WebApp: On-Board

Project Description: On-Board is a web platform designed to help students, professionals, and career changers navigate their career paths. It offers personalized features like profile creation, job matching, and connections to alumni and industry leaders. The platform also includes an exceptional grouping feature, allowing users to join or create groups based on tags like industry, skills or job roles, enhancing collaboration and networking. On-Board provides a comprehensive solution for efficient career development.

Team Members:

Krushna Thakkar – **Team Lead**

Chetas Parekh- **Scrum Master**

Khayal Dobaria- **Front-End Developer**

Jimmie Wu- **Back-End Developer**

Shrey Rakesh Kevadia- **Git Master**

Version	Description	Milestone
V0.1	Initial setup + Backend	1
V0.2	User login and sign-up Profile setup	
V0.3	Dark mode toggle Job listing page	2
V0.4	Grouping Features	3
V0.5	Profile section	4
V0.6	Job search + UI	5
V0.7	Job application tracking	

Data definition:

User Data:

Attributes

- FirstName: First name of the user

- lastName: Last name of the user

- email: Email Address

- password: User's password (hashed for security)

- userType: Student/Recruiter/Company

- userCountry: Country in which the user resides or wants to work

- userState: State in which the user resides or wants to work

- userCity: City in which the user resides or wants to work

- userJobInterests: Job categories or roles that the user is interested in

- userRemote: Whether the user prefers remote jobs

- userResume: Uploaded resume of the user (optional)

- userSkills: List of skills the user possesses.

- userExperience: User's work experience (title, company, years)

- userEducation: User's educational background (degree, institution, years)

- userJobBookmarks: Jobs the user has bookmarked or saved

- userNotification: Job alerts, messages, and group notifications received

- userTags: Keywords or tags for representing the user's areas of expertise

Student Data:

Attributes:

- studentId: Unique identifier for the student user.

- firstName: First name of the student.

- lastName: Last name of the student.

- Email: Email address of the student.

- Password: Hashed password for authentication.

- schoolName: Name of the school or university the student is attending.

- Degree. The degree or program the student is pursuing.

- Major the student's major or area of study.

- graduationYear: Expected year of graduation.

- studentSkills: List of skills acquired by the student (academic, technical, etc.)

-studentResume Uploaded resume of the student.

- studentProjects List of projects completed by the student

- studentInternships: Details about internships or part-time.

- studentJobInterests: Job roles or industries the student is interested in.

- studentRemotePreference: Whether the student is interested in remote

- studentJobApplications: List of jobs the student has applied to.

- studentClubs: List of student clubs or extracurriculars

- studentAchievements Academic or extracurricular achievements.

- studentMentors : List of mentors the student relates to on the platform.

- studentNetworkingStatus: Student's engagement in networking activities.

- studentNotifications: Alerts for new jobs, messages, application status, etc.

- studentProfileImage: Profile picture uploaded by the student.

Company Data:

Attributes

- companyName: Name of the company

- companyEmail: Official email address of the company

- companyWebsite: URL of the company's official website -

- companyIndustry: Industry in which the company operates -

- companyLocation: Physical location of the company.

- companySize: Number of employees in the company.

- companyDescription: Description of company's mission and services

- companyProducts: Products of the company

- jobOpenings: List of current job openings available at the company

- companyLogo: Logo image of the company

- companyTags: Keywords or tags representing the company's areas of expertise.

Recruiters Data

Attributes

- recruiterName: Full name of the recruiter

- recruiterEmail: Official email address of the recruiter

- recruiterPhone: Phone number of the recruiter

- recruiterCompany: Name of the company the recruiter represents

- recruiterLocation: Geographical location of the recruiter (city, state, country)

- recruiterSpecialty: Specific industries or job roles the recruiter specializes in

- jobOpenings: List of current job openings the recruiter is managing

- recruiterProfileLink: Link to the recruiter's professional profile (LinkedIn, etc.)

- recruiterTags: Keywords or tags related to the recruiter's areas of focus

- recruiterProfileImage: Profile picture of the recruiter

Group Data

Attributes

- groupId: Unique identifier for the group.

