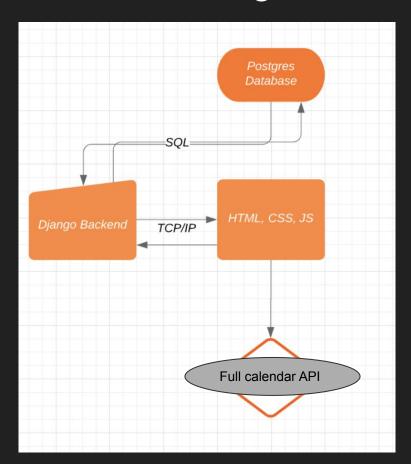
ScheduleCU

Spencer Boverman, Jacob Felknor, Glenn Holzhauer, Kristain Montoya, Raegan Rychecky, Sam Williams

ScheduleCU Architecture Diagram



Development and Organizational Tools

Project Tracker: TRELLO

VCS repository: GITHUB

Database: PostgreSQL

Testing tool: Travis CI

Auto-Documenter: Sphinx

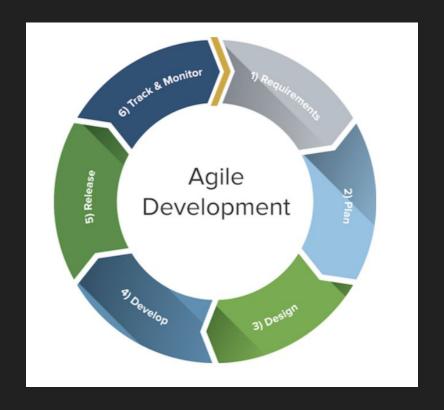
Deployment: Heroku

IDE: Atom, Visual Studio Code, Sublime

Framework: Django (Python)

Agile: Methodology

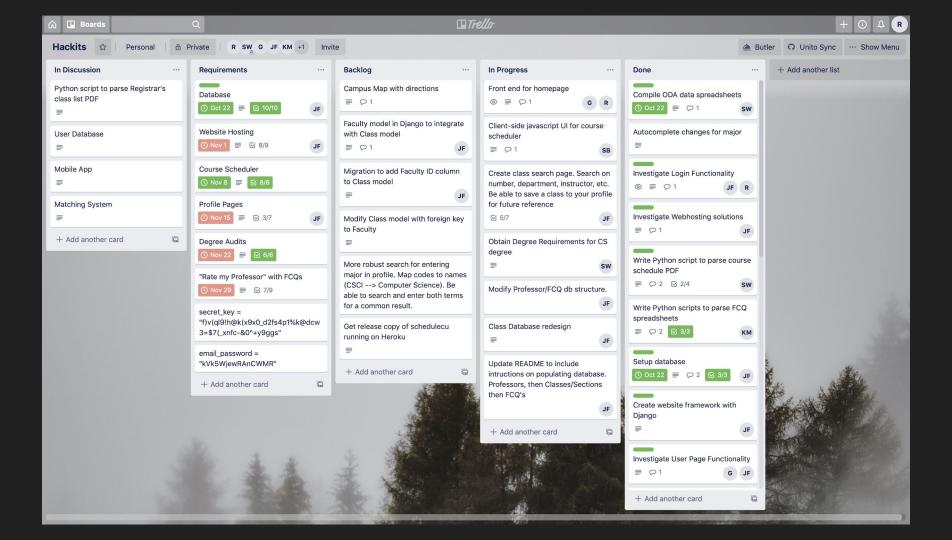
- Allow for general adjustments and changes as the project advances
- Iterative model
 - Plan iterations to complete in sprints
 - Allow for flexibility
- 2 week sprints
- Work collaboratively
- Keep track of progress using Trello Board and GitHub meeting log repository
- Code reviews on pull requests
- Grade: 5/5



Trello: Project Tracking

- Project tracking and organization
- Grade: 5/5
- Useful for assigning tasks
- Good visual layout to see what is completed/what needs to be completed in the next sprint
- Easy to use with agile methodology





GitHub: VCS Repository

- Remote repository for development
- Repositories for meeting logs, milestones, and "ScheduleCU" frontend/backend code
- Grade: 5/5
- Integrated pull requests with built in code review functionality



E READINE.IIIU Opuale READINE.IIIU 19 days

■ README.md

csci3308-meetinglog

Meeting logs for CSCI3308

Tuesday, Sept 17

Team discussed severable viable project types, settled on "ClassBook" (name maybe subject to change?). Most details ironed out, most of description written up.

