Team Inflated Fishermen: Clement Chan, Joseph Lee, Yifan Wang, Emily Zhang
Project Name: Time Page
SoftDev1 - pd1
Design Document

Roles:
Clement Chan - Groups, Database
Joseph Lee - API Integration, Priority
Yifan Wang - Project Manager, Credibility
Emily Zhang - Calendar Display, Functionality

Project Description: Crowdsource Calendar (Time Page)

In the midst of all the work and extracurricular activities, it may be hard for a student to keep track of all of his/her responsibilities. We wish to design a platform where students can schedule their time and and crowdsource their assignments/deadlines with ease.

On the website, students will have a fully customizable, crowdsourced planner. Students can view the tasks/events for "Today" ordered by priority assigned by the user. Students can also view what's going to occur/be due later in the week. Additionally, students can view their tasks/tasks on a monthly calendar. Their tasks/events can be added personally, but if you join classes/clubs/private groups, the tasks/events posted by other students in those groups will be also part of your planner. Lastly, we will have a "profile page" for each student where they can edit their information, such as name, email, and groups joined, and also view their credibility score. The credibility score will increase/decrease depending on the number of upvotes/downvotes on a person's posted tasks and the number of tasks a person posts.

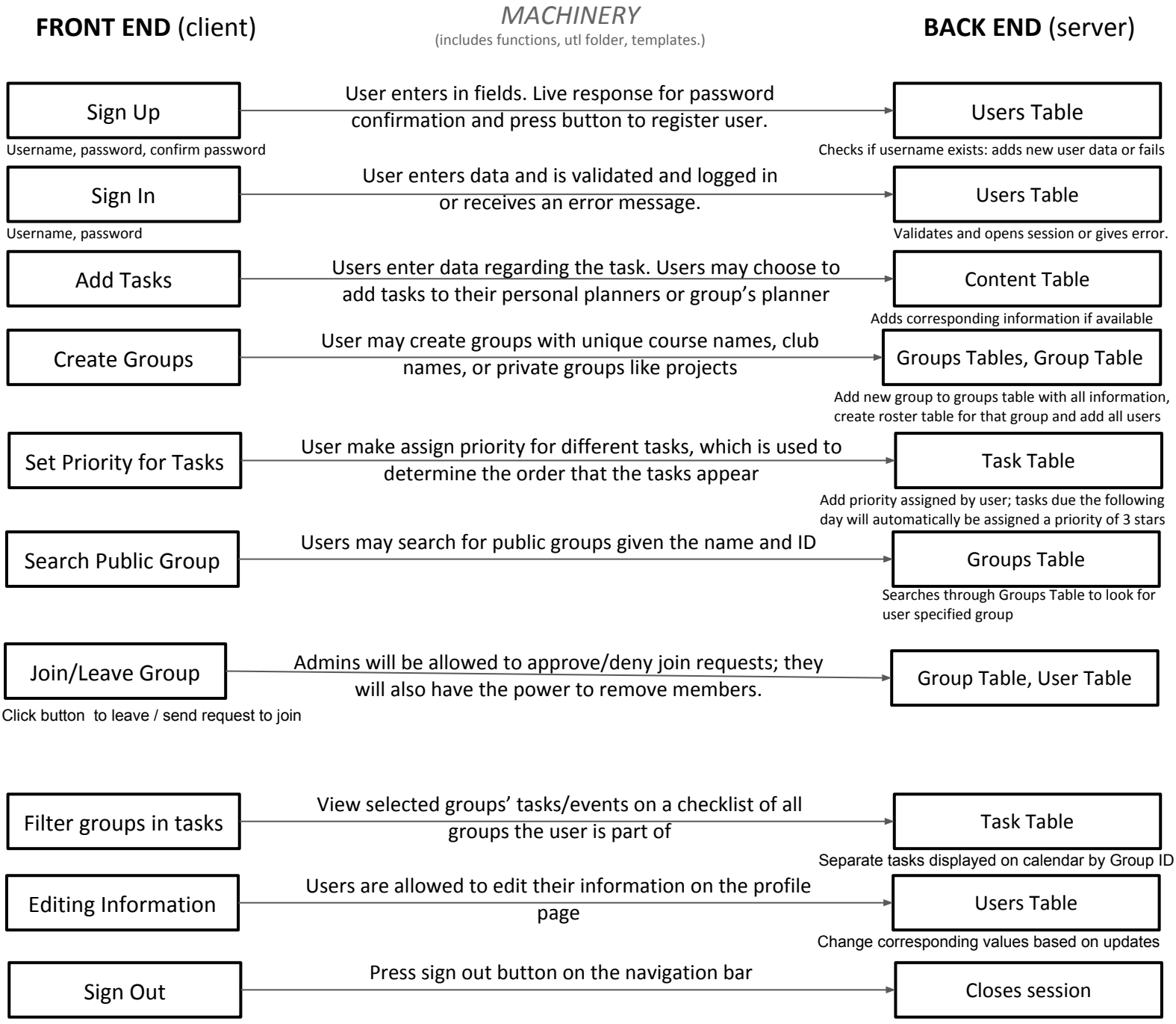
As our front end framework, our team has decided to use Bootstrap with additional HTML, CSS, and Javascript components. We chose Bootstrap over Foundation for the variability in its design, allowing us to customize our website. Also, Bootstrap is the framework that our team members are more familiar with and thus are more comfortable utilizing.