- groupName: Name of the group.

- groupDescription: Brief description of the group's purpose or focus.

- groupCreatorId: User ID of the group creator.

- groupMembers: List of user IDs who are members of the group.

- groupTags: Keywords or tags associated with the group (e.g., industry, roles).

- groupCreationDate: Date and time when the group was created.

- groupPosts: List of posts made within the group (post ID, author, timestamp).

- groupMessages: Conversations or messages exchanged between group members.

- groupReacts: Reactions (e.g., likes, comments) to posts within the group.

- groupJobsPosted: Job postings shared within the group (job ID, title, author).

- groupActiveStatus: Boolean indicating if the group is active or inactive.

- groupConversations: List of stored chat threads or conversations within the group.

- groupMatchConnections: Connections made between users within the group

- groupNotifications: Notifications related to group activities (new posts, messages).

Functional Requirements

    User:

        High Priority

            1. User can register on the platform using their email and password.

            2. Users must be able to securely log in and log out, with their passwords hashed for security.

            3. Users must be able to recover or reset their passwords.

            4. User can create Profile.

            5. Users must be able to select their userType

            6. Users can create group.

        Medium Priority

1. User can update Profile.
2. User can delete Profile.
3. Users must be able to browse jobs based on their userJobInterests and filter jobs by userRemote preference.
4. Users must be able to save or bookmark jobs (userJobBookmarks) for future reference.
5. Users must be able to upload or update their userResume.
6. Users should be able to input and edit their work history (userExperience), including the job title, company, and duration of employment.
7. Users must be able to add, update, and display their userEducation background.
8. Users must be able to add, update, and display a list of userSkills they possess.

        Low Priority

1. Users should have the ability to filter job listings based on whether they are userRemote jobs or in-office.
2. Users should be able to assign userTags (keywords) to highlight their areas of expertise for recruiters or companies.
3. User can add, remove and update group as per the requirement.
4. User can request recruiters for the group

Student:

High Priority

1. Students can provide personal details such as first name, last name, email, and password during sign-up.
2. Students can upload a profile image to personalize their accounts.

3. Students enter their school/university, degree program, major, and expected graduation year.

4. Students can list skills they've acquired and specify their job interests.

5. Students can browse job listings and filter them based on job roles, industries, and remote preferences.

6. Students can apply to job openings by submitting their profile, resume

7. Students can update their personal, academic, and career details at any time (skills, job interests, resume, etc.).

Medium Priority

1. Students can modify or update their degree information, major, or expecte graduation year as they progress.
2. Students can update their job role preferences, remote job preferences, and th industries they are interested in.
3. Students can document their internship experiences, including details about the company, role, and duration.
4. Students can create a list of academic or personal projects they've completed including titles, descriptions, and technologies used.
5. Students can add, update, and remove skills on their profile as they gain new experiences.
6. Students can connect with and add mentors to their profile for guidance and career advice.

Low Priority

1. Students can add details about their involvement in clubs and extracurricular activities.
2. Students can delete their profile if they no longer want to use the platform, removing their data, job applications, and networking connections from the system.

3. Students can regularly update their resume to reflect their latest experiences and skills.

Companies:

High Priority

1. Companies can create a profile by providing their name, official email, website URL, industry, and physical location.

2. Companies can list new job openings by specifying job details, requirements, and responsibilities.

3. Companies can view applications submitted by students or job seekers, including resumes and cover letters.

4. Companies can describe their mission, values, and services to give potential job seekers insights into their organization.

5. Companies can upload their logo to personalize their profile and branding on the platform.

6. Companies can update any of their profile details such as the company name, location, industry, website, and description as needed.

Medium Priority

1. Companies can edit the details of their current job postings (e.g., job title, location, salary, or role responsibilities).
2. Once positions are filled, companies can close job postings or remove them from the platform.
3. Companies can interact with mentors on the platform to collaborate or provide insight into industry trends and recruitment strategies.
4. Companies can add, remove, or update tags representing their areas of expertise to ensure they remain aligned with evolving company operations.
5. Companies can advertise their brand, achievements, updates, and services on their profile, making it visible to potential job seekers and partners.