Tuesday, Sept 24

Finished details, Milestone 1 looking ready for submission. Small tasks settled for team members to complete at home, and submit.

[∞] Tuesday, Oct 1

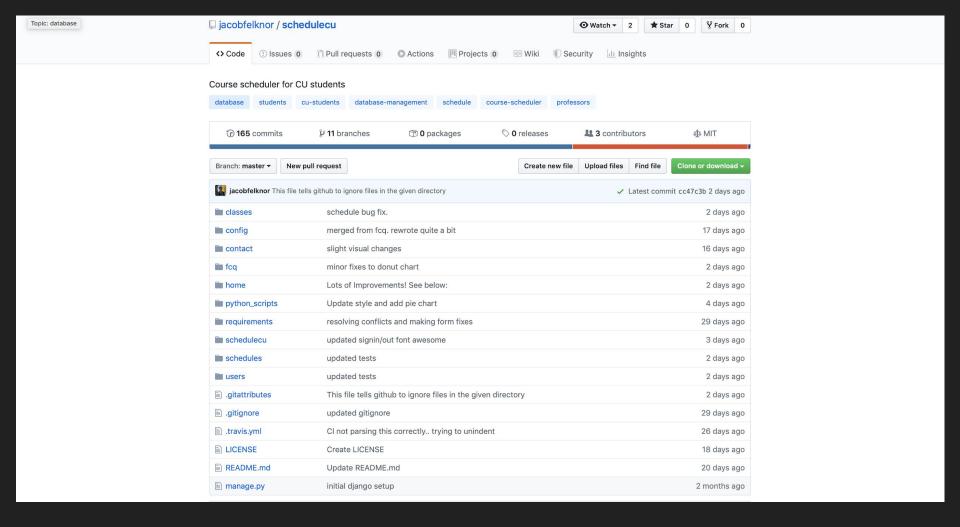
As a group, we decided to alter our framework to Node.js instead of Django. Although Jacob has experience in Django, we decided it was of best interest to the group to use Node.js since that is what our assignments and labs will most likley be using. We also set up a Trello page to keep track of TODO items for our project.

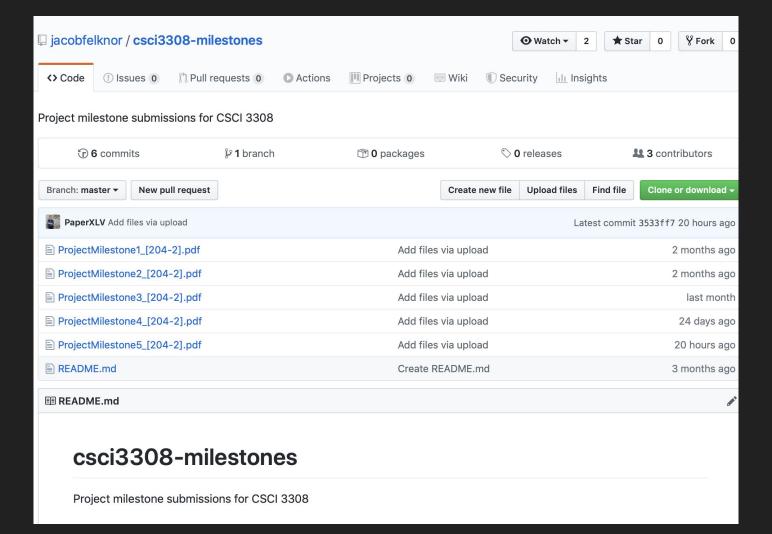
We also started talking about how usable we want our app to be. Currently, our platform is useless if no one is on it. We decided we want to be able to have our product be productive even if only you use it. We are shifting our focus from less of a social media site to more of a tool. Degree auditing came up, and also statistics on the university came up. We really want our project to be usable for a single person. The one we really liked was a class scheduler with instructer information baked in. The big problem is getting this data.

Another idea was discussed about alternative ideas, including a Twitter/other social media stats application to do analytics on a person's account.

Tuesday, Oct 8

The group discussed the usage of the application further and built the Trello up with prioritization of features and tasks.





