# Integrated Job Posting, Bidding, and Social Media Platform

## Project Title

**Asaana**- This means "Easy", suggesting a place where digital support is made easy.

**Asaana** is an accessible Job Posting, Bidding, and Social Media Platform for Skilled Labor and Local Services

## Project Overview

**Asaana** is an innovative platform designed to bridge the gap between skilled laborers and potential clients. It integrates job posting, bidding features, and social media functionalities to cater to individuals with limited literacy levels. The platform aims to simplify the process of finding local jobs and services, making it accessible to plumbers, construction workers, event planners, cooks, drivers, and other blue-collar workers. Unlike existing platforms such as Fiverr and Upwork, which are focused on remote freelance work and are often complex to use, **Asaana** emphasizes ease of use and local engagement.

**Asaana** promises to be a game-changer in the job market, particularly for blue-collar workers and local service providers, making it easier for everyone to find and offer services, regardless of their literacy level.

## Objectives

* Simplify Job Posting and Seeking: Create an intuitive interface for job postings and applications, accessible to individuals with limited literacy.
* Enable Bidding on Local Services: Allow clients to post detailed bids for various local services, and contractors to bid on these projects.
* Integrate Social Media Features: Facilitate the sharing of job experiences, skill showcases, and community engagement through social media functionalities.
* Support for Remote and Local Jobs: Include opportunities for both remote freelance work (similar to Fiverr and Upwork) and local, in-person jobs.
* Enhance Communication: Implement voice messaging and video capabilities to aid users who may struggle with text-based communication.

## Key Features

### Job Posting and Seeking

* User-Friendly Interface: Simple navigation and straightforward job posting forms with minimal text requirements.
* Voice and Video Integration: Allow users to post job details and applications through voice messages and videos.
* Categorization of Jobs: Separate sections for different job types (e.g., blue-collar, freelance remote, etc.).

### Bidding System

* + Bid Posting: Clients can post bids for various services (e.g., home construction, event planning).
  + Bid Submission: Contractors can submit their bids, detailing their offers through text, voice, or video.

#### Examples of Biddable Services:

* House construction
* Plumbing repairs
* Event planning and management
* Catering services
* Transportation and driver services
* Landscaping and gardening
* Electrical work
* Home cleaning services
* And much more…..

### Social Media Platform

* Experience Sharing: Users can post about their job experiences, share tips, and showcase their work.
* Skill Development: Sections for users to share and learn new skills, enhancing their employability.
* Community Building: Foster a sense of community among users through group discussions and networking features.

### Communication Tools

* Voice Messaging: Enable users to communicate through voice messages for easier interaction.
* Video Messaging: Allow users to post job details and responses via video for better clarity.
* Chat Functionality: Real-time chat for quick and efficient communication between clients and contractors.

## Benefits and Impact

### Accessibility (Easy-to-use)

* User-Friendly Design: Tailored for individuals with limited literacy, ensuring ease of use and broad accessibility.
* Versatile ways of Communication: Voice and video features cater to users who may find text-based communication challenging.

### Local Engagement

* Empowering Local Workers: Provide a platform for local skilled laborers to find jobs and clients within their community.
* Strengthening Communities: Encourage community building and support through social media features.

### Versatility

* Diverse Job Opportunities: Cater to both local blue-collar jobs and remote freelance work, offering a wide range of opportunities.
* Comprehensive Services: Allow clients to find and hire contractors for various services, enhancing the platform’s utility.

## Project Plan

### Phase 1: Research and Planning

* Conduct market research to understand the needs of the target audience.
* Define detailed requirements and create wireframes for the platform.

### Phase 2: Design and Development

* Develop the user interface with a focus on simplicity and accessibility.
* Implement the job posting and bidding systems.
* Integrate voice and video messaging capabilities.

### Phase 3: Testing and Feedback

* Conduct usability testing with target users.
* Gather feedback and make necessary adjustments to the platform.

### Phase 4: Launch and Marketing

* Launch the platform with a targeted marketing campaign.
* Engage with community organizations to promote the platform.

### Phase 5: Maintenance and Updates

* Continuously monitor the platform for issues and user feedback.
* Implement regular updates to improve functionality and user experience.

