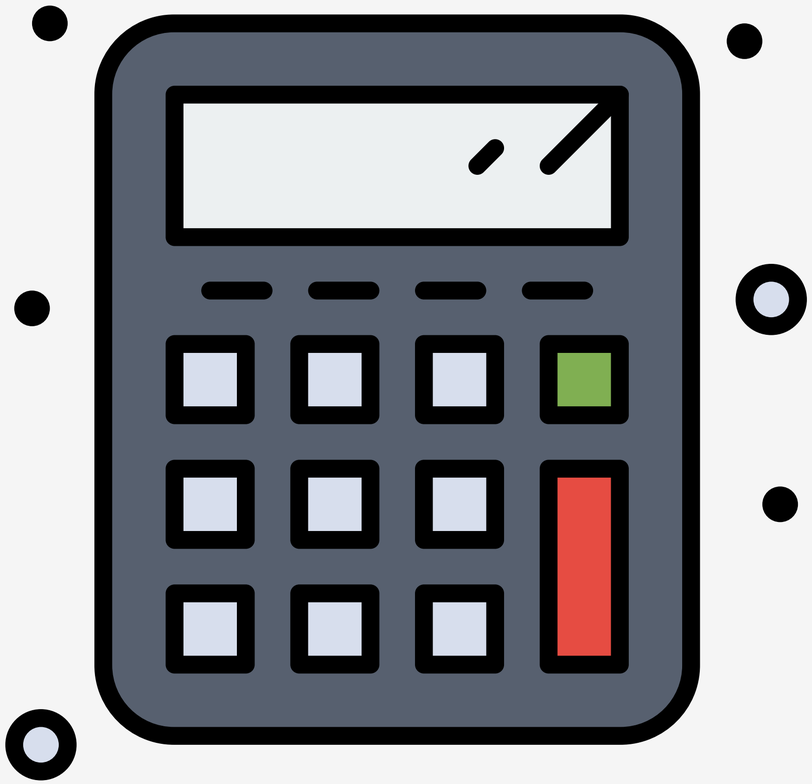
- JavaScript
- Git and GitHub
- Frameworks and Libraries
- Sass

ASSIGNMENTS



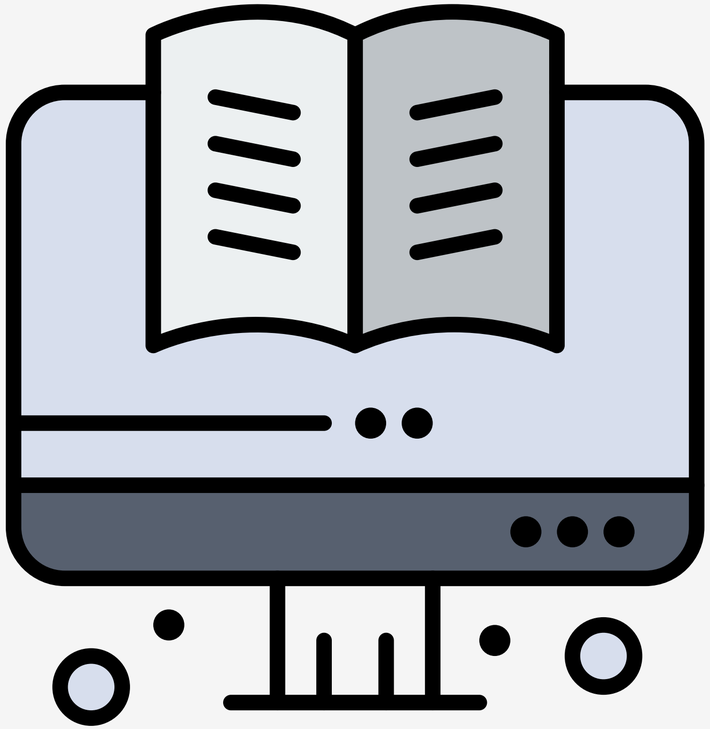
- 10 Participation (20%)
- 5 Exercises + 1 Bonus (30%)
- 2 Projects (50%)

