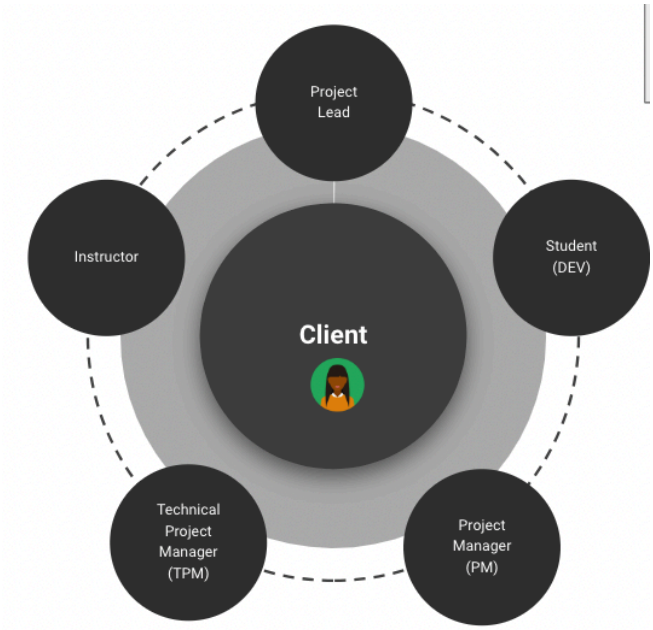
CDS DS 594
Lec 02

Project Management

1. PEOPLE

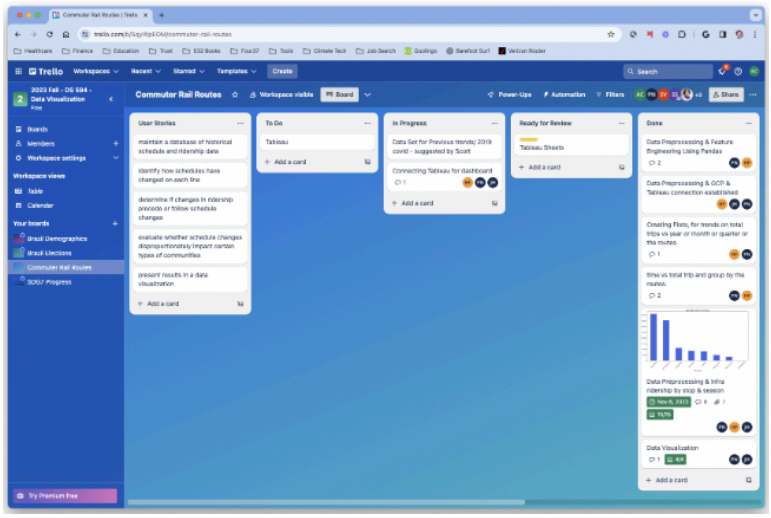


a.
b. Project Lead
    i. PM guidance
    ii. Issue escalation
    iii. Ensure project progress
    iv. Mid-term evaluation
    v. Implement student feedback
c. Student (DEV)
    i. Own user story
    ii. Complete tasks in Trello
    iii. Push code to GitHub
    iv. Present to clients
d. Project Manager (PM)
    i. Schedule meetings
    ii. Add tasks to Trello
    iii. Address blockers
    iv. Document student feedback
e. Instructor
    i. Oversee project direction
    ii. Define user stories