## Feasibility

### Why current Job providing platforms are not for Everyone

* Reading and Understanding Ability
* Writing Skills
* Digital Literacy
* Job Search Literacy

## Challenges Faced by Pakistani Users with Limited Literacy in Online Job Applications

1. Language Barrier: Many online job platforms may predominantly use English leading to difficulty in understanding job descriptions, application forms, and communication with potential employers.
2. Navigational Challenges: Limited literacy may make it difficult for users to navigate through the online platform, search for relevant job listings, and complete the application process. Complex interfaces and terminology may further exacerbate this issue.
3. Understanding Job Requirements: Limited literacy can hinder the user's ability to comprehend job requirements, such as educational qualifications, skills, and experience, making it challenging to determine if they are eligible for certain positions.
4. Completing Application Forms: Filling out online application forms may be daunting for users with limited literacy, particularly if the forms require detailed information or responses to open-ended questions. This can lead to incomplete applications or errors in providing necessary details.
5. Communication Barriers: Limited literacy may impede effective communication with potential employers, including responding to inquiries, scheduling interviews, or discussing job-related matters via email or messaging platforms.

## Possible Actors

Job Seeker, Employer, Bidder, Contract Poster, Social media user.

## Subsystems

1. job board platform
2. bidding platform
3. Social media
4. auth
5. database

## Job-board

* Job Posting and job finding platform.
* Employers can post jobs and employees can apply for them.
* Employers can also find employees by searching for particular profession and the nearest available potential employees will show up in a map and the employer can choose between one of them.
* There will be an AI feature which help employers determine what employees of what profession will be needed for a particular work. For example, the employer can describe their work using voice or text and our AI agent will figure out what profession employees will be required to fulfill the work.
* It provides a safer way for employers to find reliable freelance employees because employees registered with us will have a record in our system and in case of mishaps, employers can easily find basic information about employees. It also provides a safe work environment for freelance skillful labours.

## Technology Stack

Express, React, MongoDB, Nodejs

## USE CASES

### LOGIN (UC-0001)

Created By: Khurshid Khan

Date of Creation: 7-3-2024

Last Updated By/Update Date: Aftab Alam/15-07-2024

#### Description:

* **Primary Actor:** User
* **Scope:** Auth Service
* **Level:** System Level

Preconditions: The user must have a registered account on the website.

#### Main Success Scenario:

1. User opens the website in a search engine.
2. User navigates to the login page.
3. User enters their valid email/phoneNo/username (identity) into the designated field.
4. User enters their valid password into the designated field.
5. User clicks on the "Login" button.
6. The system checks whether there is a user account with the given identity.
7. If account exists, then the system hashes the provided password and compares it with the hashed password corresponding to the found account.
8. If the password matched, then the system will generate a JSON Web Token (jwt) and save it in the user’s cookies.
9. The next time the user visits a url, system will authenticate the user by verifying their jwt token.

#### Postconditions:

1. The user is successfully logged into the website.
2. The user is directed to the home page after successful login.

#### Alternative Flows:

If the email entered by the user is not valid:

1. The system prompts an error message indicating an invalid email format.
2. The user is instructed to enter a valid email.

If the password entered by the user is incorrect:

1. The system prompts an error message indicating an invalid password.
2. The user is instructed to enter the correct password.

#### Exceptions

If the user forgets their password:

1. User clicks on the "Forgot Password?" link.
2. User is redirected to the password recovery/reset page.
3. User enters their email address on the password recovery page.
4. If the email exists in the system, a password reset link is sent to the user's email.
5. User follows the instructions in the email to reset their password.

### REGISTER (UC-0002)

Created By: Khurshid Khan

Date of Creation: 11-3-2024

Last Updated By/Update Date: Aftab Alam/30-05-2024

#### Description:

* **Primary Actor:** User
* **Scope:** Auth Service
* **Level:** System Level

Preconditions: User should have a form of contact either email or phone but it’s not mandatory.

#### Main Success Scenario:

1. User opens the web-based interface on their device.
2. User selects the option to register for a new account.
3. User enters their full name, phone number or email, and profession in the designated fields.
4. User enters their desired password in the password field.
5. User submits the registration form by clicking the "Sign Up" button.
6. The client-side interface validates the form inputs and then submits it to the system.
7. System also validates the user's input.
8. If the input is in right format, then the system checks whether another user is registered with the given email/username/phoneNo (identity).
9. If these is no any other user with the provided identity, then password will be hashed and saved along with the identity.
10. The user will be signed in by generating JSON Web Token (jwt) and saving it in client-side cookies. The next time the user visits, he/she should not have to login again. They will be authenticated with jwt token stored in cookies.
11. The user is redirected to home screen or whatever screen the user was trying to access

#### Postconditions:

1. The user's account is successfully created.
2. The user is logged into the app after successful registration.

#### Exceptions:

If the phone number or email provided by the user is not in the correct format

1. The system prompts an error message indicating that the phone number or email format is incorrect.
2. User is instructed to enter the phone number or email in the correct format.

If a person with the given identity is already registered:

1. The user will be instructed to login if the provided identity belongs to them or use a different identity for registration.