Site Features:

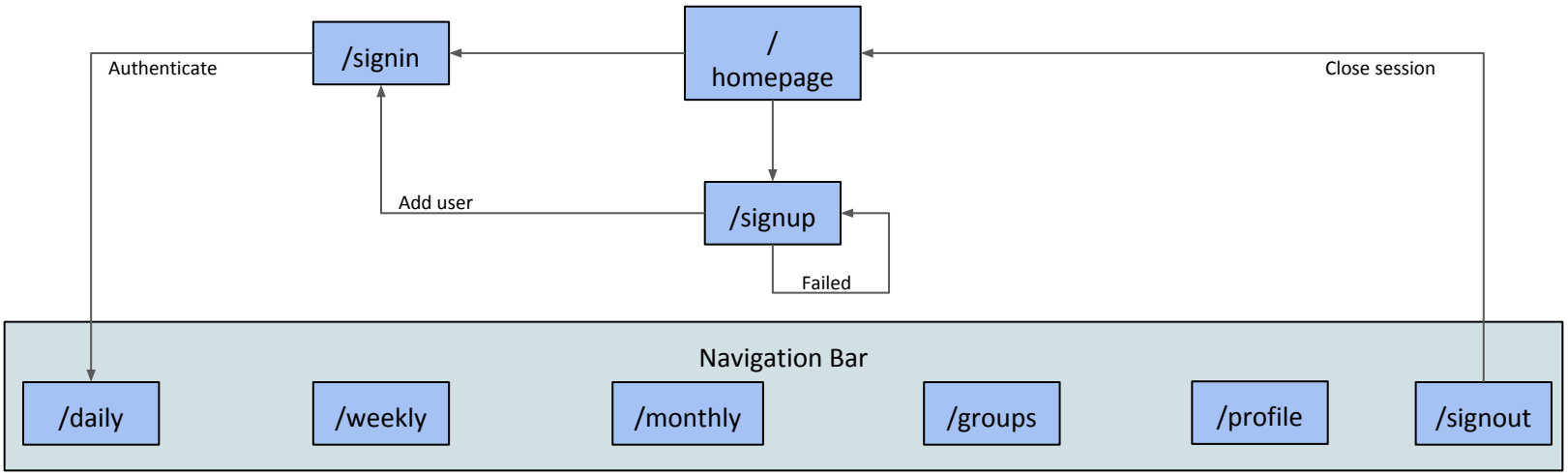
1. User must create an account and be logged in to use this site
2. Planner/"Due Tomorrow"/To-Do List
    - Default display: Today's To Do List, with options of weekly and monthly view (navigation bar)
    - Users can add personal tasks
    - Users can add tasks for groups they are part of
    - To Do List
        - Tasks with name and optional description
        - Orders by user-defined priority. If priority is undefined, it is ordered from earliest to latest due date
        - Display the day a task was assigned/updated and due date (small, gray font)
    - Monthly
        - Displays tasks on a calendar
3. Priority for assignments
    - Assigned by the user
    - If not assigned, the task will be displayed below prioritized
4. Create public groups (classes/clubs) or private groups (group projects)
5. Join public groups (classes/clubs) through a search bar and a suggested list of groups
6. Calendar filters by groups and courses
    - Integration of Google Calendar API to sync and add in holidays
7. Upvote/Downvote content credibility
    - Tasks made by users with a low enough credibility will be put on the bottom and a font color of gray, unless it gains enough upvotes
    - Users with high enough credibility will be able to edit grayed out task descriptions from other members

8. Filter their tasks/events by group
    - Checklist on the monthly calendar that allows user to select which group's tasks to display
9. Choose to post tasks to their personal calendar or to groups

Component Map



Site Map



Database Layout

private_groups	
group_id	INTEGER
name	TEXT
admin_ids	TEXT

groups	
group_id	INTEGER
name	TEXT
admin_ids	TEXT

users	
user_id	INTEGER
username	TEXT
password	TEXT
cred_score	INTEGER

group_id	
task_ids	INTEGER
member_ids	INTEGER

user_id	
group_ids	INTEGER
admin_id	BLOB

task_id	
due_date	BLOB
priority	INTEGER
time	BLOB
title	TEXT
description	TEXT
upvotes	INTEGER
downvotes	INTEGER

APIs

API	What is it used for?
Google Calendar API	This API will be used to sync and add in holidays

Database Tables:

Users:
(determined by a User ID prefix)

- User ID
- Username
- Password
- Credibility score

User: (named by user ID)

- Groups(the user is a part of)
- Admin?

Public Groups:
(courses, clubs)

- Group ID
- Group name
- Admin

Private Groups:
(groups for group projects)

- Group ID
- Group name
- Admin

Group: (named by group ID)

- Tasks (list of task IDs)
- Members (user IDs)

Task: (named by Task IDs)

- Due Date
- Priority
- Time
- Title
- Description
- Upvotes
- Downvotes

Table naming conventions: eg. u000000

u - user
g - group
t - task

For example, a table for task with id number 123456 would be named t123456