<u>**CS673 Software Engineering**</u>
<u>**Team 4 : Team Four**</u>
<u>**Meeting Minutes**</u>

<u>**Meeting 3**</u>

Database Structure : Faizan to draft the initial database schema for review.
Date and Time: Fri, Sept 21 2:00 PM – 4:00 PM
Place: Zoom
Participants: Hemant, Jaindra, Amruth, Shubh, Tushar, Faizan
Minutes taker: Hemant
Timekeeper: Hemant
Purpose: Env and Stack setup in all systems

Actions:
- **Started setting up Docker, Postman, PGAdmin**
- **Ran through the initial boilerplate code to start off**
- **Debugged all errors and made sure all systems are supporting the stack and the env**

Meeting 2

Date and Time: Fri, Sept 15 12:00 PM – 1:30 PM
Place: Zoom
Participants: Hemant, Jaindra, Amruth, Shubh, Tushar, Faizan
Minutes taker: Amruth
Timekeeper: Amruth
Purpose: Discussing the UI design, tech stack, MVP features, security considerations, and task assignments.

Agenda :
1. Discuss UI and tech stack
2. Finalize MVP features
3. Assign tasks for backend and frontend teams
4. Security considerations
5. Discuss GitHub protocol and project structure

Discussions :

1.UI Design :
Faizan initiated the discussion by asking if we should use Figma templates or design a detailed UI from scratch.
Tushar emphasized that the UI should be functional, mentioning that many teams rely on Material UI (MUI), which could be a good option.

2. Tech Stack :
Tushar outlined the tech stack for the project:
  1. Authentication : Keycloak (OAuth 2.0 with JWT)
  2. Backend : Fastify for APIs, Prisma ORM, PostgreSQL (tentative)
  3. Frontend : React with TypeScript
  4. UI Package : Material UI (tentative)
  5. Cache : Redis

3. MVP Features :
  Hemant suggested starting the process by finalizing the MVP features.
  Tushar proposed that the MVP will include the following:
  Applicant Dashboard : Upload Resume, Upload Job Description (JD), Analytics

Recruiter Dashboard : View Resumes, Analytics

Hemant raised a suggestion for a feature that would allow applicants to check if their resume is suited for a particular job.

4. **Project Phases :** Tushar stated that Phase 1 will focus on implementing the Resume ATS system, while Phase 2 will handle job listings if time permits.

5. **Security Considerations :**
Faizan questioned if security features should be included as part of the learning experience.
Tushar responded by explaining that the SQL database will not be exposed to the internet, and the API security will be handled through Prisma ORM. Prisma also creates types for the database, making it efficient and secure.

6. **GitHub Protocol :**
Faizan proposed that we establish a protocol for GitHub pull requests.
Tushar suggested using conventional commit comments to maintain structure.

7. **Backend and Frontend Teams :**
Hemant proposed Faizan and Tushar to work on the backend.
Tushar suggested dividing the team into three members for the backend and three for the frontend. He will begin with building the CRUD API before moving on to the frontend tasks.

Key Decisions :
Decided to use the proposed tech stack, including Fastify, Prisma, and Redis.
Agreed to focus on the ATS features for Phase 1 and job listings for Phase 2 if time permits.
Established a tentative security plan based on API security through Prisma.

Action Items :
UI Design : Faizan to explore UI options, potentially leveraging Figma and Material UI.
Tech Stack Setup : Tushar to set up the tech stack, focusing on Fastify and Prisma.
Backend and Frontend Division : Hemant to assign team members for backend and frontend tasks.

Meeting 1

Date and Time: Fri, Sept 6 2:00 PM - 2:50 PM
Place: Zoom
Participants: Hemant, Jaindra, Amruth, Shubh
Minutes taker: Jaindra
Timekeeper: Jaindra
Purpose: Project initiation meet

Agenda:
- **Decide on a project idea**

Discussions:
- **The team discussed the course schedule for the semester with Hemant leading the conversation.**

- **Each team member shared the technologies they were familiar with to gauge the overall skill set of the group.**

- **It was collectively decided that the project would be a web application.**

- **Project Ideas :**

  - Idea 1: An online document analyzer specifically for legal documents (suggested by Shubh).
  - Idea 2: A tool to shortlist proposals through a comparative analysis, providing both objective and subjective grading (suggested by Hemant). This idea was also considered for filtering job applications.
  - Idea 3: A prototype generation tool that leverages generative AI to create prototypes based on user inputs (suggested by Jaindra). However, this idea was considered challenging due to the lack of domain knowledge about specific prototypes.
  - Idea 4: A finance tracker app with AI integration to provide personalized recommendations based on spending habits and income, offering personal financial advice (suggested by Jerome).
  - Idea 5: A grading tool that evaluates assignments based on a model assignment that represents a perfect grade (suggested by Hemant).

- **The team is deciding between building an already popular project with improvements or developing a completely new idea. The initial inclination is to follow the first route, enhancing the application with a simpler UI and more sophisticated backend.**

- **The team discussed the potential use of Langchain, embeddings, a vector database, and Elasticsearch for the project. For the backend, Fastify and Prisma were identified as possible technologies.**

- **The team is leaning towards Idea 2 - a reviewer app that compares one document against others, helping to filter out key differences. The focus would be on creating a simple UI while implementing a more complex backend.**

- **The team was deciding on what to call the project but put it away for later discussions**

- **The team talked about starting the iteration 0 document**

- **Decided on possible use of Fastify, Prisma in backend.**

- **Security lead - jerome, Qna lead - shubh have agreed on going about the practises that would be in the project by the next meeting**

- **Jaindra was assigned the task of creating an empty repository on Git and**

notifying the team once it's ready.

- **Shubh and Jerome will collaborate on certain aspects of the project which includes testing.**

- **Jerome suggested that Fastify has a testing framework which could be used in the testing process.**

- **The team agreed to meet every Friday at 2 PM for project updates.**

Key Decisions:
- **Decided on the meeting time.**
- **Decided that the project would be a web application**

Action Items:
- **Think of more project ideas (Group)**
- **Setup Git and let the team know after creating an empty repository (Jaindra)**
- **Read about the technologies (Langchain, fastify….), (Group)**

Links :
- **https://fastify.dev/docs/v1.14.x/Documentation/Testing/**