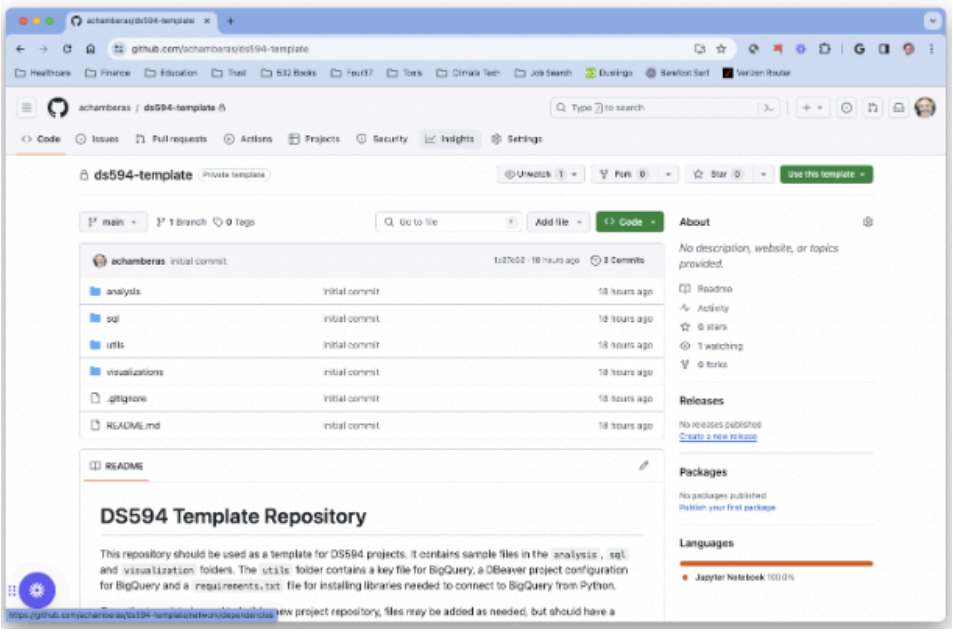
iii. Evaluate datasets
iv. Support TPM and PMs

f. Technical Project Manager (TPM)
i. Review completed tasks
ii. Answer technical questions
iii. Setup GitHub and Trello
iv. Load data to BigQuery

2. Clients
a. 

3. TOOLS
a. Task Management - Trello
i. 
ii. Why Trello?
1. Simple
2. Supports Kanban
3. Task assignment
4. Notes/Comments
5. Flexible
6. Project status

b. Code Repository - GitHub

i. 

ii. Why GitHub?

1. Collaboration
2. Backup
3. Review
4. Prevent conflicts
5. Project repository

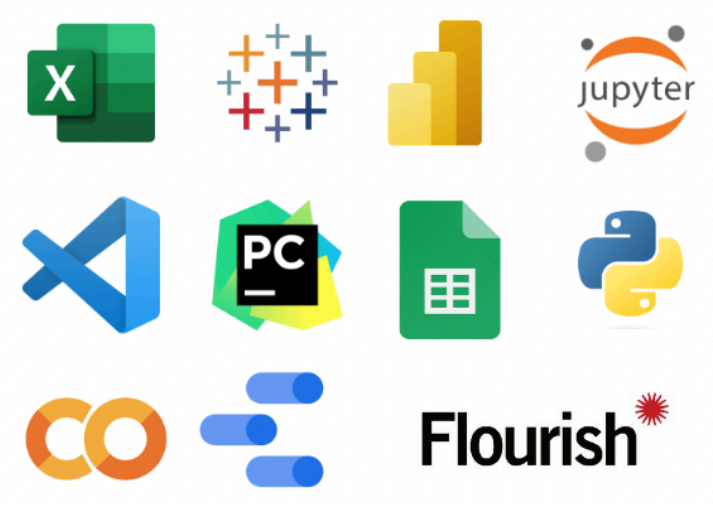
c. Project Database - Google BigQuery

i. 

ii. Why BigQuery?

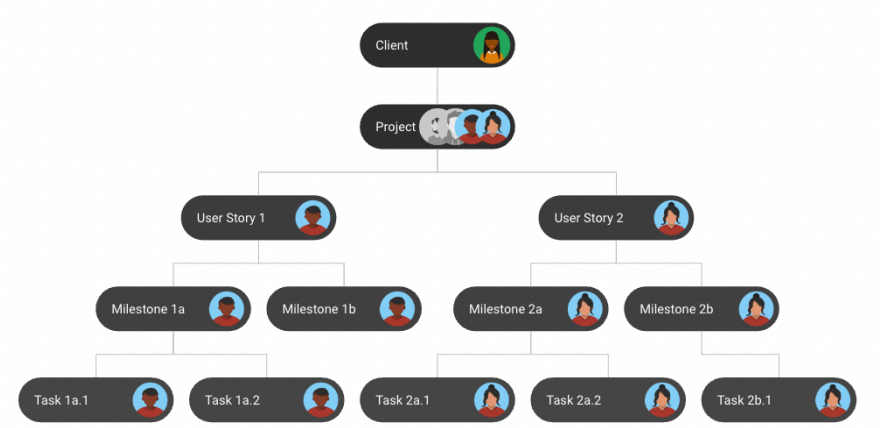
1. Data from various sources
2. Data to multiple tools
3. Share data across projects
4. Scalable
5. Data streaming