### APPLY FOR JOB

### POST A JOB

### SEARCH

### BROWSE THROUGH FEED

### CHAT

### LIKE

### COMMENT

### POST AN UPDATE TO SOCIAL MEDIA

### ASSET LISTING FOR BIDDING

### SUBMIT A BID

# Dictionary

|  |  |  |
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|  |  |  |
|  | Employer | The person who is posting a job and hiring job seekers relevant to the job. |
|  | Job Seeker | The person who is applying for a job. |
|  | Use Case: Scope | Represents the subsystem or module within the larger system to which the use case belongs.   1. Job Board Platform 2. Contract Bidding Platform 3. Social media |
|  | Use Case: Level | Represents the level of abstraction or detail of the use case.   1. **Summary Level:** Provides a high-level overview of the use case without delving into detailed steps or interactions. 2. **User Goal Level:** Describes the primary goal or objective of the use case from the perspective of the user or actor involved. 3. **Subfunction Level**: Breaks down the use case into smaller subfunctions or steps, offering more detail than the summary level but not as detailed as individual steps. 4. **System Level:** Focuses on interactions between the user and the system, detailing the specific actions taken by both parties to accomplish the use case. 5. **Detailed Level:** Provides a comprehensive and step-by-step description of each action and interaction within the use case, including inputs, outputs, and error conditions. |
|  | Frequency of Use | The frequency of use in the context of a system or application refers to how often it is utilized by users within a specific timeframe.  Understanding the frequency of use is essential for various reasons:   1. **User Engagement**: It helps measure the level of user engagement with the system. Higher frequency of use typically indicates that users find the system valuable and are actively using it to accomplish their goals. 2. **Usage Patterns:** Analyzing the frequency of use can reveal patterns in user behavior, such as peak usage times, recurring tasks, or popular features. This information can be valuable for optimizing the system's design, performance, and resource allocation. 3. **Feature Prioritization:** It assists in prioritizing features or functionalities based on their usage frequency. Features that are used frequently by a large number of users may receive more attention in terms of improvements or enhancements. 4. **User Satisfaction:** The frequency of use can serve as an indicator of user satisfaction. If users are using the system regularly, it may suggest that they are satisfied with its performance and find it useful. 5. **ROI Assessment:** For businesses or organizations, understanding the frequency of use can help assess the return on investment (ROI) of the system. Systems that are used frequently and contribute to achieving business goals are likely to have a higher ROI. 6. **Resource Planning:** It aids in resource planning and management, including server capacity, bandwidth, and support resources. Systems with high frequency of use may require additional resources to ensure optimal performance and user experience. |
|  | Feature Listing | A featured listing on a job board platform refers to a job posting that is given special prominence or visibility compared to regular postings. Typically, featured listings are displayed more prominently on the job board's website or search results page. They may appear at the top of search results, highlighted with a different color or design, or accompanied by additional promotional features such as logos or banners.  Employers or recruiters often opt for featured listings to attract more attention to their job openings and increase the likelihood of finding qualified candidates. This enhanced visibility can result in a higher number of views and applications for the featured job posting compared to regular listings. |
|  | Auction Terminalogies | **Bid**: An offer made by a bidder to buy or acquire something, such as an item, service, or contract, at a specified price.  **Bidder**: A person, company, or entity that submits bids or offers in an auction or bidding process.  **Auction**: A public sale in which goods, services, or properties are sold to the highest bidder.  **Auctioneer**: The person or entity conducting the auction, responsible for announcing items for sale, accepting bids, and declaring the winning bidder.  **Starting Bid:** The initial price set by the auctioneer to begin the bidding process for an item.  **Reserve Price:** The minimum price that the seller is willing to accept for an item in an auction. If the bidding does not reach this price, the item may not be sold.  **Minimum Bid Increment:** The minimum amount by which a bid must be raised in order to be considered valid. It ensures that bids increase gradually during the auction.  **Proxy Bid:** A bid submitted by a bidder to automatically increase their bid up to a specified maximum amount if competing bids are received.  **Winning Bid:** The highest bid placed on an item before the auction closes, determining the successful bidder who will acquire the item.  **Bid Closing:** The end of the bidding period, after which no further bids will be accepted, and the winning bidder is determined.  **Bid Increment:** The predetermined amount by which bids must be increased during the bidding process.  **Live Auction:** An auction conducted in real-time, where bidders physically attend the auction event and place bids in person.  **Online Auction:** An auction conducted over the internet, where bidders submit bids electronically through a bidding platform or website.  **Silent Auction:** An auction where bids are submitted privately and anonymously, typically on written forms, often used for fundraising events. |