



Freelancer Connect Empowering Opportunities in a GIG Economy

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Abstract: Online project outsourcing involves contracting third-party providers, often located overseas, to deliver products or services via the internet. This business process leverages outsourcing or freelancing marketplaces, which are crucial in connecting clients (small businesses and individuals) with service providers (freelance workers). These platforms facilitate the formation of relationships based on mutual needs and the professionalism and competence of both parties involved.

A freelancer, freelance worker, or "freelance" is someone who is self-employed and not committed to a long-term employer. Freelancers typically enjoy a wider variety of assignments compared to regular employment and have more freedom in choosing their work schedules, subject to the necessity of earning a regular income. However, freelancing comes with significant drawbacks, such as the uncertainty of work and income, and the lack of company benefits like provident fund (PF), health insurance, paid holidays, and bonuses.

Keywords: Freelancer Connect Empowering Opportunities in a GIG Economy, Freelancing marketplaces, Professionalism and competence, Regular income.

I. INTRODUCTION

Online project outsourcing involves contracting third-party providers, often located overseas, to supply products or services via the internet. Outsourcing or freelancing marketplaces play a pivotal role in connecting buyers of outsourced services (small businesses and individuals) with providers of outsourced services (freelance workers). These platforms enable freelancers and clients to form relationships based on mutual needs and the professionalism and competence of both parties.

A freelancer, freelance worker, or "freelance" is someone who is self-employed and not committed to a long-term employer. Freelancers generally enjoy a greater variety of assignments than those in regular employment and, subject to the need to earn a regular income, usually have more freedom to choose their work schedules. The major drawback is the uncertainty of work and income, and the lack of company benefits such as provident fund (PF), health insurance, paid holidays, and bonuses.

In traditional custom software development, clients typically must adhere to the software company's rules and regulations, with limited options to customize their requirements. Our project aims to overcome these disadvantages by directly connecting programmers and clients who need custom programming for their projects. This application connects programmers (software developers) with clients who need custom software development.

The system allows clients to outsource their projects by posting their requirements (e.g., custom software development) and enabling interested programmers to bid on these projects. Programmers can place bids and detail the work they can provide. Clients can then choose a programmer's bid, and the selected programmer will be notified via email.

We provide a smooth channel of communication between clients and programmers and facilitate quality service delivery through our custom management system. Clients receive instant bids and real-time cost estimates for their projects from freelancers and professional companies.

This system helps clients select the best company or professional for the job, manage time and money efficiently, and establish long-term relationships for future outsourcing needs.

II. SYSTEM ARCHITECTURE

In this below figure 1:

1. Company registration to avail this feature.
2. User registration to avail this feature.
3. Company post project details.
4. Project detail will be stored.
5. Based on the project requirements and freelancers skills email notification sent.
6. Freelancer bid the project considering time and budget.
7. Company select freelancer based on budget, time and ratings.
8. Company confirm the freelancer to proceed with project.

