Project Proposal on Co-Sphere

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Introduction

Co-sphere is a project-based networking site through which enterprises can leave non-core business or specific projects to a professional team, while individuals can use their spare time to undertake projects to realize self-worth and increase income. This project is a platform designed to connect skilled individuals with opportunities that align with their expertise using an intuitive swipe-based matching system. (Li et al., 2012) By fostering collaboration between professionals and project owners, it aims to create a transparent and efficient ecosystem for building relationships and advancing careers. The platform emphasizes simplicity, innovation, and mutual growth, making it an ideal solution for finding and managing project-based work. The platform empowers individuals to turn their skills into economic benefits, providing them autonomy and balance in their career paths. It fosters a collaborative ecosystem where businesses can leverage global talent, and professionals can grow through real-world project experiences, benefiting both parties in the process.

Project Justification

Gaining practical experience is critical for individuals in the computer science field to build competitive portfolios and enhance their job prospects. However, finding relevant projects that align with their skills and career goals is often a challenge. At the same time, enterprises, especially startups, struggle to identify and engage skilled collaborators for specific tasks, facing constraints such as limited budgets and inflexible resources. For businesses, maintaining an in-house team for every technical requirement can be costly and inefficient, especially in dynamic markets that require rapid adaptability. (Wei et al., 2020) Small enterprises and startups often lack the resources to scale effectively or acquire specialized skills, limiting their ability to expand operations or improve service quality. For individuals, opportunities to

leverage their skills outside full-time jobs or academic settings are scarce. Many skilled professionals and students seek flexible ways to utilize their expertise, gain experience, and generate income.

This project search platform addresses these real-world challenges by creating a streamlined system that connects developers with project owners in need of skilled collaborators. For developers, it offers a platform to find meaningful projects, gain diverse experiences, and build stronger portfolios crucial for job applications in competitive industries. (Chowdhury et al., 2021) For enterprises, the platform provides an efficient and cost-effective solution for outsourcing projects, allowing them to adapt quickly to market changes without incurring high fixed costs. The platform also provides strong project management support for enterprises and builds a collaborative work platform to help enterprises improve their project management level, improve competitiveness, and achieve sustainable development.

Objectives

- Conduct thorough research on existing project-based work platforms, focusing on features, user experience, and market trends.
- Identify and evaluate technologies and tools that can enhance the platform's functionality, focusing on features like swipe-based matching and resume submission.
- Develop and integrate a user-friendly swipe-based system to match skilled individuals with relevant projects.
- Test and validate the platform's features by simulating various user interactions and project scenarios to ensure smooth functionality.
- Document the development process, challenges faced, and solutions implemented.

Project Mission

Professional Growth and Collaboration

Design and develop a platform that connects skilled individuals with relevant projects for professional development through a swipe-based matching system, fostering collaboration and career growth.

Fostering a Community of Skilled Professionals

Bring forth a community of people with the same interests, enabling users to build a sense of belonging and identity, and strengthening social relationships.

Promote knowledge dissemination

As a collaboration platform, empower the exchange of skills and insights. Users can gain new knowledge and opportunities through connections with like-minded professionals.

Commercial value

Draws the interest of businesses and advertisers by providing a broad platform for connecting with skilled professionals, offering a wide market reach, and serving as a valuable channel for promoting commercial activities.
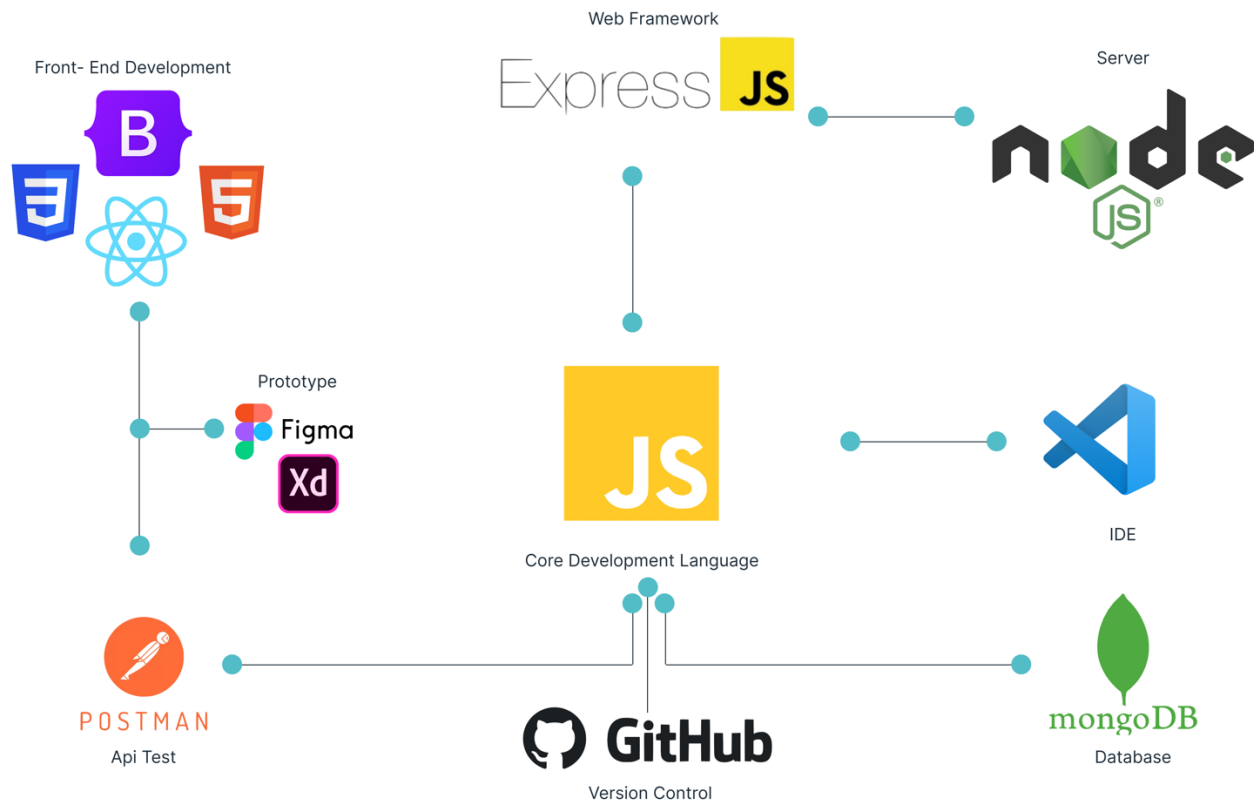
Project Scope

