Project title: BoilerHouse
Team Number: 10
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Problem Statement: Boilerlink is currently the sole website for finding clubs, yet a lot of important features are missing. Boilerlink does not have a suggested club feature, sets of filters for searching, an application system built into the website, a conflict schedule, a rating/review system, and an active notification system.

Project Objectives: We aim to produce a website that can replace Boilerlink and provide us with a more complete experience when finding clubs and extracurricular activities.

- Create user profiles sync personal schedules with application and provide notifications based on club meeting times
- Build a club-suggesting feature to recommend clubs to users based on filters
- Create a system that allows both users to join clubs and create clubs, giving unique features and permissions for each
- Implement a review system where users can leave reviews and ratings on clubs for others to see

Stakeholders:

Users:

- Purdue Students who want to join clubs that are relevant and interesting to them
- Purdue club officers who want to create clubs, advertise clubs, and post relevant club information
- Purdue admins who approve clubs that can exist on campus

Project Deliverables:

- Front end website that allows users to:
  - Create, edit, delete accounts through a UI system
  - For Admins:
    - Manage accounts, approve clubs to be added to the website
  - For Club Officers:
    - Create clubs
    - Create, cancel, postpone meetings

        - Send notifications/emails to club members
        - Manage and edit club description (officers can upload social media links and images/videos as well)
        - Upload an application form for prospective members to complete and attach any relevant documents
    - For Members:
        - Join clubs
        - View breakdown of clubs (what current members are majoring in, what members' interests are, etc)
        - Calendar view of upcoming club meetings
        - Rating system–past members can rate a club and leave a small note such as favorite memory while in the club
        - Filter system to filter clubs based on interests, major, commitment time, breakdown of club, rating
        - AI system that returns a match percentage between user and certain clubs
- Back-end rest API that allows the front end to:
    - Create, Edit, and Delete accounts, clubs, meetings, ratings, and reviews all persisted in a cloud hosted database
    - Log users in and provide a JWT token with special permissions to access certain features
    - Use a KNN algorithm to suggest clubs for a given user
    - Query SQL database using filters

Platforms/Frameworks

- React
- SQL (mySQL)
- Django