CS 4604: Introduction to Database Management Systems

Project

Virginia Tech CS 4604 Sprint 2021
Instructor: Yinlin Chen



Project

- Goal: design a database system application with a Web front-end
- Total of 3 project assignments during the semester and 2 presentations
- Heads-up: Reminder about groups
 - Same group for rest of the semester
 - You are free to choose your own project members
 - You can post on piazza as well
 - 4 members.

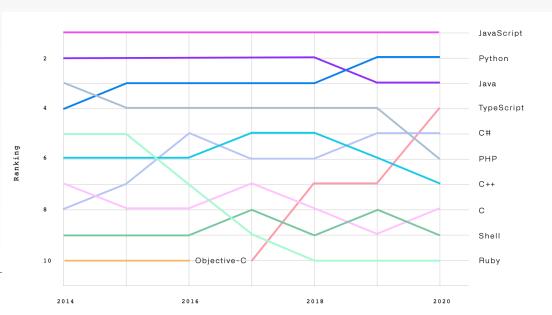


Project

- Team picks the programming language
 - Please do not pick something like FORTRAN or Shell or Objective-C...
- Team picks the database from below
 - RDBMS (MySQL, MariaDB, SQLite, PostgreSQL)

MongoDB, Redis

You don't need to decide now!



Past Projects

- BiblioVT
- TweetVT
- The Configuration Management Database (CMDB)
- Hot Wheels Auto Repair
- Hospital DB
- ArtBase
- Real-estate Database

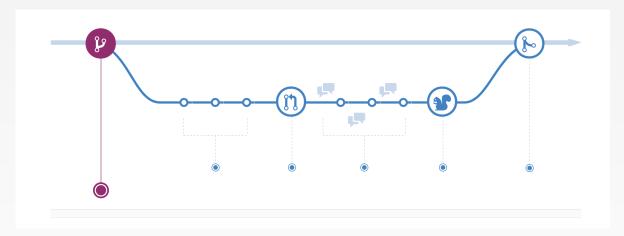


Project 1

- https://github.com/VTCourses/CS4604 Project
- Form a group
- Learn Git & GitHub
- Learn Markdown
- First due 01/28 11:59pm (Team with 2,3,4)
 - Team with 4
 - Add a not in the Readme.md and indicate needs (Programming, Writing, Presentation, System Design)
 - We will find/assign other students to your team
- Final due 02/04 11:59pm



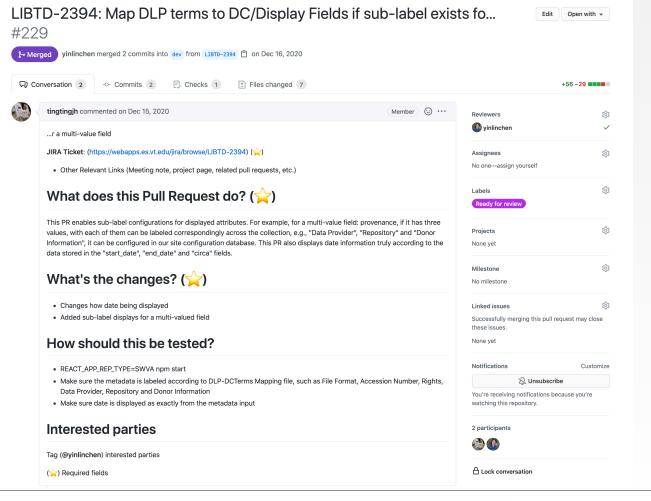
GitHub Flow



- 1. Create a branch
- 2. Add commits
- 3. Open a Pull Request
- 4. Discuss and review your code
- 5. Deploy
- 6. Merge



Pull Request & Code Review



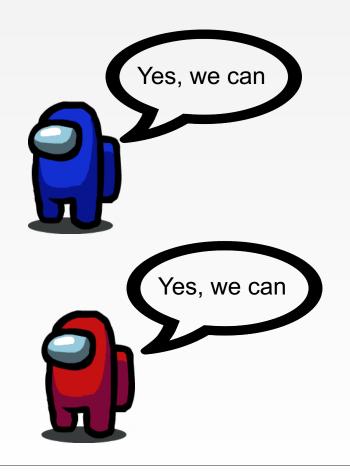


Reminder

- Have a balanced team
- Team work
- Zoom meet
- Commit early and often
- Test-driven development (TDD)
- Automation (CI/CD)
- Documentation

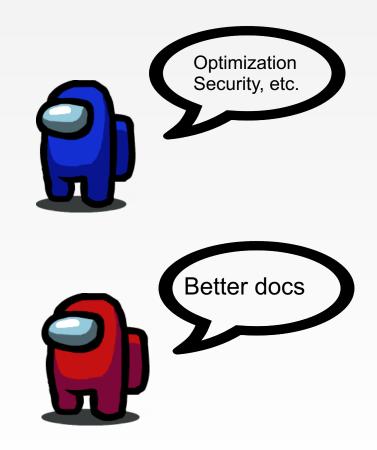


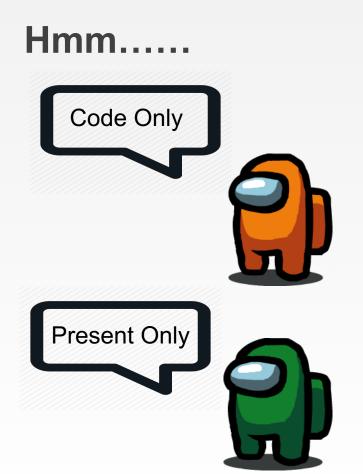
Good We can do it! We can do it!