DEVELOPMENT TOOLS



- VS Code
- Git
- Node
- Sass

COURSE CONTENT

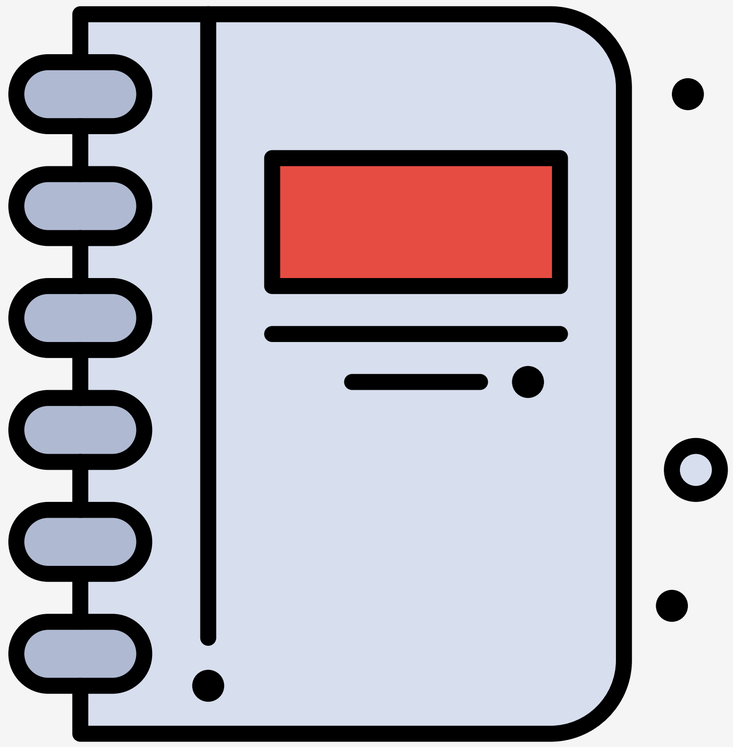


- IMDAC Website is use for content
- BrightSpace is used for submission and grades
- GitHub Classroom for submission

COURSE STRUCTURE

- 12 weeks
- Two classes per week
- First class will focus on theory and practice
- Second class will *MOSTLY* be a lab
- Slides and recordings will be made available

CLASS TIMES

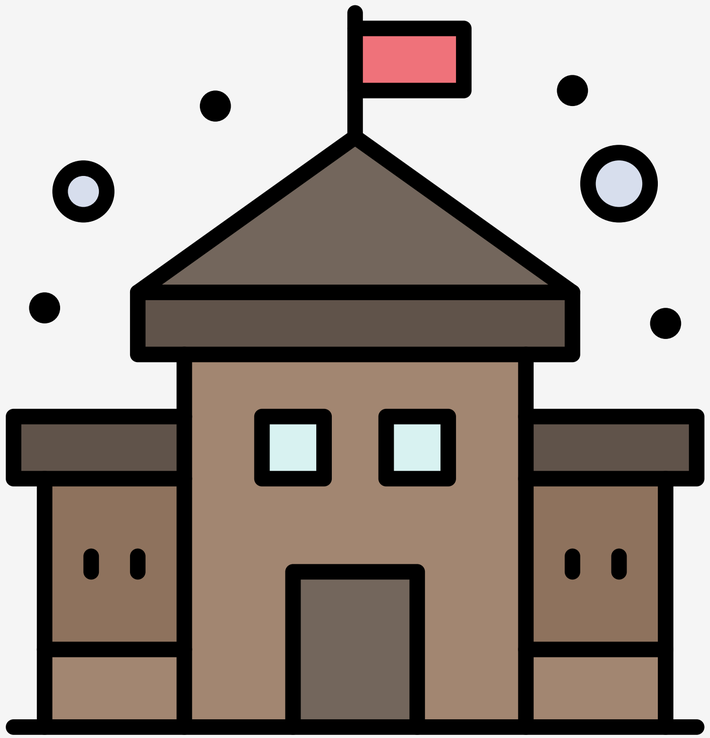


- **Section 010:**
  Mon 11:00 - 1:00 (T229)
  Tue 12:30 - 2:30 {N202)

- **Section 020:**
  Thu 11:00 - 1:00 (T232)
  Fri 2:00 - 4:00 (T229)