Django (Python): Framework

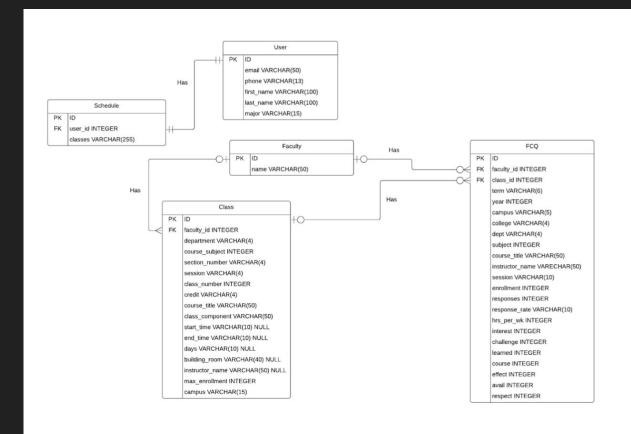
- Web framework
- Grade: 5/5
- Easy to follow tutorials, led nicely into project development
- Handled full stack
- Built in template language and handler for dynamic html generation



PostgreSQL: Database

- Grade: 5/5
- Handled through Django
 - Object Relational Mapper (ORM)
 - Mapped queries to Python objects
- Designed early on
 - Took full advantage of relational abilities of the database
 - Database Normalization
 - Well structured and defined from the beginning





Travis CI: Continuous Integration

- Continuous Integration
- Grade: 5/5
- Extremely useful to know when changes broke other parts
- Required unit tests to utilize
- Allowed for code to be successfully and quickly integrated



My Repositories +	Current Branches Build History Pull Requests				More options =
✓ jacobfelknor/schedulecu # 189 ③ Duration: 1 min 22 sec ☑ Finished: 21 hours ago	✓ master ⑤ Jacob Felknor	Merge pull request #24 from jacobfelknor/class-par	-o- #189 passed -o- e830699 ♂	① 1 min 22 sec 22 1 hours ago	©
	✓ class-parse-improvements ③ Jacob Felknor	Merge branch 'master' into class-parse-improvement	-≎- #187 passed -◇- e2059ab છ	① 1 min 28 sec 21 hours ago	©
	✓ master ② Jacob Felknor	Update :gitattributes	->- #186 passed ->- 90e5614 ♂	① 1 min 31 sec 22 hours ago	©
	✓ master ➡ WhyHelloPear	Added link to project site	-≎- #185 passed -≎- 7bb34e1 ⊘	① 1 min 29 sec ☐ a day ago	©
	✓ heroku Sam Williams	Merge branch 'master' into heroku	-0- #184 passed -0- 0c34a55 ♂	① 1 min 33 sec ☐ a day ago	©
	✓ master ② Jacob Felknor	Merge pull request #25 from jacobfelknor/dependabo	-o- #183 passed -o- 7a56ee7 ♂	① 1 min 16 sec ☐ a day ago	©
	✓ dependabot/pip/requirements	Bump django from 2.2.6 to 2.2.8 in /requirements	-≎- #181 passed -≎- f747944 ♂	① 1 min 40 sec ☐ a day ago	©
	✓ master ⑤ Jacob Felknor	Merge pull request #23 from jacobfelknor/calendar2	-0- #180 passed -0- 44a0f7c ♂	© 1 min 30 sec ☐ a day ago	©
	✓ heroku ⑤ Sam Williams	whitenoise statics	-≎- #179 passed -≎- a39f69c Ø	① 1 min 26 sec 37 a day ago	©
	✓ calendar2.0 ③ Jacob Felknor	slight visual changes	-0- #177 passed -0- 822bb36 ♂	© 1 min 30 sec a day ago	©
	✓ calendar2.0	Fixed day parsing. Parse TH before T.	-> #176 passed -> 9b34c12 ☑	① 1 min 32 sec ☐ a day ago	©

Heroku: Deployment

- Deployment
- Grade: 4/5
- Our database is 12x larger than their free tier
- Many additional things to consider when moving to production
- Slow loading for free tier



Atom, Sublime, Visual Studio Code: IDEs

Sublime (5/5):

Simple

Visual Studio Code (5/5):

- Good user experience
- Integrated git
- Integrated diff tool to make merge conflicts a breeze

Atom (5/5):

Integration with GitHub





Challenges

- Database work
 - Multiple iterations on the design of some of our tables
 - Data had to be parsed from excel / pdfs
- Django
 - Learning curve to the framework
- Heroku
 - Deploying with DEBUG=False brought unexpected issues
 - Static files
 - Database is too large for free tier