309 Dashboard

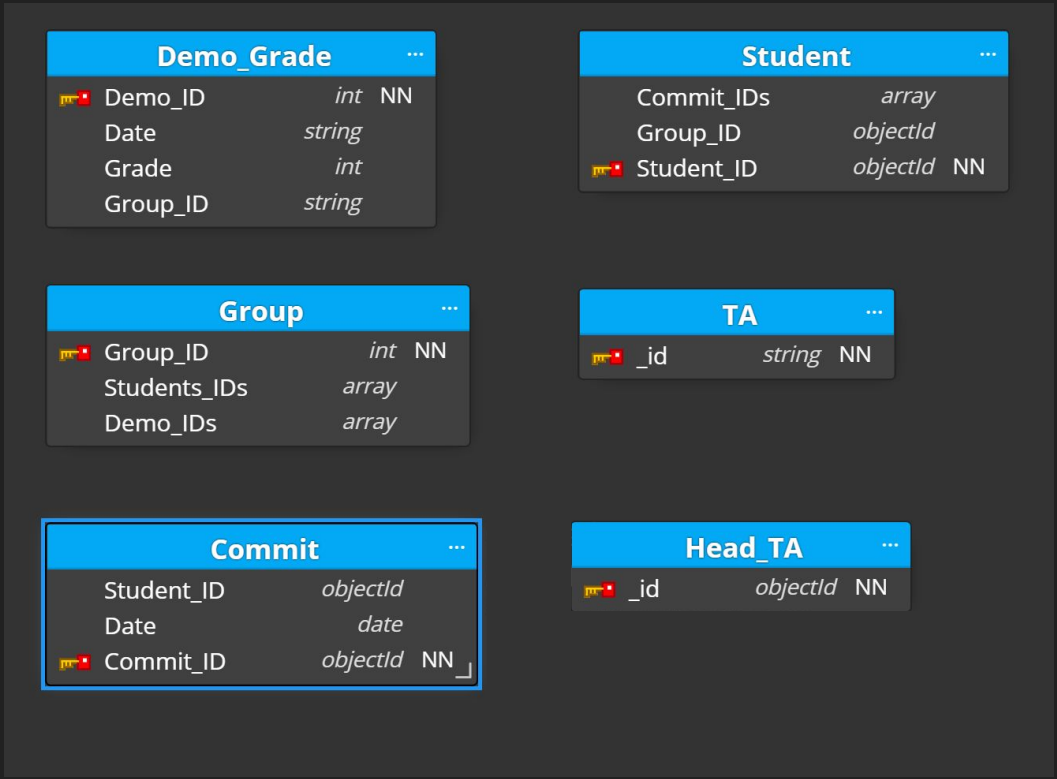
Group 7

Project Requirements

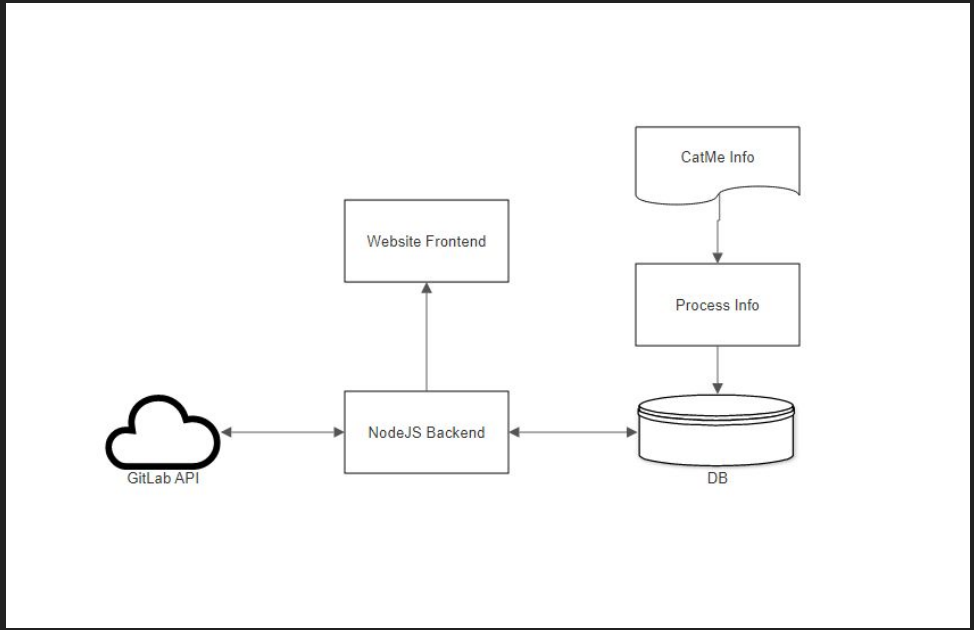
- Create dashboard showing projects
  - Dashboard will have a “preview” for each project on the main screen, and can expand by clicking on it
- Projects will...
  - Track commit frequency
  - Show when group isn’t committing enough (notify instructor/TAs after selected timeframe)
  - Show data on the project
    - Progress, demo dates, CatMe, grades, etc…
- Backend to handle communication between the various systems and data stored

