

# NoteShare - Easier Notetaking for Students

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## 1 Introduction

My project is going to be a website which contains a persistent public database of notes organized by classes and teachers, which supports real-time editing by multiple users. Users will not need to be validated to see the notes, but they will need to be validated to make changes to the notes. All changes to items in database will be logged, and the database will keep a copy of the notes before the change until the changes are validated. The website will use an automatic form of moderating changes to the notes in the database, where the community can vote on which changes get removed from the database.

## 2 Screens

### 2.1 Main Search Page

Upon visiting the website you will be taken to a page where you can find the school, class, and teacher that you wish to see the notes of. There will be two main search criteria to find the appropriate page; either the user is looking for a specific class in specific school or a general class topic. Examples of these two criteria respectively would be "Cal Poly - CSC 480 - Abler" and "Intro to Machine Learning."

### 2.2 Login

The Login page will be navigable from anywhere in the website. This page will have a logo, fields to enter your username and password, and an option to save the username and password for the device that you are using. There will be a separate button that can be used to create a new account.

### 2.3 Class Notes

This page will contain a page of community driven content about the topic of the class. Sample data that the page can contain include pdfs, jpg images of notes, doc files, and txt

files. Viewing of non-mutable files will be handled by the browser, but mutable files such as .docx files will be handled by the website to allow for real-time editing.

## **2.4 Class Discussion**

Each class topic will have a discussion page, which will allow registered users to ask for help with certain topics and discuss the class. Discussion in this page will be sorted similarly to Reddit and Piazas discussion templates, with the comments sorted by a starting topic and by time.

## **3 APIs and Technologies**

The frontend for this website will mainly be React, with Django filling in the backend. We will use DynamoDB for local storage, though if that proves to be insufficient for the volume of storage we will supplement that by storing larger files in S3 Buckets. The Google Drive API will be used to supplement our storage, and will be used for file transfers between Google Drive accounts and our class pages. We will also use Google Accounts to supplement our own local accounts, as not every user will want to create a new account for this service.