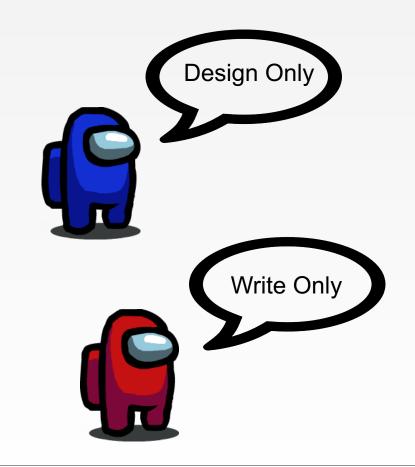


Better

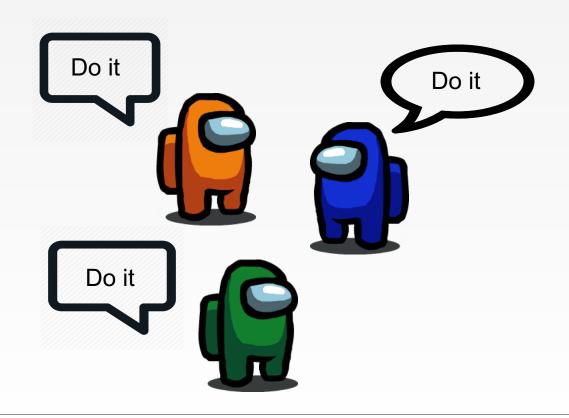




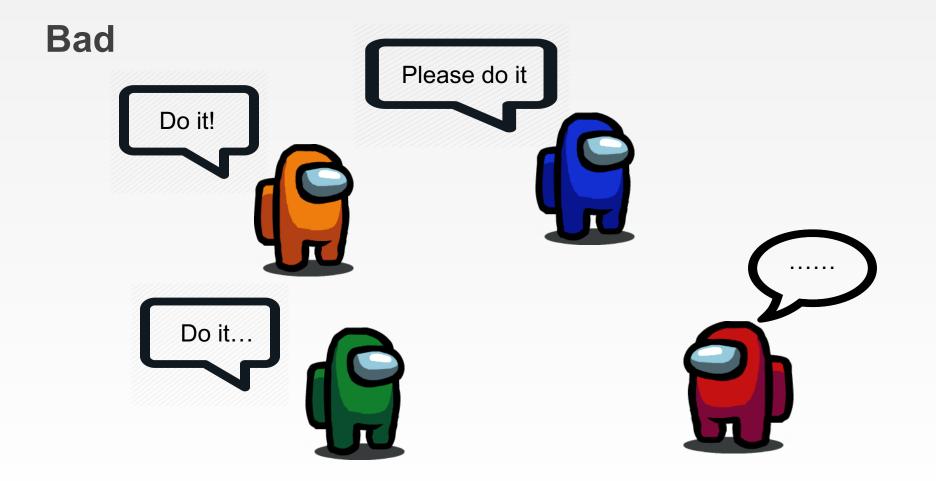




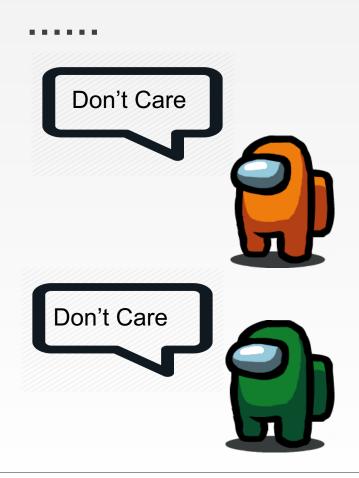
Not Good

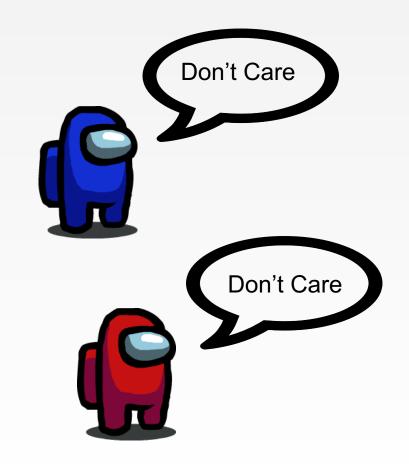












Teamwork