Low Priority

1. Companies can list and describe the products they offer, providing additional details for job seekers or potential clients interested in learning about their services.
2. Companies can update the details of their products if changes occur in their product lines or when they want to promote new offerings.
3. Companies can change or update their logo image if rebranding or making updates to their corporate identity.
4. Companies can delete their profile, removing all associated data including job postings, product listings, and messages from the system.

Recruiter:

High Priority

1. Recruiters can create a profile by providing their full name, official email, phone number, company name, and geographical location.
2. Recruiters can add job listings to the platform by specifying job details (title, location, responsibilities, and qualifications).
3. Recruiters can directly message candidates for further engagement, including scheduling interviews or providing feedback on applications.
4. Recruiters can update details of job openings such as the job description, salary, or role requirements.
5. Once a job opening is filled, recruiters can close or delete the job posting from the platform.

Medium Priority

1. Recruiters can define their industry focus or the specific job roles they specialize in, helping them connect with relevant job seekers.
2. Recruiters can upload a profile image to personalize their account and build trust with candidates.
3. Recruiters can modify their tags to reflect changes in their recruitment focus or industries they cover.
4. Recruiters can control the visibility of their profile, determining whether it is public or only viewable by certain groups or connections.
5. Recruiters can update their profile details such as name, contact information, and location.

Low Priority

1. Recruiters can add keywords representing their areas of focus to improve their searchability.
2. Recruiters can delete their profile, which will remove all associated data such as job postings, messages, and connections from the platform.

Group:

High Priority

1. Users can create a group by providing necessary details such as group name, description, and tags to describe the focus or purpose of the group.
2. The user who creates the group will automatically be assigned as the group creator with administrative privileges.
3. If the group is set to private, group creators or admins can approve or reject membership requests.
4. Group members can create and share posts within the group, including job openings, discussions, and announcements.
5. Members can react to posts by liking, commenting, or sharing.

Medium Priority

1. Group creators or admins can update the group name, description, and tags as the group's focus evolves.
2. Users can search for groups by name, description, tags, or industry keywords to find groups that align with their interests.
3. Users can add relevant tags or keywords to enhance the searchability of the group based on industry, roles, or interests.
4. Group members can edit or delete their own posts, and group creators or admins can remove inappropriate posts.

Low Priority

1. Users can view reactions to their posts, such as likes, comments, or shares from other members.
2. Members, especially recruiters or group admins, can share job openings within the group, including details such as job title and description.