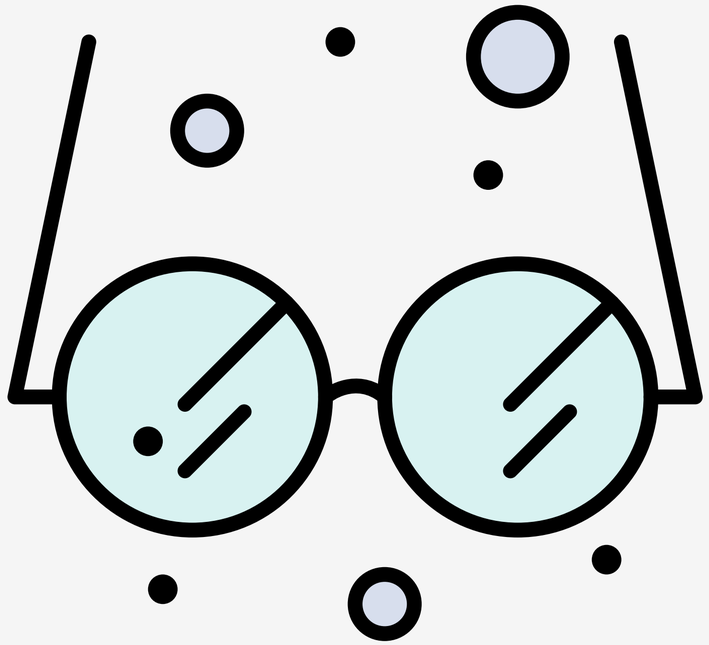
- **Section 030:**
  Mon 1:00 - 3:00 (N202)
  Tue 10:30 - 12:30 (N202)

STUDENT EXPECTATIONS



- Do the work
- Do your own work
- Don't be late
- Be respectful

PROFESSOR EXPECTATIONS

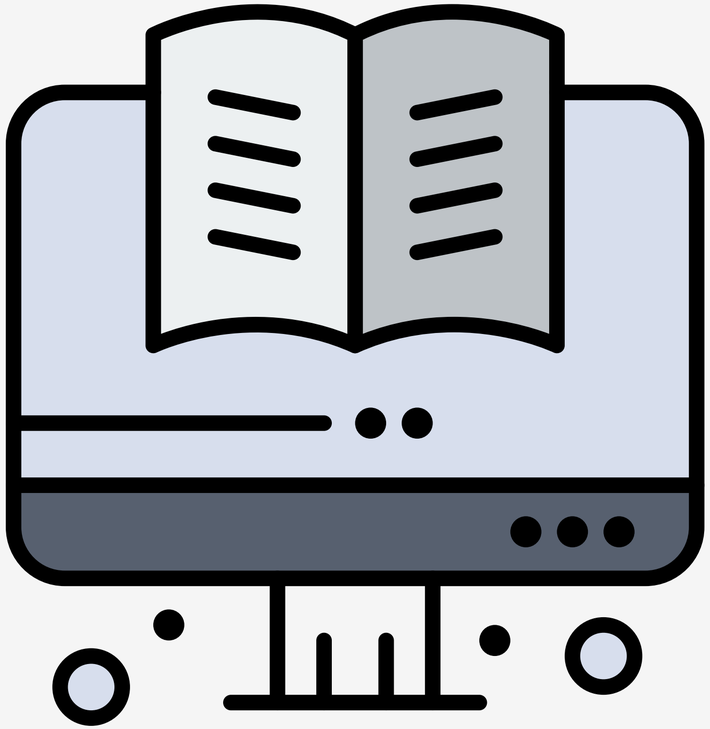


- Provide accurate and timely information
- Be flexible to the needs of the class
- Respond to emails within 24 hours
- Provide feedback within 1 week
- Fair and unbiased grading

