**Une image contenant Police, Graphique, logo, graphisme

Description générée automatiquement CoConsult**

**Issue:**

Effectively managing the ambitious scope of the ERP project necessitates a strategic approach to prioritization, aiming to avoid resource constraints and feature overload. In this context, project managers need to conduct a thorough analysis of user needs and project objectives, engaging stakeholders to identify essential functionalities. This involves understanding the operational priorities and specific challenges faced by digital service companies, consulting firms, and engineering entities. How can project managers establish an iterative process of user and stakeholder consultation, fostering a continuous understanding of evolving needs and enabling a phased implementation that aligns with shifting user expectations and project goals, all while promoting creativity and innovation in the development process?

**Functional requirements:**

1. User and Profile Management:

User Accounts:

* + As an admin, I create, edit, and deactivate user accounts for all types of users (HR, Sales, Project Managers, Consultants).
  + As an admin or a HR, I define user roles and permissions for access control based on functionalities.
  + As an admin I implement single sign-on (SSO) integration with existing corporate systems.

Profiles:

* + As an admin I should allow users to update their own profile information.
  + As an admin I should integrate with HR module for employee data synchronization.

2. Recruitment and HR Activity:

Application Management:

* + As a hr, I can post job openings with detailed descriptions and requirements.
  + As a user, I receive and manage applications electronically.

Employee Profiles:

* + As a hr, I can maintain complete employee profiles with personal details, job history, skills, achievements, and salary information.
  + As a hr, I can track career goals, training records, and certifications.

Leave and Absence Tracking:

* + As an employee, I canrequest and manage leaves (vacation, sick leave, etc.) via the platform.
  + As a manager, I can approve or deny leave requests electronically.

Performance Tracking:

* + As an admin I should, Implement a performance evaluation system with customizable templates and goals.

**3. Commercial Management & CRM:**

Prospects and Clients Tracking:

* + As a CRM manager or team, I can create and manage prospect profiles with contact information, sales stages, and communication history.
  + As a CRM manager or team, I can segment clients based on industry, project types, and other criteria.
  + As a CRM manager I can manage the CRM team.

Commercial Opportunities Management.

Contract Management:

* + As a CRM manager or team, I can create and manage contracts with clients electronically.
  + As a CRM manager or team, I can track contract milestones and expiration dates.

Quote Creation, Invoice Tracking, and Payment Monitoring:

* + As a CRM manager or team, I can generate professional quotes based on client requirements and project specifications.
  + As a customer, I can issue invoices electronically and track payment status.
  + As a CRM manager or team, I can generate reports on sales performance, revenue, and profitability.

4. Consultant Activity (Time, Expenses & Absences):

Time Recording:

* + As an admin I should allow consultants to track their time spent on different projects and tasks.
  + As an admin I should integrate with project management tools for accurate time logging.
  + As a consultant I can generate reports on individual and team productivity.

Expense Entry and Tracking:

* + As an admin I should allow consultants to submit expense reports with receipts and categories.
  + As an admin I should implement approval workflows for expense claims.
  + As a hr I can track and manage consultant budgets.

Absence Tracking:

* + As an admin I should allow consultants to request and manage absences (sick leave, vacation, etc.) via the platform.
  + As an admin I should Integrate absence data with project calendars and resource planning.

5. Instant Messaging:

* As an admin I should implement a secure and reliable instant messaging system for internal communication.
* As an admin I should integrate with user profiles and project teams for enhanced collaboration.
* As an admin I should enable file sharing and group chat functionality.

**Non-functional requirements:**

1. **Security**:
   * **User Authentication**: Implement robust role-based user authentication for HR managers, employees, and candidates.
   * **Encryption of Sensitive Data**: Sensitive information such as financial data, personally identifiable information (PII), and performance evaluations must be encrypted during transmission and storage.
   * **Role-Based Access Control**: Use role-based access controls to limit access to sensitive functionalities such as salary management, performance evaluations, and personal data.
   * **Regular Security Audits**: Schedule regular security audits and penetration testing to identify and rectify potential vulnerabilities.
2. **Usability**:
   * **Intuitive User Interface**: Design a user-friendly and intuitive interface to facilitate navigation and use of the platform by HR managers, employees, and candidates.
   * **Multilingual Support and Accessibility**: Incorporate multilingual features and accessibility options (screen reader compatibility, etc.) to cater to the needs of international and diverse users.
3. **Maintainability**:
   * **Comprehensive Documentation**: Provide comprehensive documentation for HR developers and administrators, including inline code comments and detailed usage guides.
   * **Modular Design**: Implement a modular design of the HR platform to facilitate maintenance, updates, and addition of new features without disrupting the entire system.
   * **Use of Git**: Utilize a version control system such as Git to manage source code changes, facilitate collaboration among developers, and ensure traceability of changes made.

