Team Daring Ducks

Overview

StuyDash is a website for students and teachers at Stuyvesant. Features include setting up classes for students to join (similar to Google Classroom), allowing instructors to effortlessly reach out to students and assign homework. Students are able to submit homework and add to to-do lists, which are necessary tools to help them succeed.

Components

Student accounts vs teacher accounts

- When people sign up for accounts, they should be able to indicate whether they're a student or teacher

Creating/Joining/Removing classes (+ class code)

- Teachers can add classes on class.html, generating a class code that the teacher can share with the students
    - Class code example: EB5375A
- Teachers can view the classes they have on their homepage
- Teachers can remove classes through the class.html page
- Students can join classes by using the class code (that the teacher should have given to the students) on class.html
- Classes that students have joined will show up on their homepage
- Students can leave classes through the class.html page

Assignments

- Teachers can add assignments and view student submitted assignments for each class they have by clicking on the specific class on their homepage and see all the assignments students have submitted for that class on class.html
- Students can submit assignments for each class they joined by clicking on the class name on the student's homepage, then clicking the individual assignment on class.html, and then entering text in the textbox on assignment.html

Teacher can upload assignments

- Teacher can post assignments and announcements as text on the class page through assignment.html
- Teacher can put a maximum and minimum word limit on student-submitted assignments

Writing/pasting and submitting student assignments

- Students can click on the assignments on the class.html page, and they'll be brought to the assignment.html page, where they can submit their assignments for that class
- There'll be javascript code checking how many words the submission has and will not allow students to submit if the student has gone over the word limit

Word-count for pasted assignments

- Use a var counter to keep track of number of words the student has typed in the text box in real time and display and “error” if they go over the limit that may be imposed by the teacher
- To keep track of word count on the webpage, Javascript will be used