IMDAC WEBSITE

https://imdac.github.io

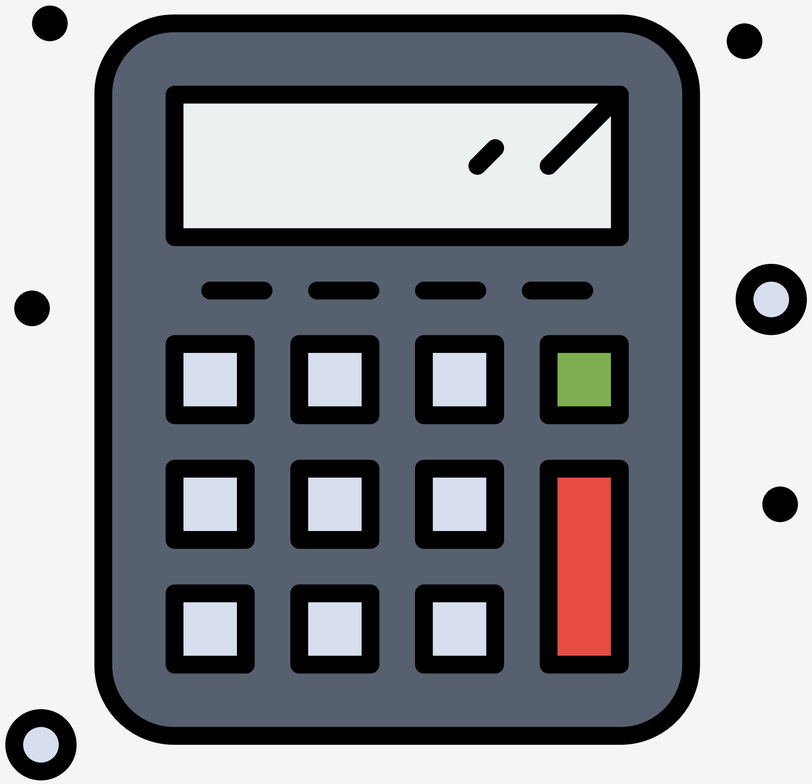
IMDAC WEBSITE



- One location for all IMD courses
- Courses available to *EVERYONE*
- Content is share between courses
- Content is searchable
- Currently in *BETA*
- Feedback welcome