UI Mockups and UX Flows

App Main Page
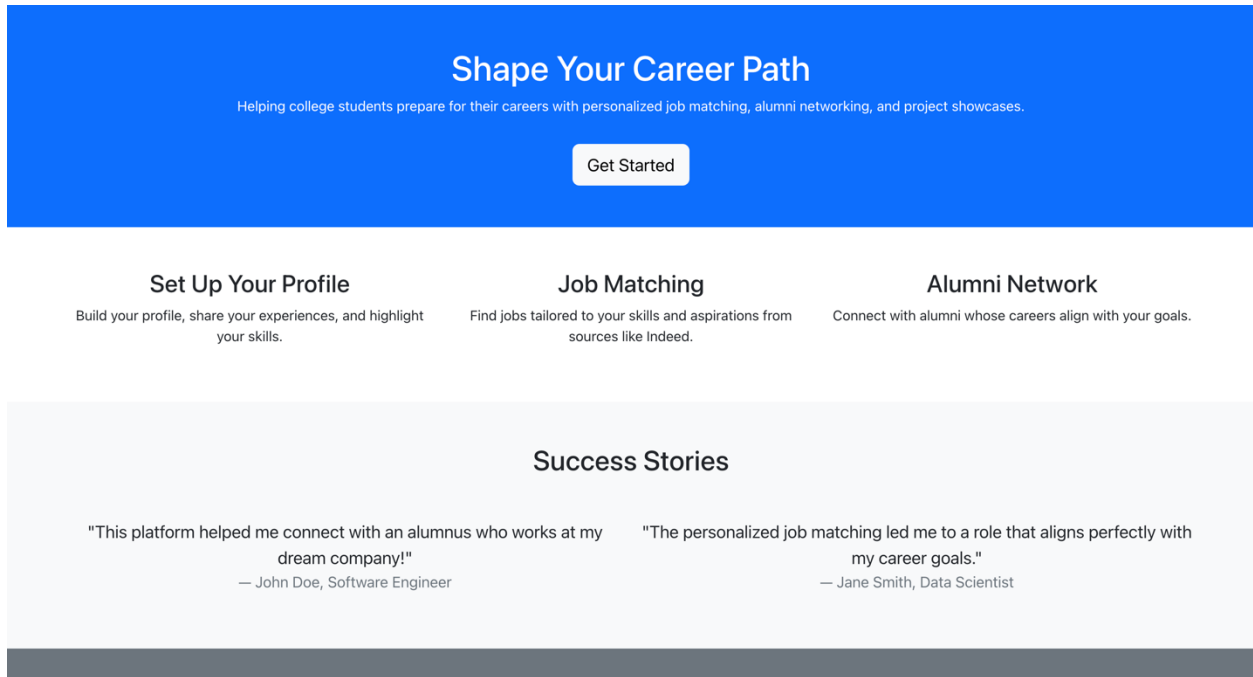
Welcome to On-Board

This is the main or the Home Page. Click "Get Started" to Launch your Career.

Login Page

Email: [   ]

Password: [   ]

Forget Password?

Create Account?

Login

User Can Login with Credentials like-

Email: Stored as userEmail

Password: Stored as userPassword

If User doesn't remember the password, then-

User ma Click Forgot Password-

This will take User to Page where user will create a New Password

User may Create a New Account-

This will take User to Sign-Up Page

Sign-up Page

User will Enter details to make sure the account created is unique and status confirmed-

First Name- Stored as firstName

Last Name- Stored as lastName
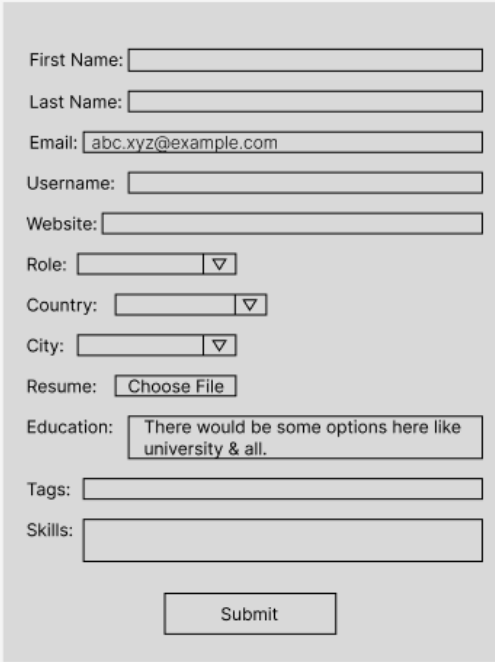
Email- Stored as userEmail

Password: Stored as userPassword

If User want to Login, then-

User can click on "Already have an account", this can take User to Login-Page

Click Register to Create User Profile

Profile Page

Field	Input
First Name:	
Last Name:	
Email:	abc.xyz@example.com
Username:	
Website:	
Role:	▽
Country:	▽
City:	▽
Resume:	Choose File
Education:	There would be some options here like university & all.
Tags:	
Skills:	

Submit

User can Enter its detail to build Profile, which includes-

userType: Student/Recruiter/Company

userCountry: Country in which the user resides or wants to work

userState: State in which the user resides or wants to work

userCity: City in which the user resides or wants to work

userJobInterests: Job categories or roles that the user is interested in

userRemote: Whether the user prefers remote jobs

userResume: Uploaded resume of the user (optional)

userSkills: List of skills the user possesses.

userExperience: User's work experience (title, company, years)

userEducation: User's educational

Body Page: After Login

This is the basic or Version-1 Layout for the User after Logged-In.