d. Analysis & Visualization



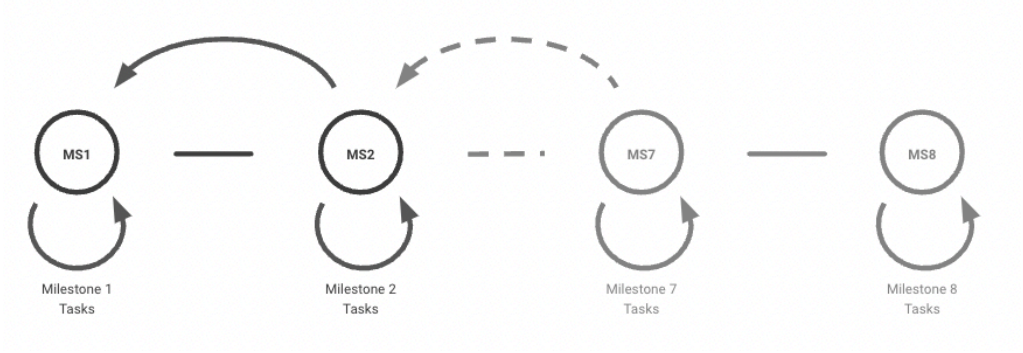
i.
ii. Use what makes you comfortable
iii. Satisfy client requirements
iv. Consider learning something new
v. Tableau recommended

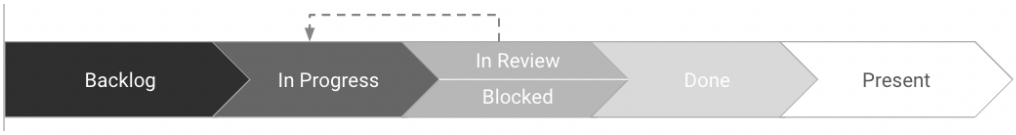
4. Processes
    a. Project Structure



    b. User Stories
        i. Describes one of several client business problems
        ii. Each student selects one user story
        iii. Use data, analysis, and visualization to address this problem
5. Milestones
    a. Data preparation
    b. Exploratory analysis
    c. Chart selection
    d. Color selection
    e. Labels

f. Preattentive attributes
g. Layout and Interaction
h. Final sponsor presentation

6. Project Lifecycle
    a. 

7. Task Lifecycle
    a. 

    b. Backlog
        i. The project manager creates a task related to a milestone or based on client feedback, and assigns it to a student.
        ii. Each task has a definition of done
        iii. Tasks are prioritized here per client needs
    c. In Progress
        i. The student begins work, moving the task to “In Review” when they feel it is done.
        ii. If there are issues, the task is moved to “Blocked”
    d. In Review / Blocked
        i. The technical project manager reviews the task and moves it to “Done” if complete.
        ii. Otherwise it goes back to “In Progress” with feedback
    e. Done
        i. The student summarizes their work in a presentation format
    f. Present
        i. The student presents all completed tasks to the client since their last meeting

8. Code Repository
    a.

Create local code repository

```
git clone <url for git repository>
git create branch <your username>
git checkout branch <your username>
```

Periodically pull and push code

```
git pull
git add .
git commit -m "<task name: commit comment>"
git push
```

Repository Structure

- analysis
  - └ us_x_<desc>.<ext>
  - └ us_x_<desc>.<ext>
- sql
- visualizations
- .gitignore
- README.md

9. Meetings
    a. Client Kickoff-Off Meeting
    b. Team Standups
    c. Client Progress Meetings
    d. Retrospective Meetings
10. Project Selection
    a.