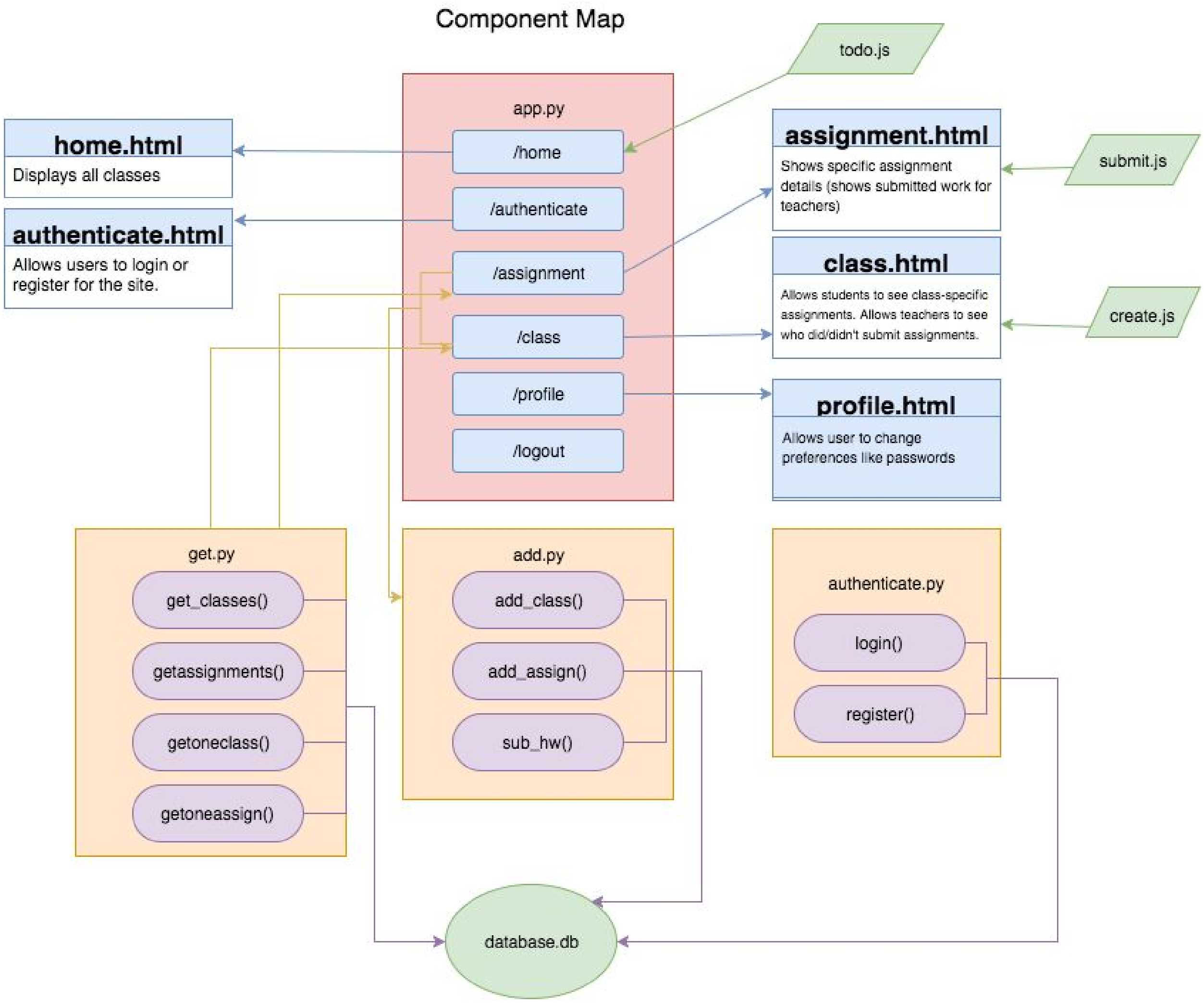
To-do list

- To-do list on students’ homepages where they can instantaneously add items to their to-do lists
- Will use javascript to allow adding and removing of tasks and updating the to-do list simultaneously

Javascript

- Used to automatically update to-do lists
- Word count for student submissions as well as showing an error if a student goes over the word limit
- Automatically generates and displays class codes when classes are created

Component Map



Directory/File Structure

```
app.py
data/
      database.db
static/
      bootstrap/
      custom.css
      todo.js
      submit.js
      create.js
templates/
      home.html
      authenticate.html
      assignment.html
      class.html
      profile.html
utils/
      get.py
      add.py
      authenticate.py
```

Database Schema

Users Info / Administrative

Username	Password (hashed)	User ID	Enrolled Classes	Account Type (teacher vs student)

Tasks

Task ID	Class ID	Data (content of task)