At the top horizontal layout, we have-

    Menu: This will be updated with other functionaltie and options

    Group: Groups will be visible here

    Jobs: User can see their personalized Jobs

    Connections: Connections made will be shown here

At the top vertical layout, we have-

    Profile Section

    Saved Posts

    Version be removed but has kept for basic Layout

    Logout Button

High level Architecture, Database Organization

Column Name	Data Type	Description
user_id	ObjectId **(PK)**	Unique identifier for each user.
firstName	String	First name of the user
lastName	String	Last name of the user
email	String	Email Address
Password	String	User Auth Password
userType	String	User role (Student/Recruiter/Company)
userCountry	String	Country where the user resides
userState	String	State where the user resides
userCountry	String	Country where the user resides
userCity	String	City where the user resides
userJobInterests	Array of Strings	Job categories of interest
userRemote	Boolean	Indicates if the user prefers remote jobs
userResume	String (URL)	URL/path to the user's uploaded resume
userSkills	Array of Strings	List of skills the user possesses
userExperience	Array of Objects	Work experience (title, company, years)
userEducation	Array of Objects	Educational background (degree, institution, years)
userJobBookmarks	Array of Objects	Notifications received by the user.
userTags	Array of Objects	Keywords representing user's expertise.

1. **Companies Table**

Description: Stores information about companies that are part of the platform.

Column Name	Data Type	Description
company_id	ObjectId (PK)	Unique identifier for each company.
companyName	String	Name of the company.
companyEmail	String	Official email address of the company.
companyWebsite	String	URL of the company's official website.
companyIndustry	String	Industry in which the company operates.
companyLocation	String	Physical location of the company.
companySize	String	Size of the company (e.g., small, medium, large).
companyDescription	String	Description of the company's mission and services.
companyProducts	Array of Strings	List of products offered by the company.
jobOpenings	Array of ObjectId	Current job openings available (references to jobs table).
companyLogo	String (URL)	URL/path to the company logo image.
companyTags	Array of Strings	Keywords representing the company's expertise.

1. **Recruiter Table**

Description: Stores information about recruiters associated with companies.

| Column Name	Data Type	Description
job_id	ObjectId (PK)	Unique identifier for job
jobTitle	String	Title of the job position
jobDescription	String	Detailed description of the job
jobLocation	String	Location of the job
jobRequirements	Array of String	Required qualifications
jobSalary	String	Salary range for the job
jobType	String	Type of employment
company_id	ObjectId (FK)	Reference to the company
recruiter_id	ObjectId (FK)	Reference to the recruiter
jobApplicationLink	String (URL)	Link to apply for the job
jobPostedDate	Date	Job posting date

1. **Job Table**: Stores job postings made by companies or recruiters.

Column Name	Data Type	Description
Job_id	ObjectId (PK)	Unique identifier for job
jobTitle	String	Title of the job position.
jobDescription	String	Job role description
jobLocation	String	Location of the job
jobRequirements	Array of Strings	Required qualifications
jobSalary	String	Salary range for the job
jobType	String	Type of employment
company_id	ObjectId (FK)	Reference to the company
recruiter_id	ObjectId (FK)	Reference to the recruiter
jobPostedDate	String	Job posted Date.
jobApplicationLink	String (URL)	Link to apply for the job

Groups Table: Description: Stores information about user-created groups.

Column Name	Data Type	Description
group_id	ObjectId (PK)	Unique identifier for each group.
groupName	String	Name of the group.
groupDescription	String	Brief description of the group's purpose.
groupTags	Array of Strings	Tags associated with the group
members	Array of ObjectId	List of user IDs representing members of the group.
createdDate	Date	Group created Date
admin_id	ObjectId (FK)	Reference to the user who created the group.