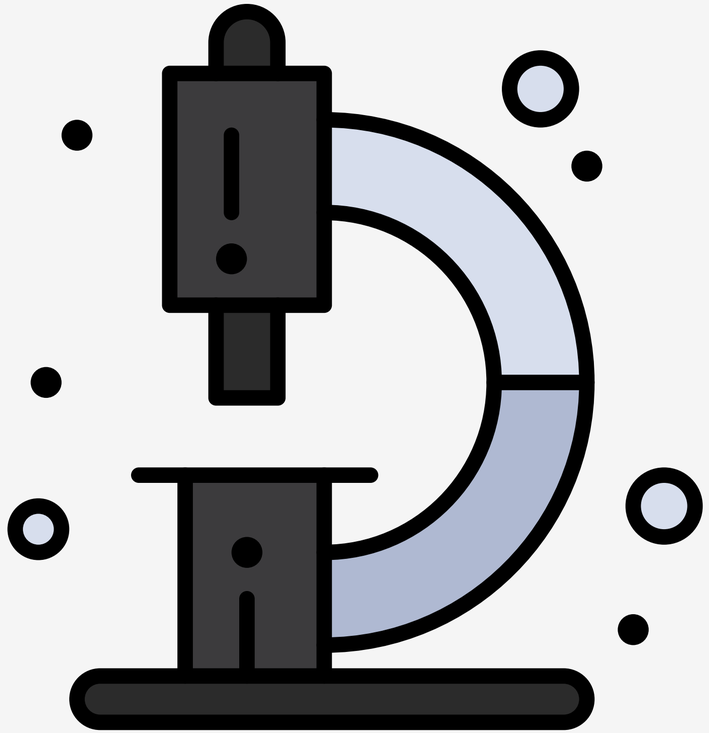
UPDATE DEVELOPMENT TOOLS

UPDATES



- Browsers
- VS Code
- Git
- Node

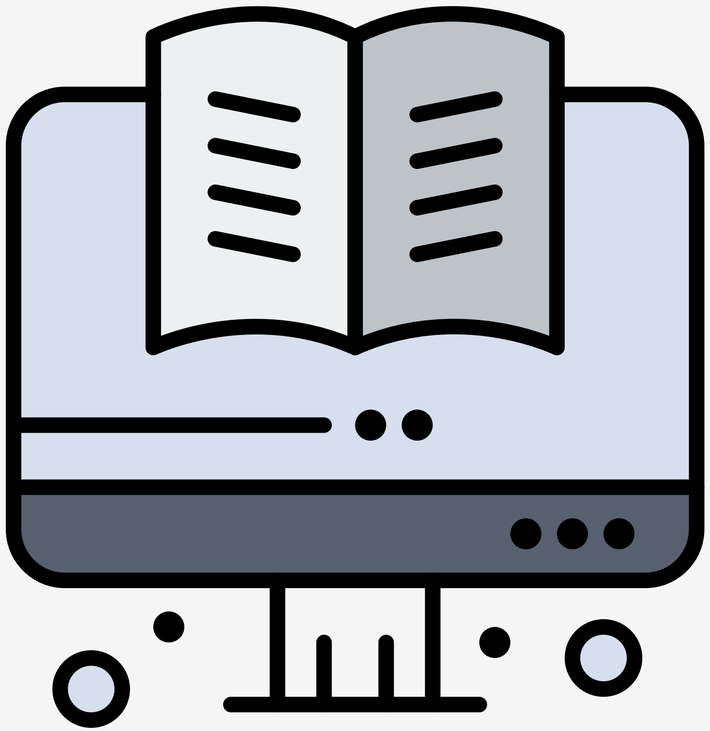
VS CODE EXTENSIONS



- Live Server
- Live Sass Compiler
- StandardJS

GIT & GITHUB

VERSION CONTROL SYSTEMS

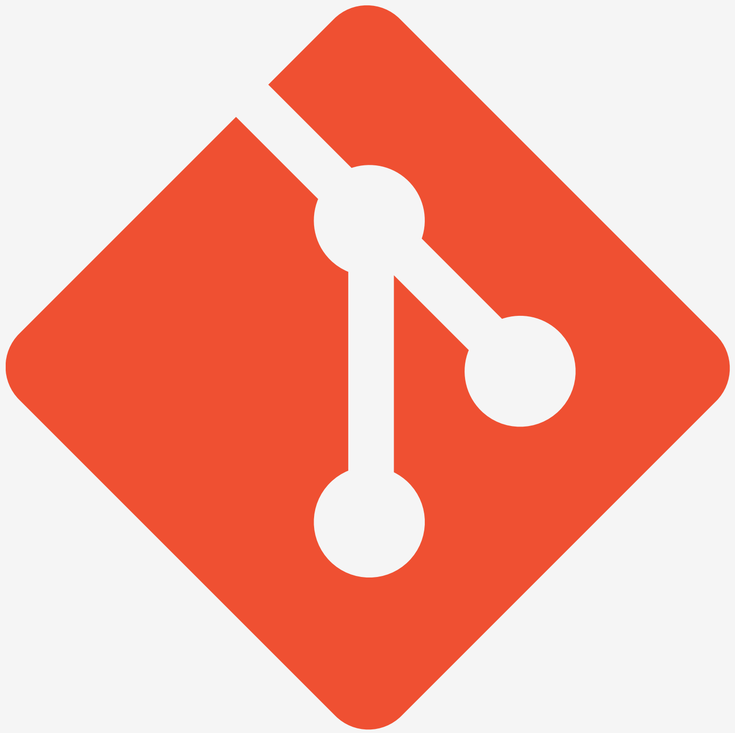


- Tools that track changes within a project
- Keep a long-term history of every file
- Able to branch or merge a project
- Log each change made to a project

GIT

- Distributed versioning control system
- Created in 2005 by Linus Torvalds
- Better performance, security, and flexibility
- Most popular version control system

GIT WORKFLOW



- Initialize a Repository
- Check the status of the repository
- Stage untracked or modified files
- Commit files in the staging area
- Push changes to remote repository

```
# Initialize a repository in current folder
git init

# Initialize a repository with new folder
git init my_project

# Check status of repository
git status

# Add a file to staging area
git add index.html

# Add all untracked and modified files
git add --all
```

```
# Commit all file in staging area
git commit

# Downloading a remote repository
git clone http://github.com/user/project.git

# Get commits from remote repository
git pull

# Add commits to remote repository
git push
```

GITHUB

- Web hosting service for remote Git repositories
- Integrates professional collaboration tools
- Social network for developers and content creators