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Description générée automatiquement**

**Study of the existing:**

In this preliminary examination, we explore examples of established ERP systems that cater to similar business needs across various industries. These examples, such as SAP S/4HANA, Microsoft Dynamics 365, Oracle ERP Cloud, Workday, and NetSuite, provide insights into both the advantages and disadvantages of existing solutions.

1. **SAP S/4HANA:**
   * **Advantages:**
     + Comprehensive suite covering various business functions.
     + Advanced analytics and reporting capabilities.
   * **Disadvantages:**
     + High implementation costs and resource requirements.
     + Complex customization may require specialized expertise.
2. **Microsoft Dynamics 365:**
   * **Advantages:**
     + Integration with Microsoft productivity tools.
     + Scalable for small to large enterprises.
   * **Disadvantages:**
     + Cost may be a barrier for smaller businesses.
     + Customization can be complex and may require technical expertise.
3. **Oracle ERP Cloud:**
   * **Advantages:**
     + End-to-end business process support.
     + Robust financial management capabilities.
   * **Disadvantages:**
     + High initial costs and potential ongoing fees.
     + Implementation can be time-consuming.
4. **Workday:**
   * **Advantages:**
     + User-friendly interface.
     + Cloud-based, offering flexibility and scalability.
   * **Disadvantages:**
     + May not be as feature-rich for certain industries.
     + Continuous updates may disrupt existing processes.
5. **NetSuite:**
   * **Advantages:**
     + Cloud-based ERP with a unified suite.
     + Strong financial management capabilities.
   * **Disadvantages:**
     + Cost can be a concern for smaller businesses.
     + Customization may require technical expertise.

**Task repartition :**

**Ala's tasks:**

* User management:
* Presence tracking (id, date, hour, number of hours)
* User data (id, username, password, email, phone, department, role, profile picture, position)
* Enumeration (HR, employee, consultant, admin, customer, CRM manager, project manager)
* Authentication
* Sign up
* Messenger functionality:
* Communication in groups (department) Private messaging Messaging all users Ability to share messages and files
* Message(id, contenu, receiver, sender)

**Houssemeddine's tasks:**

* Consultant management
* Adding reports (project name, date, consultant name, description)
* Task management (id, description, priority, status, consultant id, number of hours)
* Calendar
* Meetings (id, user id, date, subject, participants, notes)
* Trainings (id, name, duration, date, description, consultant name)

**Hassan's tasks:**

* Payments
* CRM management:
* Contracts (id, start date, end date, description, project id, amount)
* Invoices (id, customer id, date, amount)
* Tasks (id, description, recipient, status, priority)
* Salaries (user id, salary, bonus)

**Sarra's tasks:**

* Performance management:
* Performance data (id, employee id, number of hours)
* Contract management:
* Contracts (id, type, start date, end date, salary, department id)
* Department management:
* Departments (id, manager name, employee list)
* Leave management:
* Leaves (id, type, start date, end date)

**Houssem's tasks:**

* Recruitment management:
* Job offers (id, job name, description, expiration date, number of positions, number of applicants)
* Job applications (id, name, email, phone, CV, date)
* Interviews (id, date, description, applicant email)
* Project management:
* Projects (id, name, details, date, employee list)

1. **Automated CV Analysis**:
   * **Spring Boot**: Utilizes Java libraries to extract and analyze data from CVs.
   * **Angular**: Displays key skills and relevant information extracted from CVs in the user interface.
2. **Advanced Interview Management**:
   * **Spring Boot**: Creates RESTful APIs to schedule, organize, and record interview details.
   * **Angular**: Provides an interactive user interface to display interview schedules, send reminders, and provide interview feedback.
3. **Integration of Video Conferencing Systems**:
   * **Spring Boot**: Integrates with third-party video conferencing services via APIs.
   * **Angular**: Develops components to initiate and manage virtual meetings directly from the user interface.
4. **Advanced Project Management**:
   * **Spring Boot**: Develops services to manage project planning, collaboration, and tracking.
   * **Angular**: Creates a user interface to display tasks, deadlines, team members, and project dashboards.