Database Structure
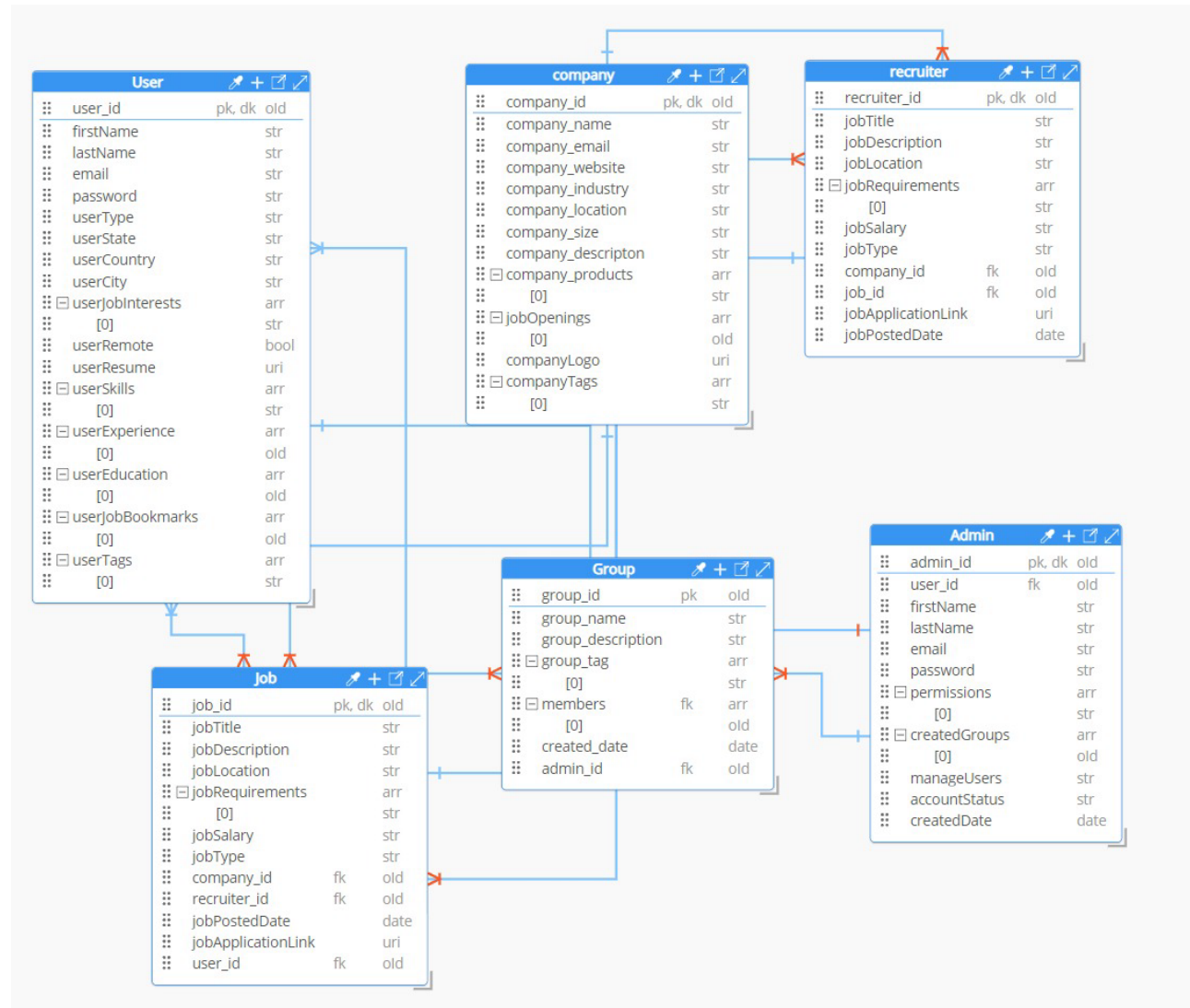
Here, we have User Table, Group Table, Job Table, Admin Table, Company Table and Recruiter Table.

User Table will store all the information if the user of any time. There are 3 types of users- Student, Company and Recruiter and will be responsible for their specific role.

Group Table will store the group information created by either user or recruiter.

Job Table will store information related to jobs. Only Company can post job.

Company Table will contain company information.

Recruiter Table will have everything Recruiter will have in there profile as well as role it plays in creating groups and reposting jobs if needed.