Figure 1:Scope

MongoDB

As an alternative to conventional SQL-based database systems, MongoDB is a NoSQL database management system. Because MongoDB is a cloud-based database, it has been chosen as it is easier to deploy and is more effective at defining, manipulating, and retrieving data.

NodeJS

NodeJS is a server environment based on the JavaScript programming language. NodeJS, a cross platform framework, is used for the project to provide a backend JavaScript server environment.

ExpressJS

ExpressJS is a well-known Java script framework that offers RESTful APIs using a NodeJS server. In order to map URLs of to server-side operations, it works on the server and wraps HTTP requests and answers. (Bafna, 2022)

ReactJS

JavaScript framework called ReactJS is used on the front end of co-sphere. It offers a reliable front-end development mechanism, by making use of conventional HTML, CSS, Bootstrap inside of a .jsx file.

Postman

An application called Postman is used to test API endpoints. It is implemented to generate, run, and test HTTP requests and API answers to ensure that the API is operational.

Features

Resume Management

The system allows users to create and manage personal information, including educational background, work experience, skills and personal statements, etc. This enables jobs and project seekers to centrally manage and update their application materials in one place.

Search and Matching Algorithms

The system provides a skill based search and matching functions to connect users with the most suitable positions according to their skills, experience and preferences. This greatly simplifies the search process of users and improves the matching with suitable positions.

Swipe-Based Rejection and Acceptance

Users can quickly browse available projects, and the platform recommends opportunities based on their skills, interests, and past work experience. Once a user finds a project that matches their expertise and preferences, they can swipe to express interest. This tailored recommendation system ensures that users are presented with the most relevant opportunities.

Automatic Resume Submission

Project seekers can apply for a role in the project online through the platform's swipe-based system and submit their resumes and other supporting materials directly to the recruiter. This eliminates the tedious process of traditional mail and paper applications, while ensuring the accuracy and integrity of application materials.

Application and Recruitment Tracking

The platform enables applicants to track their job search progress, including application status, interview arrangements, and feedback. Recruiters can also monitor applicants and view their resumes. Through the evaluation, screening and prioritization of multiple applications, the enterprise can ensure the resources are invested in the most valuable and suitable applicants.

Project Management

The system provides comprehensive project management functions, including project planning, task allocation, progress tracking, etc. The project manager can clearly define the milestones and deliverables of the project, monitor the progress of the project in real time, find and solve problems in time, and ensure that the project is delivered on time and in quality.

Employment Opportunity Market

As a broad employment opportunity market, the search system gathers job vacancy information from various industries and companies. This provides job seekers with more employment options and a wider range of candidate resources for recruiters.

