Team Pupiter Classroom - Emily Zhang (PM), Kevin Li, William Lin, Henry Liu SoftDev2 pd1

Project Name: Learnination Machine

Design Document

Description:

Our website aims to be an alternative portal to Google Classroom with added features/quality of life improvements, such as a better integrated calendar, the ability to hide classes, searching for posts, etc. Everything done on this site is reflected on Google Classroom.

Selling points of our app:

- The ability to hide classes you don't want to leave, without waiting for your teachers to archive them
- Being able to group classes together
- Searching for posts so you don't have to keep scrolling
- Have a calendar that is more integrated with the site (rather than redirecting to another like Google Calendar)

Task division:

- A. Emily (Project Manager)
 - Oversees project development
 - Updates devlog and design doc
 - Gradebook
 - Archive classes
- B. Kevin Li
 - Interfacing with Google Classroom API
 - Sign in with Google
 - GET data, POST data back to Google
 - Deployment to droplet via Flask (and Apache, if time permits)
- C. William Lin
 - Database work
 - Front end
- D. Henry Liu
 - Search mechanism for posts
 - Calendar/To Do List

API(s) used:

Google Classroom API

Core Components:

- A. Navigation Bar (present on every page)
 - Classes
 - List of classes (view, hide)
 - No join or leave functions not provided by API
 - Calendar + To-Do List (by day)
- Right side: Archived/hidden classes
- Right side: Logout
- B. Home page
- Welcome text
- Sign in with Google button
- C. Classes (same functionality of Google Classroom)
- View posts/assignments and their due dates, grades, status
- Search for posts
- Comment on posts
- Allows for submission of images/audio/video along with text
- List of upcoming deadlines + previously turned in work
- View class roster (can email students)
- D. Calendar
 - Calendar view of previous/upcoming assignments' due dates
 - Can view events of a certain day by clicking on a day in the calendar
- E. View archived/hidden classes
- Split into two sections
- Archived classes retrieved from Google Classroom API
- Hidden classes are stored in this site's database do not list those on the classes page

Extra components:

- Customizable folders to sort courses
- Filter assignments on To Do list

Hidden and archived classes are both

found here.

MACHINERY

(includes functions, utl folder, templates.)

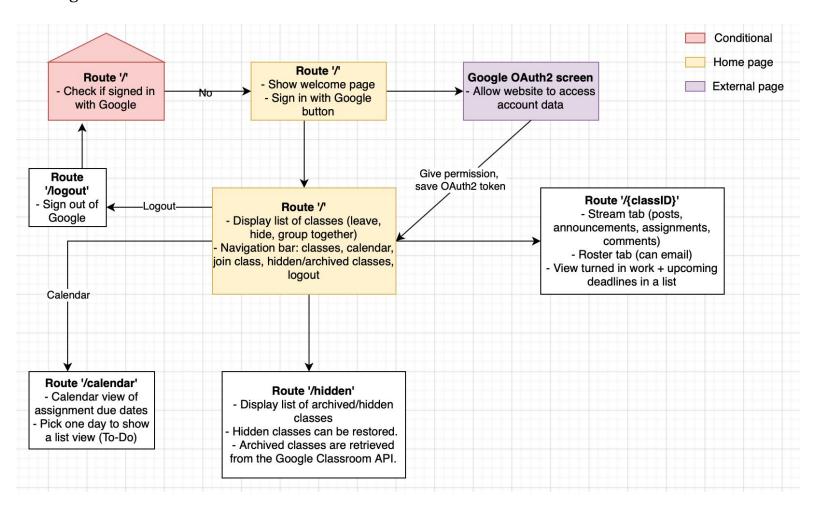
FRONT END (client) **BACK END** (server/API) Sign in with Google Google Auth Use OAuth2 authentication. Use session data to stay logged in. View classes List of classes Returned by Google API - only render classes that have not been hidden by the user/not archived Posts, announcements, due dates, roster View calendar Calendar data Get a list of due dates from all active classes, convert to calendar layout (color code, can disable classes) View To-Do Calendar data Only take the data for the selected day, show in a list view Hidden classes List of classes

Archived classes returned by Google API. Hidden classes

stored on server end by site.

Site Map

https://drive.google.com/file/d/1q8gDmpBdpGTBNQsAY1qu5p7bL63MuNxb/view?usp=sh aring



Database

users

ID (assigned by Google per acct)	hidden_class_ids	group_class_ids (put similar classes together) [if we have time]
INT	TEXT	TEXT
3029313132183618	"30219, 88148, 887471, 74617"	"381918, 31811"