

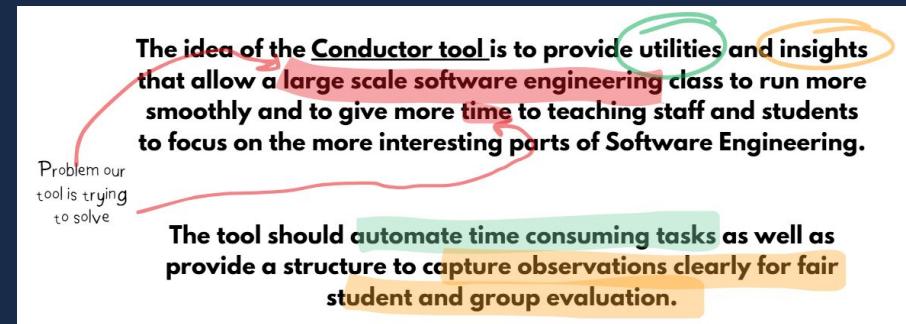
Conductor App

Team 3: <div>ine coders

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Statement of Purpose

Constructing a course management tool for teaching staff and students within the domain of software engineering to help students structure their team progress and help staff stay in the loop of the team's progress.



User Studies

We interviewed real users to understand their role, problem, and tool needs for the Conductor App, and will continue to get feedback!

Teaching Staff

Professor

Role: Run a ~200 student SE course with lecture, discussion, lab, project & chooses pragmatic tech stacks and workflows that mirror real-world practice (GitHub, Classroom, Canvas, Gradescope).

Problem: Cannot easily see process compliance and team health across many teams and disparate tools & students sometimes misallocate focus (e.g., prioritizing project over exams) without timely feedback signals.

Tool Needs: A process-health dashboard that correlates plans, issues, PRs, commits, and reviews into multi-component metrics. Also, team health cards that surface end-loading, single-contributor risk, reviewer networks, and pair-programming evidence.

TA

Role: Coordinates grading and rubric consistency across labs, milestones, and projects.

Problem: Gathering consistent evidence for process grading is slow, manual, and error-prone.

Tool Needs: One-click evidence bundles and rubric checklists auto-filled from GitHub signals and exportable to Canvas/Gradescope.

Tutor

Role: Help run labs, answer student questions, and relay any problems back to the other staff.

Problem: Coordinating student questions for labs/assignments and FAQ can be overwhelming.

Tool Needs: Queue system for answering student questions along with a FAQ tool that students need to read before entering the queue. Easy way to relay observations/problems to staff.

Students

Students

Role: Regular student managing lectures, reflections, and project tasks across Canvas, Slack, and Gradescope.

Problem: Tasks and deadlines scattered across platforms; often forgets due dates; feels unorganized.

Tool Needs: Centralized dashboard showing all assignments, meetings, and deadlines with calendar and notifications.

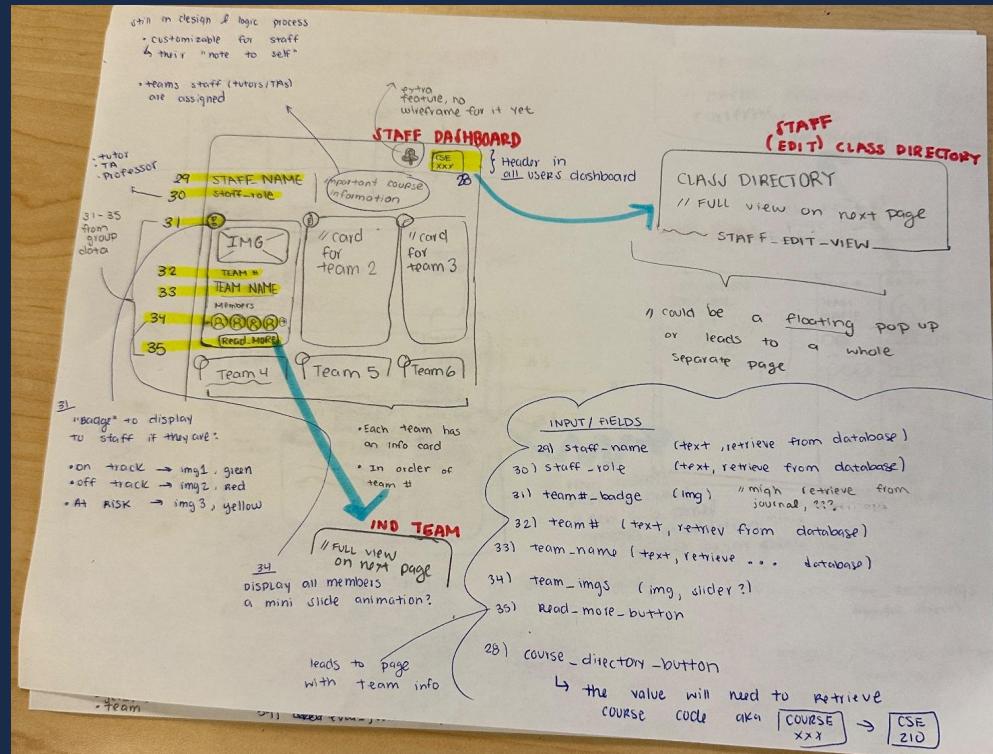
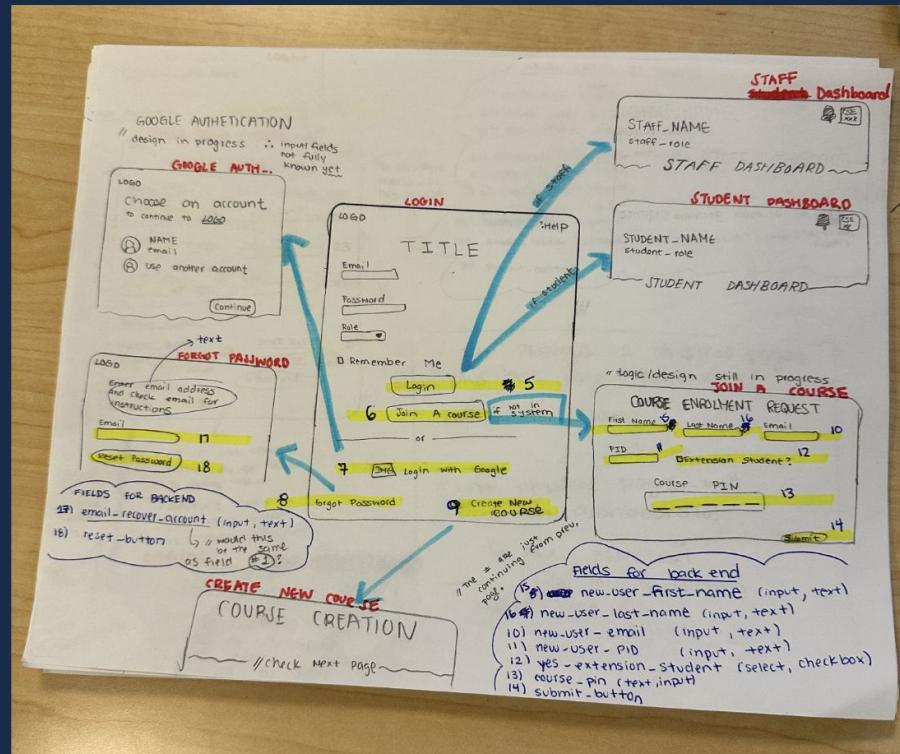
Team Lead