Performance Reviews and Feedback

After completing a project, both parties can leave reviews and feedback, helping users build their professional reputation and improve future opportunities.
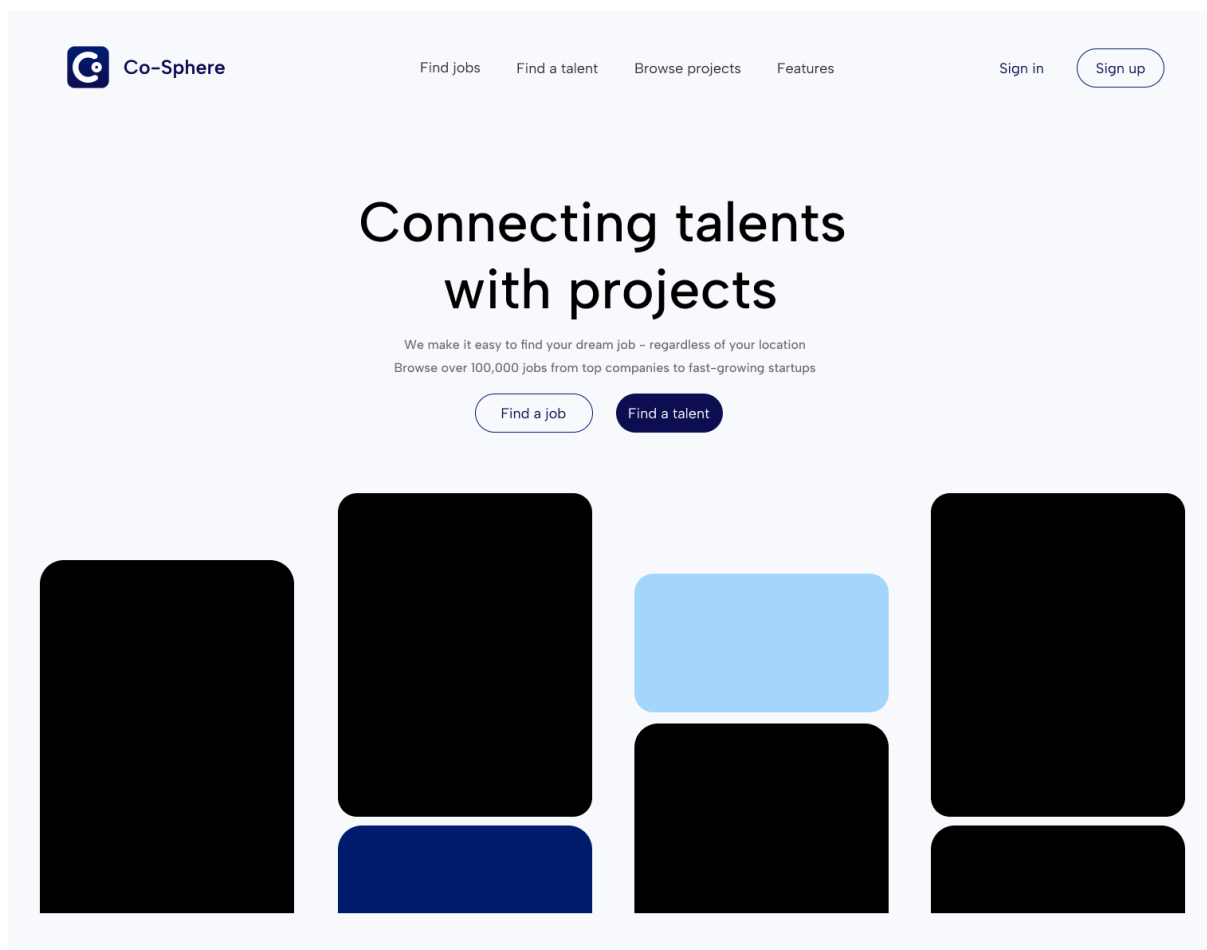
Prototype

Figure 2: Onboarding Screen

Find jobs   Find a talent   Browse projects   Features   Sign in   **Sign up**

Getting Started

Let's get you signed in to your account

Email Address
👤 yourname@gmail.com

Full Name
👤 ●●●●●●●

Phone
+977 | 9800809909

Date Of Birth
14 — 07 — 2005

Continue

Don't have an account? **Sign up**

Figure 3: Sign Up Page

Co-Sphere

Find jobs   Find a talent   Browse projects   Features   Sign in   **Sign up**

Sign in to your account

Let's get you signed in to your account

Email/Phone number
👤 yourname@gmail.com

Password
👤 ●●●●●●●

Forgot Password?

Sign in

Don't have an account? **Sign up**

Figure 4: Sign In Page

Country of residence

Let's get you signed in to your account

Country
Nepal   ▼

Province
Province 1   ▼

City
Kathmandu   ▼

Continue

Don't have an account? **Sign up**

Figure 5: Residence Info Page

OTP Authentication

An authentication code has been sent to
youremail@gmail.com

| 4 | 1 | 2 | 2 | 3 |

Did'nt get the code? **Resend**

Continue

Already have an account? **Sign In**

Figure 6: OTP Authentication Page

Conclusion

The project search platform, with its unique advantages and potential, is reshaping how developers gain experience and how projects are executed in the modern labor market. It not only creates valuable opportunities for individuals to enhance their skills and build their professional portfolios but also offers businesses a flexible and efficient way to access specialized talent. (Ansell & Gash, 2017) By fostering a more diverse, adaptable, and productive approach to collaboration, the platform paves the way for a future where project-based work becomes a cornerstone of the socio-economic structure. With the continuous evolution of technology and changing workforce needs, the development prospects of this project search platform are both promising and transformative.

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