GITHUB TOOLS

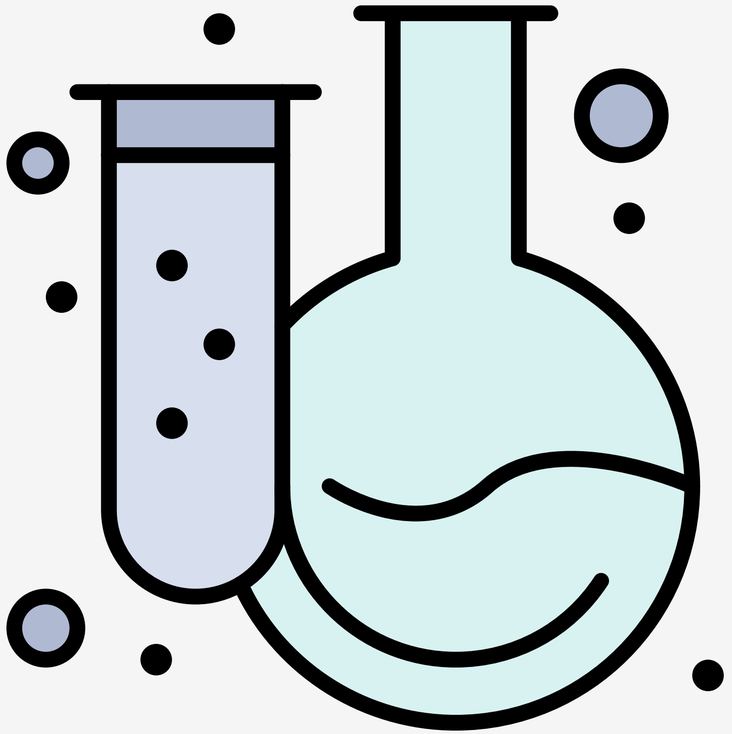
- Create remote repositories
- Fork existing repositories
- Submit issues
- Make pull requests
- Collaborate with developers and content creators

GITHUB CLASSROOM

- An education tool that help manages classroom projects
- Private repository is automatically created for each student and assignment
- Students submit assignments by pushing commits to GitHub

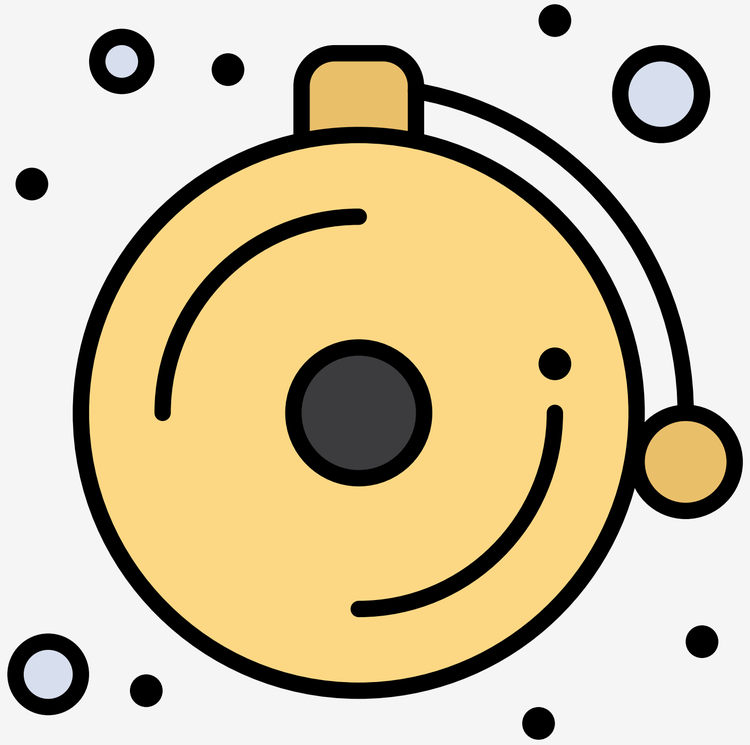
PRACTICE

GET READY FOR GIT



- *GITHUB CLASSROOM ASSIGNMENT*
- Clone the repository
- Edit and add markdown files
- Commit and push changes
- Submit URL to BrightSpace
- *DUE:* **Thu. Sep. 12 @ 11:59 PM**

NEXT TIME...



- Working with GitHub
- Review of JavaScript Basics
- **Participation:** Git JavaScript
- **Project:** Scramble