

Report on
AllyHub

Prepared for

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Course No: CSE 3224

Course Name: Information System Design & Software Engineering Lab

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Reason For Project Selection

Problem Statement: With the advancement of the world most beginner IT employees and job seekers do not have access or knowledge of accessing proper workstation, clients or project groups but on the contrary IT companies seek experienced employees. Besides there are many people who can work but are certainly unemployed due to physical boundaries or other reasons and there are clients who have project ideas but are sitting idle due to incapability of implementing their IT ideas.

Solution: To eradicate these problems, we have come up with this idea of providing a beginner friendly platform so that people who are willing to work and clients with their unique IT related ideas can interact swiftly building a workstation mutually in their own way in order to turn their ideas into reality.

Goals: Our prime goals are cited below,

1. *Flexible Interaction:* We want to build a dedicated networking platform for people who are available, are willing to work and have ideas to offer. Both clients and developers can explore each other's project proposals and profiles respectively.
2. *Collaboration Availability:* Our platform will point out people who are available and capable of implementing the projects offered by the clients. Besides it allows developer to developer interaction to form up potential IT developers' teams.
3. *Incrementation of work experience for amateurs & non-professionals:* It has been seen that professional IT companies mostly recruit experienced workers even among the fresh graduates. But it is clearly unusual for students to do part time IT jobs besides their mandatory academic education. Also, there are people from other departments who think of switching jobs at some points of their life after figuring out their interest in Developing industry. Thus, our platform is offering a welcoming environment for fresh starters.
4. *Preservation of Project Deal Histories:* We want to keep the data of the whole project that has been completed or proposed in one place so that later the developers can be tracked down to see calculate their work experience which will include reviews of the former clients they have worked for on their performances. Also, we can eradicate idea robbery as a project is already posted on this platform and someone else cannot claim the idea theirs other than the team affiliated.

Background Study

There exist several platforms that share the same idea as ours but are still not dedicated enough to eradicate the problems we have stated. And this is where our platform will differ from the existing platforms like LinkedIn, Glassdoor etc.

We believe for building an IT team all that is needed is ideas, will, interest and proper skills gained in however way.

AllyHub would provide greater and dedicated opportunities to interact with other developers from different sectors not necessarily professionally trained and experienced. And which is why our platform is named “Ally” concatenating with “Hub” in the first place meaning a platform where developers and clients can team up and work like allies. We want to bring together broad minds who are simply willing and necessarily dedicated to increase work experience that the profession IT industry is so concerned about.

Requirement Analysis

Functional Requirements:

1. *User Authentication:* To use our platform the user must sign up for an individual account using some basic information such as name, email, status as in he or she is a client or a developer, username and a password to their account. Later they will be able to login to their accounts using the credentials asked.
2. *User Panels:* A user can behave two ways. Whether they are clients or developers. Clients can explore developers lists, post project proposals and send deal requests to their desired developers. Developers can explore project proposals posted by the clients, can apply to contribute, can also post project proposals themselves and interact with other developers to team up and work together.
3. *Database:* For managing huge data, complex queries and for data integrity an SQL server will be there in backend process.
4. *Explore Bar:* It is to explore developers list by their names which will also include developer filtration according to their skills and interests such as Game Developer, Cyber Security expert, AI Architect etc.
5. *Posting Project Proposals:* This feature is applicable for both clients and developers so they can flexibly propose their ideas in a professional way.
6. *Payment Integration:* This feature allows the clients and developers to mutually come up with their working schedule and can set up payment likewise. If developers finish a particular work, then they will be paid automatically by our platform which amount was set up by the client.
7. *Handshaking Option:* It is a featured button that allows a client to send deal requests to their desired developers. In case a developer handshake back the deal is set. That particular developer is declared hired by the particular client in this way.
8. *Rating and Review Sections:* After completion of work by a team or a particular IT worker, clients can review their performances.
9. *Developers Work History:* This is a particular feature assigned to be in the developer's account that shows all the clients and their deals that developer has contributed to.

Non-Functional Requirements:

1. *Performance:* Our platform is expected to be responsive and quick providing a beginner-friendly and smoothly interactive interface.
2. *Security:* We are aware of data confidentiality. Our platform will provide robust security measures storing data in the database correctly.

3. *Compatibility*: To ensure consistent user experience the platform is expected to be compatible and responsive in various browsers and devices including smartphones, computers, tablets etc.
4. *Maintenance*: This is the most important requirement of all as maintenance and proper upgradation of our platform will reshape the future of our prime goals. Taking user reviews, debugging and solving the small leaks will make and keep this platform's performance top tier.

Feasibility Analysis

Technical Feasibility:

1. *Front-End*: We will be using C# programming language and ASP.NET MVC framework for the user interface. This will guarantee a strong and engaging user experience and smooth integration of different features of the platform.
2. *Back-End*: We will use a MySQL server to make sure data storage and retrieval are effective. This database management system provides the necessary scalability and reliability to manage the large volume of project data and user information on our platform.

Operational Feasibility:

1. *User Friendly*: Our system will focus on providing a user-friendly interface, ensuring that individuals of all skill levels can navigate and use it easily. This method guarantees that individuals who are not IT experts and novices can easily interact with the platform.
2. *Administrative Maintenance*: In order to maintain operational efficiency, our team will carry out regular debugging, upgrades, and security improvements. This proactive maintenance approach guarantees the platform stays operational and meets users' changing needs.

Economic Feasibility:

1. *Production Cost*: This includes the investments in the direct labor of the coders working initially for front-end and back-end coding of our platform to meet the satisfaction of functional requirements accomplishment.
2. *Maintenance Cost*: This is the annual fixed cost for administrative maintenance of our platform that includes the employees safeguarding all the non-functional requirements.
3. *Revenue Generation*: By implementing this project and by deploying it we will be able to generate some revenue and it will help us to maintain our website and also be able to get capital for other costs regarding this project.

Project GitHub Link

[ashikulislam/AllyHub: A Platform for developers to express and expand their skills \(github.com\)](https://github.com/ashikulislam/AllyHub)