High Level UML Diagrams
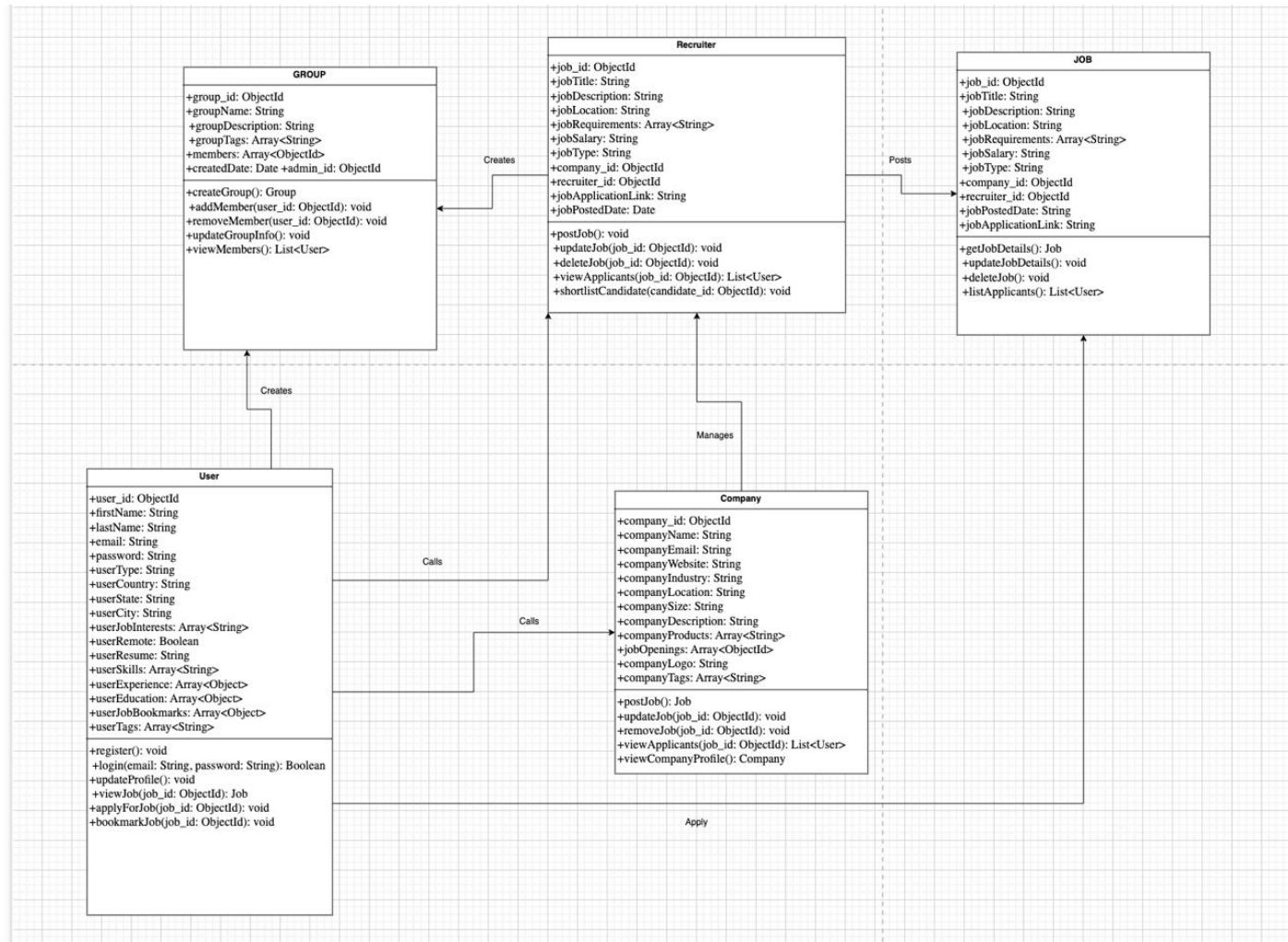
Outline-

User can contact Recruiter + User can contact company + User can create group AND User edit Job Posting + User cannot create Company

Recruiter can contact Company + Recruiter can contact User + Recruiter can repost job AND Recruiter cannot create Company

Company create Jobs + Company can contact User + Company can contact Recruiter + + Company can create Groups + Company can repost job

Groups can be created by User + Groups can be created by Recruiter + Groups can be created by Company AND Groups cannot post Jobs.