Submissions

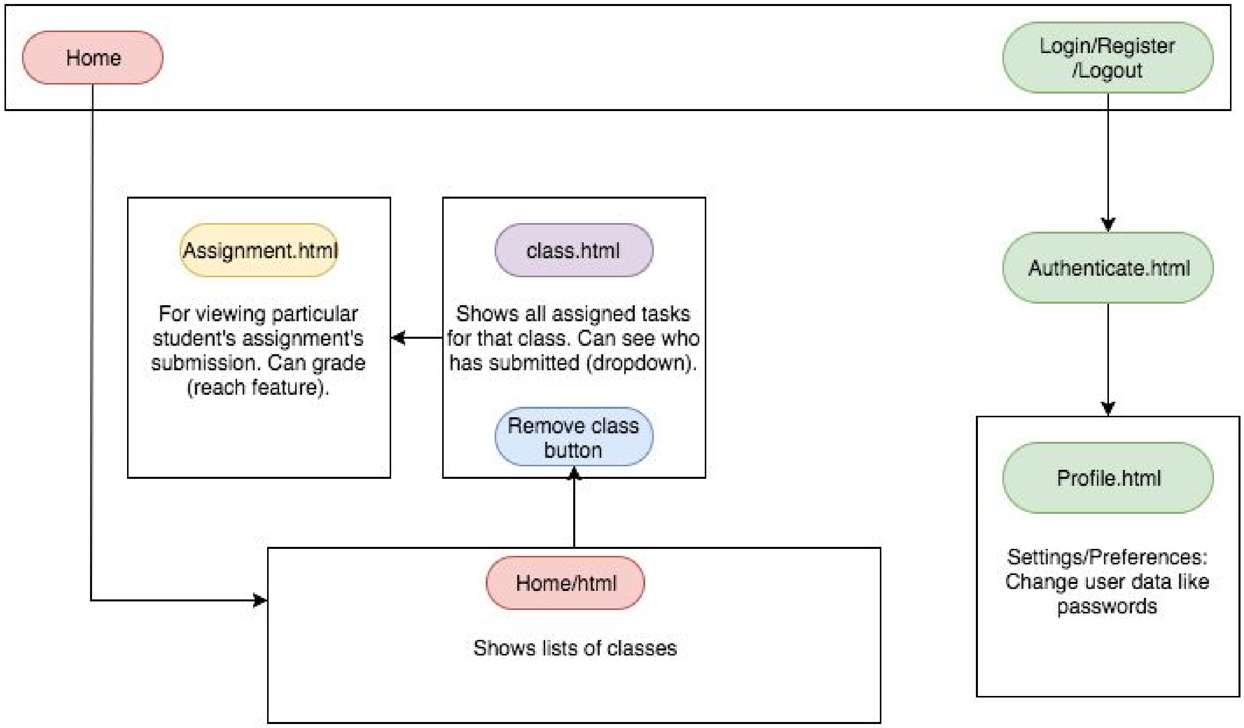
Submission ID	Task ID	Data

Classes

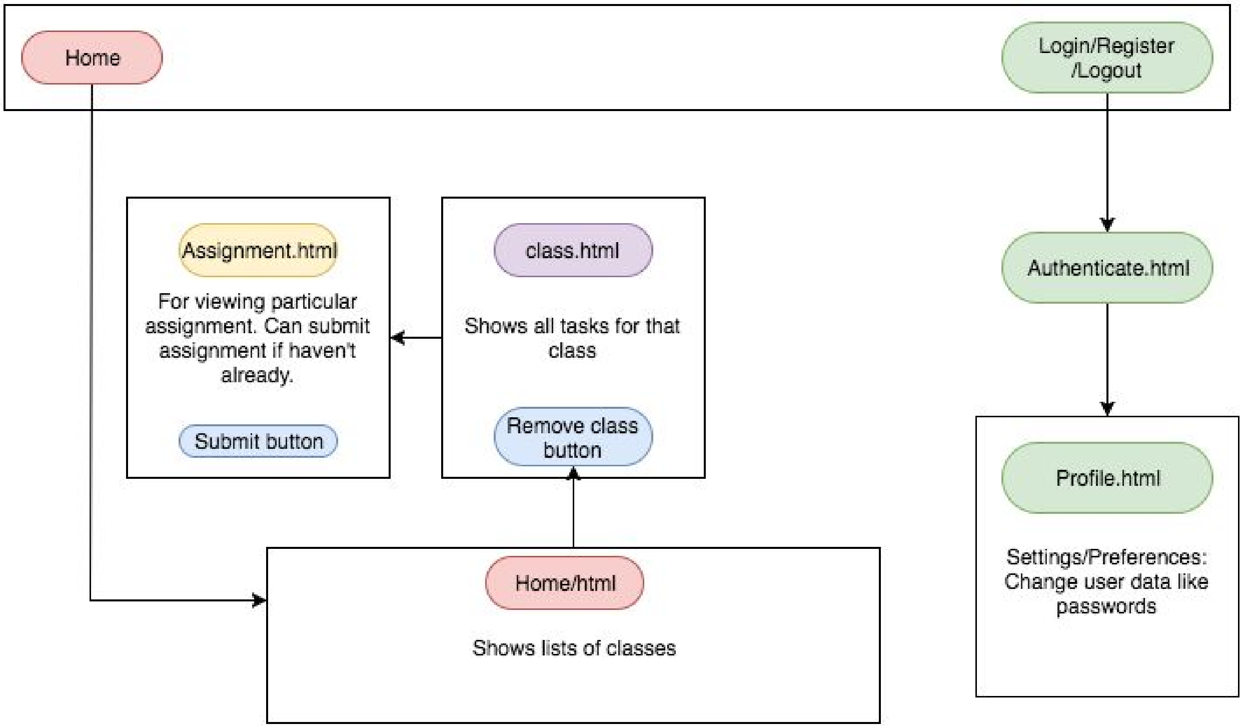
Class ID	User ID (Teacher that created class)	Class Code (Password to access class)

Site Map

Teachers


Home
Login/Register /Logout
Assignment.html
For viewing particular student's assignment's submission. Can grade (reach feature).
class.html
Shows all assigned tasks for that class. Can see who has submitted (dropdown).
Remove class button
Authenticate.html
Profile.html
Settings/Preferences: Change user data like passwords
Home/html
Shows lists of classes

Students


Home
Login/Register /Logout
Assignment.html
For viewing particular assignment. Can submit assignment if haven't already.
Submit button
class.html
Shows all tasks for that class
Remove class button
Authenticate.html
Profile.html
Settings/Preferences: Change user data like passwords
Home/html
Shows lists of classes

Division of Labor

- **Project Manager:** Brian Yang
  - Designs work schedule
  - Works front/backend whenever necessary
  - Resolves conflicts
- **Frontend:** Shaeq Ahmed, Amy Xu
  - Make word count and the to-do list with Javascript
  - Allow teachers to view homeworks through a drop down menu in assignment.html with Javascript
  - Flask templates + Bootstrapping (CSS)
  - Making routes and working on app.py (Flasky things)
- **Backend:** Brian Yang, Karol Regula
  - Updating and removing to-do items
  - Authenticating users
  - Generating and storing class codes (authenticate class and student)
  - Creating classes + grabbing data to display on HTML templates
  - Store teacher created assignments in database
  - Store submitted homework

Timeline

1/7 - Get login and register working as well as allow users to change passwords through the profile.html page; have basic site templates done
1/11 - Allow teachers to create classes and allow students to join classes
1/15 - Allow teachers to create assignments and allow students to submit assignments
1/17 - Allow teachers to view assignments
1/19 - Allow students to create to-do lists and edit them
1/21 - Prettify the website using bootstrap; add extended features

Extended Features

- Calculator
- Calendar
- Textbook pdf manager
- Figure out uploading of pdfs
  - Convert PDFs to plaintext
- Grade manager