

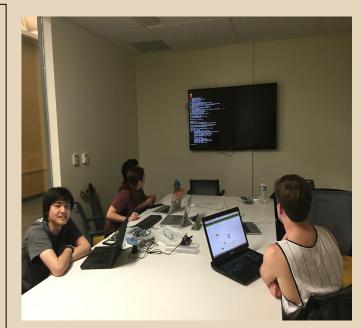


## Methodology

Adapting to the challenges of busy and varied schedules we ended up combining several methodologies.

#### Methodologies used

- -waterfall employed to follow the "parts" of the project
  - -Agile broke up the "parts" of the project into more manageable components
- -Pair Programming/Peer Code Review when coding we used each other as much as possible to improve the velocity and accuracy of our work





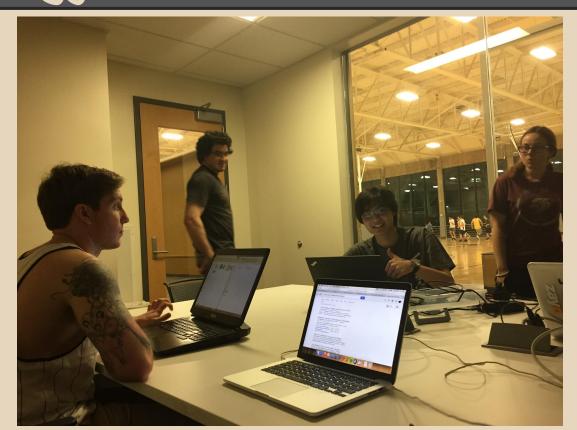
# "Global" Methodology

#### waterfall - 3

-Followed the project "parts" sequentially

#### Agile - 5

-we broke up work within the project "parts" to leverage our group's skills as efficiently as possible





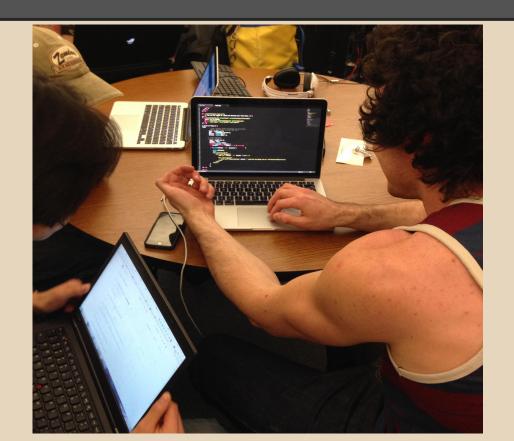
# "Unit" Methodology

#### Pair Programming - 4

#### Peer Code Review - 4

-we further combined these two methodologies

-we set up weekly group meetings where we employed both pair programming and peer code review





#### Tools we used





















# Project Tracker-Trello



Repository -

GitHub

GitHub

#### -Rating: 4

- -Pros: Kept everything well organized
- -Cons: a little too simplistic at times

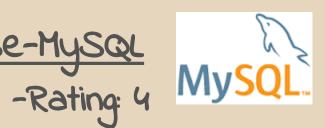
#### -Rating: 4

- -Pros: powerful we could use it to do a lot
- -Cons: bit of a learning curve; clunky and at times redundant



# "Design" Tools (Part 1)

# Database-MySQL



- -Pros: very powerful
- -Cons: learning curve almost a programming language

#### QTCreator



#### -Rating: 4

- -Pros: useful features (like libraries); user friendly
- -Cons: difficult to customize



### "Design" Tools (Part 2)

#### JSFIddle



#### -Rating: 4

- -Pros: user friendly; quality user interface
- Cons: None identified

#### Bootstraps



-Rating: 5

- -Pros: useful made cross platform compatibility possible
- Cons: None Identified



#### "Review" Tools

#### Auto-documenter-

<u>Doxygen</u>

#### Doxygen

-Rating: 5

- -Pros: simple, powerful, useful
- -Cons: not as effective with certain languages (PHP)

#### Testing-PHPUnit





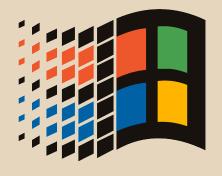
- -Pros: none
- -Cons: really confusing, clunky, and not very useful

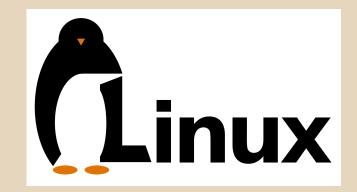


### Deployment Environment

- Tested on different machines: LINUX, WINDOWS, MAC and MOBILE
  - Dynamically Coded
- we ended up with no distribution plan because our product was strictly implemented by the Buffbox Team
- Updated versions will be accessible on our VCS









# overcoming Challenges

#### <u>Organizational Challenge</u>

Challenge: How do we more effectively organize and communicate when group members have very disparate schedules?

Solution: use TOOLS like Trello, Google Hangouts, and Google Docs/Slides, to better communicate and organize group action. Also, having consistency in group interactions.

### Technological\_Challenge

Challenge: How do we more effectively use the varied skill sets of our group members to accomplish our technological goals?

Solution: by using Tools like github and METHODOLOGIES like agile, pair programing and peer code review we were able to take best advantage of our different skill sets



#### Demonstration