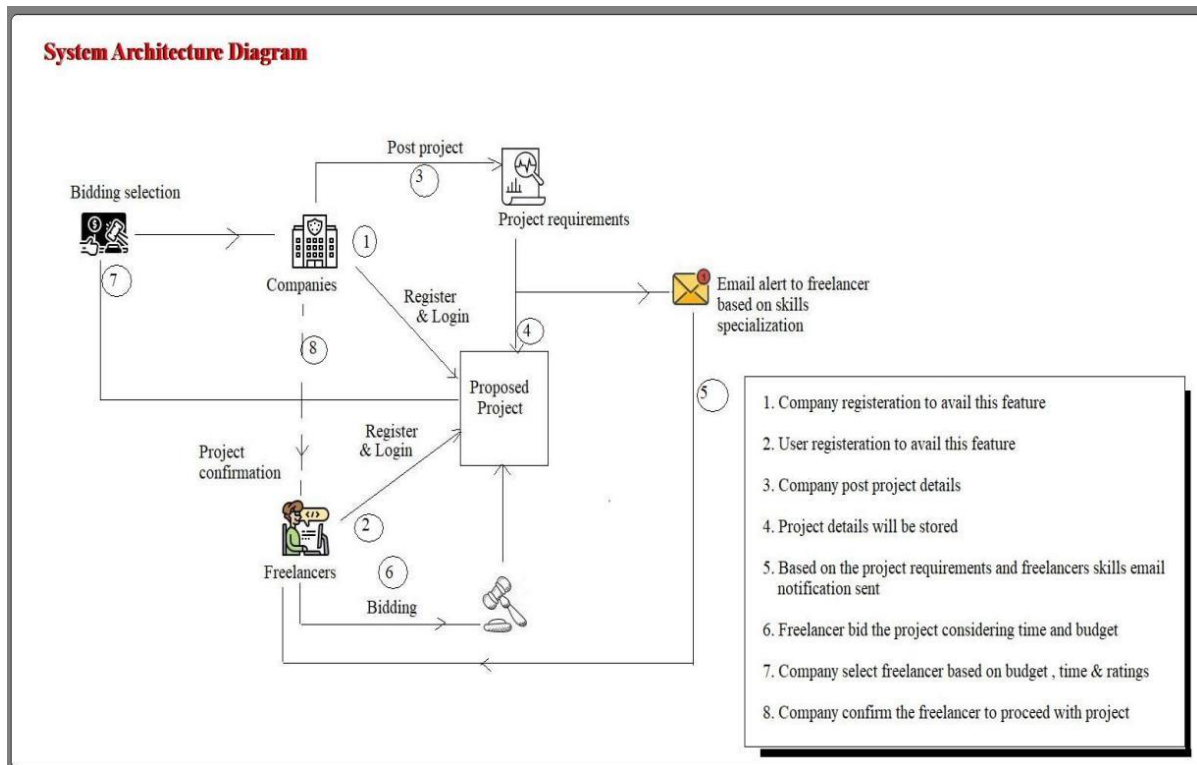


Figure 1: System Architecture

III. IMPLEMENTAION

This web application is implemented using an object-oriented programming (OOP) language. Object-oriented programming is an approach that modularization programs by creating partitioned memory areas for both data and functions, which can be used as templates for creating copies of these modules on demand.

Features of Object Oriented Paradigm:

- Emphasizes data over procedures.
- Divides programs into entities known as objects.
- Designs data structures to characterize the objects.
- Ties methods that operate on an object's data to the data structure itself.
- Enables objects to communicate with each other through methods.
- Allows for the easy addition of new data and methods as needed.
- Follows a bottom-up approach in program design.
- Hides data, preventing access by external functions..

This project is implemented using a three-tier architecture. The presentation layer uses ASP.NET, the business logic is handled by C# classes, the data tier utilizes TableAdapter, and the backend database is MS SQL Server 2005.

Process

Presentation Layer:

- Implemented using ASP.NET (front end).
- Invokes the business logic through events such as button clicks, page loads, or SelectedIndexChanged events of dropdown lists.

Business Logic:

- Contains class members and member functions.
- An object of the business logic class is created to invoke methods.
- The business logic object calls the TableAdapter methods.

Data Tier:

- **TableAdapter:** Opens the database connection and interacts with the SQL Server 2005 backend using SqlDataSource.
- Executes methods and returns results to the business logic.
- **DataSet:** Represents an in-memory cache of data.

Implementation Details

- The project uses a DataSet named "DL.xsd."
- The DataSet includes the following TableAdapters:
 - Admin_Login
 - FreeLancer_Registration
 - Client_Registration
 - Project_Details
 - Bidding
 - Mails
 - OutBox
 - FAQs
 - Question_Category

IV. FUTURE SCOPE

1. Programmers can place bids on projects using their cell phones.
2. By sending a specific keyword via SMS, programmers trigger the server to respond with a login page containing username and password fields.
3. After sending their credentials via SMS, programmers gain access to the home page upon successful authentication.
4. Programmers have the capability to view all projects stored in the database and submit bids using their cell phones.
5. Similarly, company users can access the page using the same SMS-based authentication method outlined above. Company user can send the username and password and the server responds once the authentication is done and the company user gets the Login page in his cell phone.

V. CONCLUSION

In conclusion, this project addresses the growing need for flexible and efficient project-based work arrangements by developing a platform that connects clients and freelancers globally. By offering a user-friendly interface for clients to post their project requirements and enabling freelancers to bid on these projects on their own terms, the platform promotes a dynamic and mutually beneficial freelance marketplace.

This system not only facilitates seamless communication and project management but also ensures that both parties can engage without long-term commitments, thereby enhancing flexibility and control. Ultimately, this project aims to create a more accessible, efficient, and productive environment for outsourcing custom software development and other freelance services.



REFERENCES

- [1]. N. Beerapoot, B. Lambregts. "Competition in online job marketplaces towards a global labour market for outsourcing services?" global networks. (2015).
- [2]. Tamara Lopez, et.al. "Security Responses in Software Development". (2021).
- [3]. Anastasia Danilova, Alena Naiakshina, Anna Rasgauski. "Code Reviewing as Methodology for Online Security Studies with Developers". (2021).
- [4]. Irum Rauf, Marian Petre, Thein Tun, Tamara Lopez. "Security Thinking in Online Freelance Software Development". (2023).
- [5]. Ryan, Ita;Stol, Klaas- jan; Roedig, Utz. "Studying secure coding in the laboratory: Why, What, Where, how and Who?". (2023).