Key Risks for the On-Board Project:

1. Skills Risks

- **Risk**: The development of a web platform with advanced features such as profile creation, job matching, group creation, and tagging requires a deep understanding of various technologies (e.g., back-end technologies, front-end frameworks, database management, and security protocols). There is a risk that the team may lack proficiency in all required technologies.

- **Mitigation Plan**:

    - Develop a structured study plan focusing on specific technologies relevant to the project (e.g., Node+Express for the back end, React for the front-end).

    - Schedule workshops or online courses for team members to upskill as needed.

    - Assign tasks based on each team member's strengths and provide peer learning opportunities.

2. Schedule Risks

- **Risk**: Delays may occur if team members do not adhere to their assigned tasks or if unforeseen changes happen during development, such as additional features or bug fixes.

- **Mitigation Plan**:

    - Implement a project management tool such as Trello or Jira to track tasks and deadlines, ensuring transparency.

    - Regularly update the schedule when changes are made and communicate those changes clearly to all team members.

    - Conduct weekly check-ins to monitor progress and adjust the schedule as needed.

3. Teamwork Risks

- **Risk**: Inconsistent attendance in meetings or variations in individual progress could slow down the overall progress of the project.

- **Mitigation Plan**:

- o   Set up recurring team meetings and ensure every member is available for key discussions.

- o   If a member falls behind, assign another team member to assist or reallocate tasks to balance the workload.

- o   Establish accountability by assigning specific deliverables to each team member and setting deadlines.

4. Legal/Content Risks

- **Risk**: Using third-party content such as job data or external libraries without proper licensing could lead to legal issues.

- **Mitigation Plan**:

  - o   Ensure that all software, libraries, and external content used are properly licensed and compatible with the project's goals (e.g., verifying licenses for job-matching algorithms or profile management tools).

  - o   Maintain proper documentation for each third-party tool or content to verify its legal usage.

Work Distribution and Time Management

For M2 tasks, our team utilized a structured Scrum approach to ensure transparency and collaboration. We held daily stand-up meetings, where each member provided updates on their progress. Krushna Thakkar, as the Team Lead, guided the discussion, ensuring alignment with project goals. Chetas Parekh, the Scrum Master, facilitated the meetings and kept track of progress and blockers.

Each team member shared their updates during the meeting:

- Khayal Dobaria discussed front-end progress, including the implementation of UI components.

- Jimmie Wu provided updates on back-end development, such as API integration and database management.

- Shrey Rakesh Kevadia ensured version control, reviewing code commits and managing the Git repository.

Next Steps for Each Team Member:

- **Krushna Thakkar (Team Lead)**:

    o Oversee the integration of front-end and back-end components.

    o Ensure that the project stays on track with the timeline and address any team concerns.

    o Facilitate the next sprint planning to assign upcoming tasks.

- **Chetas Parekh (Scrum Master)**:

    o Continue organizing daily stand-ups and retrospectives.

    o Track the team's progress in the project management tool (e.g., Jira/Trello).

    o Ensure that any blockers are resolved quickly by coordinating with the relevant team members.

- **Khayal Dobaria (Front-End Developer)**:

    o Complete the remaining front-end UI components for profile creation and job matching.

    o Begin working on the group creation and tagging feature.

- o   Collaborate with Jimmie for front-end to back-end integration.

- **Jimmie Wu (Back-End Developer)**:

    - o   Finalize API development for job filtering and bookmarking.

    - o   Start working on the user and group management functionality.

    - o   Collaborate with Khayal to ensure smooth integration of the front-end and back-end.

- **Shrey Rakesh Kevadia (Git Master)**:

    - o   Continue managing the Git repository, reviewing and merging code.

    - o   Ensure proper version control and branch management.

    - o   Assist team members with any Git-related issues or conflicts during the integration phase.

All progress was transparently shared, and blockers were addressed immediately, ensuring smooth task management and collaboration.