Project Requirements Cont.

MongoDB Design

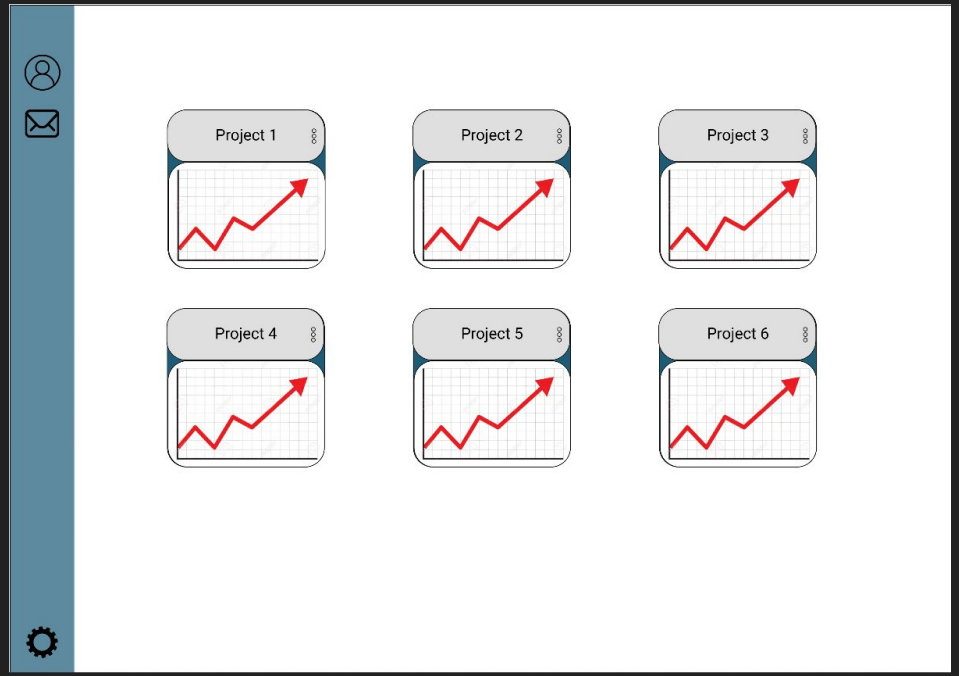


High-Level System Overview



High-Level Frontend Screen

- Frontend Dashboard after logging into GitLab account.
- Can view projects they have permissions to view, and access various other screens



Concerns

- Gitlab instance switching from linux.iastate.edu to las, ece, engineering
  - Mindful of other possible changes in the future, how to design to easily change
- Enough substance for student user?
  - Most likely yes, but being discussed
  - Obvious use for TA/teacher, view progress amongst all groups, etc…

Issues & Obstacles

- No CatMe API
- Test data for CatMe
- Test repositories from GitLab

Design Plan

- High level system flow
  - Seen earlier
- Components of front end
  - Logging in, nav bar, main dashboard, project grid, project page, notification inbox, settings
- Backend flow
  - Communication between GitLab API, database, frontend (project info, login, notif)
- Database
  - What is stored, how it is stored

Implementation

- Construct frontend components individually to divide work
  - Nav bar, project preview on dashboard, login, etc..
  - Use mock hardcoded data for now for things like graphs, numbers, etc
  - Later down the line connect with database to feed data into components
- Backend connection with GitLab
  - User authentication
  - Establish API connection and receive data
    - Filter the data to what is actually needed and store it
    - Some data stored, some shipped straight to website on demand
- Construct DB on server
  - Implement structure and design
- Eventually CatMe information processing and display