Role: Coordinates a 6-8 person project team; facilitates meetings, assigns tasks, and ensures submissions.

Problem: Difficult to align schedules, track individual contributions, and manage communication across tools.

Tool Needs: Meeting scheduler, team activity tracker, and automated participation summaries for fair evaluation.

Wireframes



Login & Dashboard Demo

Welcome to Conductor

First Name

Last Name

Email

Password

Role

Remember me

LOGIN

or

 Continue with Google

[Forgot password?](#) [Create an account](#)

Task Tracker Demo

Conductor App



Student Dashboard

Team Lead view · CSE 210



Class Directory

View and manage all staff and student class information.

[Open](#)



Task Tracker

Monitor assigned tasks, due dates, and progress updates.

[View Tasks](#)



Meeting Notes

Create, organize, or review your meeting notes and class discussions.

[Open Notes](#)



Weekly Evaluation

Review performance summaries and submit weekly feedback reports.

[View Evaluation](#)



Evaluation Journal

Review performance metrics and grading insights for your classes.

[View Journal](#)

Team Structure Overview

Our team is large (13 people) → needed structure.

We divided by **user role** because each role has different:

- UI screens
- Features
- Data access / management
- Interactions with other users

The 4 Role-Based Sections:

1. **Professor**
2. **TA**
3. **Team Leader**
4. **Student**

This was to ensure parallel work, clarity, and minimal repetition.

For TLDR/ quick info we are using the wiki. As recommended by Prof in OH!

🔗 Section 1: Prof

Front End: Yueqi Wu, Peter

Back End: Siraksha

Integrated Back & Front End: Abhishek

Data Manager: Abhishek

| 📁 Team Card in Staff Dashboard (field number 31-35 in current wirefram)

| | Peter

| | Tongfei,

| 📁 Class Directory [EDIT ACCESS] (36- 48) (#39 is a future feature)

| | Yueqi, Audria

| Raksha

| 📁 Evaluation Journal [EDIT]

| | Andrew

| | Abhishek

Sprint 1 Retrospective

What went well:

- Conducted user studies
- Developed the wireframes and how they will integrate together with Back End
- Finished login screen, dashboard, team tracker initial Front End design
- Feedback loop: async updates in Slack, bi-weekly check-ins meetings (More as required), Immediate feedback from TAs during OH

What we should improve:

- Originally organized by Frontend & Backend, but had some disagreements and realized we need more collaboration and communication on both to integrate the changes together and be aware of the other group's progress
- Thus organized by section role: Professor, TA, Team Leader, Student, with someone on Front End, Back End, Integration, and Data Manager for each section

Goals for next sprint:

- Need to continue practicing GitHub practices, including Issues, PRs, Projects, and will integrate CI/CD Pipeline
- To improve workflow, we should centralize our resources (meeting notes, wireframes, and design details) into a single source of truth (e.g., GitHub Wiki) so everyone can easily access the latest version.