

Project 27: JBook- Social Network System for Job Placement

Project Brief & Business Problem Specifications:

You will design an online system that links potential candidates with employers for this project. It is a social networking site where users may speak with one another and find appropriate solutions. On social media, you can find inspiration (LinkedIn, Facebook, and the like). Because Facebook is developed in PHP, you can easily duplicate some of its features. Recruiters would be able to publish job openings, along with their descriptions and other information, on the platform. To function properly this PHP project topic, the system would require the following features:

- A portal where a person can sign up to join the network
- An ability to respond to posts, allowing users to express themselves by comments or other means (such as 'Likes').
- Possibility to upload photos
- The administrator would be in charge of authorising users to create accounts on the platform.
- A talking system that allows one person to communicate with another.

System Modules Requirements

The application should consist of following components:

User Registration and Authentication

- User sign-up (job seekers, employers, admins)
- Email/phone verification
- Login/logout
- Password reset/change

User Profile Management

- Job seeker profile (resume/CV upload, skills, experience, education)
- Employer profile (company details, logo, website)

- Profile privacy settings

Job Posting Management

- Employer job posting
- Job editing and removal
- Job post approval (admin moderation)
- Expiry and archiving of old jobs

Job Search and Filtering

- Search by title, location, company, salary
- Advanced filters (industry, experience level, employment type)
- Saved searches

Job Application Management

- Apply to jobs
- Track application status
- Employer view of applicants
- Messaging between employer and applicant

Social Networking Features

- Connect with other users
- Follow companies or professionals
- News feed (posts, shares, likes, comments)
- Groups or communities by industry or interests

Notifications and Alerts

- Email and in-app notifications
- Job match alerts
- Application updates
- Connection requests

Admin Dashboard

- User management
- Job post moderation
- Content reporting and abuse management

- Analytics and reporting

Resume Builder / Profile Enhancer

- Templates for CV
- Suggestions for profile improvements
- Automatic parsing of uploaded resumes

Employer Dashboard

- Manage company profile
- Post and manage jobs
- Review and shortlist candidates
- View applicant analytics

Chat and Messaging System

- Real-time or asynchronous messaging
- Employer–applicant messaging
- Connection-based messaging (network contacts)

Recommendation System

- Recommended jobs for seekers
- Recommended candidates for employers
- Suggested connections

Analytics and Reporting

- User activity tracking
- Job application statistics
- Employer hiring metrics

Content Management System (CMS)

- Manage static pages (About, Help, T&Cs)
- Blog/news section

Help and Support

- FAQs
- Contact form or live chat
- Ticketing system for issues

User Modules (User Frontend):

Developers need to research and discuss with the client to finalise the modules and requirements.

UI Design

User Interface Design is concerned with the dialogue between a user and the computer. It is concerned with everything from starting the system or logging into the system to the eventually presentation of desired inputs and outputs. The overall flow of screens and messages is called a dialogue.

UI Design Requirements

1. The system user should always be aware of what to do next.
2. The screen should be formatted so that various types of information, instructions and messages always appear in the same general display area.
3. Message, instructions or information should be displayed long enough to allow the system user to read them.
4. Use display attributes sparingly.
5. Default values for fields and answers to be entered by the user should be specified.
6. A user should not be allowed to proceed without correcting an error.
7. The system user should never get an operating system message or fatal error.

The aim of proposed system is to develop a system of improved facilities.
The proposed system can overcome all the limitations of the existing system.
The system provides proper security and reduces the manual work.

- Security of data.
- Ensure data accuracy's
- Proper control of the higher officials.
- Minimize manual data entry.
- Minimum time needed for the various processing.
- Greater efficiency.
- Better service.
- User friendliness and interactive.
- Minimum time required.

Functional Requirements:

User Registration and Authentication

- User registration for Job Seekers, Employers, and Admins
- Email or phone verification during sign-up
- Secure login and logout
- Password reset via email

User Profile Management

- Creation and editing of Job Seeker profiles (education, experience, skills)
- Employer company profiles with logo, description, website
- Upload and update of profile pictures and documents (e.g. resume/CV)
- Privacy settings for controlling profile visibility

Job Posting Management

- Employer creation, editing, and deletion of job posts
- Admin moderation and approval of job posts
- Automatic archiving or expiry of job posts

Job Search and Filtering

- Keyword search by title, location, company, salary range
- Advanced filtering (industry, experience level, employment type)
- Saving of search queries for reuse

Job Application Management

- Job Seekers applying for jobs
- Tracking of submitted applications

- Employers viewing and managing applicants
- Notifications for application status updates

Social Networking Features

- Sending and accepting connection requests
- Following companies and professionals
- News feed with posts, shares, likes, comments
- Creation of groups or communities based on interests or industries

Notifications and Alerts

- Email and in-app notifications for job matches, messages, application updates
- Customisable notification preferences

Admin Dashboard

- User account management and moderation
- Job post approval or rejection
- Reviewing reported content
- Usage and analytics reporting

Resume Builder / Profile Enhancer

- CV creation using built-in templates
- Suggestions for improving profile completeness
- Parsing of uploaded resumes to auto-fill fields

Employer Dashboard

- Company profile management
- Viewing and managing posted jobs
- Shortlisting, contacting, and tracking applicants
- Analytics on post views and applicant sources

Chat and Messaging System

- Messaging between job seekers and employers
- Messaging between connected users
- Storage and retrieval of message history

Recommendation System

- Job recommendations for seekers based on profile and activity
- Candidate suggestions for employers based on job criteria
- Professional connection suggestions

Analytics and Reporting

- Tracking of user activity (logins, applications, posts)
- Reports on job posting performance for employers
- Usage statistics for admin monitoring

Payment and Subscription Management

- Purchase of premium features by employers
- Profile boosting options for job seekers
- Integration with payment gateways
- Tracking of subscription status and expiry

Content Management System (CMS)

- Management of static content pages
- Creation and editing of news/blog articles
- Updates to help, terms, and privacy policies

Non-Functional Requirements

Performance

- Average page load time under 2 seconds
- Support for at least 10,000 users
- Fast response times for searches and job applications

Scalability

- Ability to handle growing numbers of users, employers, and job posts
- Support for horizontal scaling of servers as needed
- Modular architecture to allow easy addition of new features

Availability

- Minimum uptime of 99.5%, excluding scheduled maintenance
- Automatic failover in case of server failure
- Redundant server infrastructure for high availability

Reliability

- Consistent delivery of services without crashes
- Reliable storage and retrieval of user data
- Graceful error handling with informative messages

Maintainability

- Modular, well-documented codebase
- Adherence to coding standards for clarity and consistency
- Ease of updating or adding new features

Security

- Encrypted storage of sensitive data (e.g. passwords hashed with bcrypt)
- HTTPS enforced for all communications
- Input validation to prevent SQL injection and XSS attacks
- Role-based access control for admin and employer features

Data Privacy

- User consent for data collection and usage
- Ability for users to delete their accounts and data

Usability

- Intuitive user interface for all user types
- Responsive design for mobile and desktop devices
- Accessibility features for users with disabilities

Compatibility

- Support for major browsers (Chrome, Firefox, Safari, Edge)
- Mobile-friendly design for multiple screen sizes

Audit and Logging

- Logging of critical user actions (login attempts, job postings)
- Audit trails for admin activities
- Secure storage of logs with restricted access

Hardware Requirement: Should be recommended by the developers.

Software Requirement: Should be recommended by the developers.