Industrial conclave & Innovative products showcase

Software Requirements, Specification for Innovation& Industry On Campus Management Web Application

1. Introduction

1.1 Purpose

Minimum basic requirements for the development of a web application that manages various aspects related to innovation and industry collaboration. The key functionalities include Participants Registration, Industry Registration, Idea Pitching, Industry On Campus Units Registration and Product Details, Monthly Programs and Photo Gallery, PDF Reports Generation Facility, Dashboard for Industry On Campus, Young Innovators Programme, and IEDC Activities.

1.2 Scope

The web application will serve as a platform for managing and facilitating the following activities:

- Participants Registration
- Industry Registration
- Idea Pitching
- Industry On Campus Units Registration and Product Details
- Monthly Programs and Photo Gallery
- PDF Reports Generation Facility
- Dashboard for Industry On Campus, Young Innovators Programme, and IEDC Activities

2. Functional Requirements

2.1 Participants Registration

Users shall be able to register as participants by providing necessary details.

The system shall validate participant information via gmail/OTP verification and store it securely.two-factor authentication

Participants shall be able to update their profiles, Change passwords, ask questions etc

2.2 Industry Registration

Industries shall have the capability to register on the platform.

Industry registration shall require submission of company details, contact information, and collaboration interests.

The system shall validate industry registration information. And updated only after admin approval

2.3 Idea Pitching

Participants shall be able to submit innovative ideas.

The system shall capture and store idea details, including description and potential impact Which can be accessed by admins only.

Idea submissions shall be associated with the respective participants

2.4 Industry On Campus Units Registration and Product Details

Students/ Institutions shall register Industry On Campus units.

Industries shall register Industry On-campus units.

Registration shall include unit details and product information. Type of collaboration associating industry details etc

Product details shall include name, description, and relevant documentation.

2.5 Monthly Programs and Photo Gallery

Admins shall be able to create, announce and manage monthly programs/events.

The system shall support the upload and display of event photos in a gallery format.

2.6 PDF/Excel Reports Generation Facility

The system shall generate monthly and yearly reports in PDF format.

Registration forms, Survey responses, and results

Reports shall include summaries of participant registrations, industry collaborations, idea submissions, and program attendance.

2.7 Dashboard for Industry On Campus, Young Innovators Programme, and IEDC Activities

The dashboard shall provide a visual representation of key metrics related to industry collaborations, young innovators' programs, and IEDC activities.

Users with appropriate roles shall have access to specific dashboards.

2.8. Shared functional understanding, Chat platform

2.8.1. User Authentication

Specify requirements for user authentication, including login/logout procedures, password policies, and account management.

2.8.2 User Roles

Define different user roles (e.g., administrators, moderators, regular users) and their corresponding permissions.

2.8.3 Chat Functionality

Detail the features of the chat platform, such as real-time messaging, multimedia sharing, and message editing/deletion.

2.8.4 Notification System

Specify how users will be notified about new messages, updates, and important events within the platform.

2.8.5 Search and Filter

Describe the search and filtering capabilities to allow users to find specific messages or conversations.

2.8.6 Integration with Other Systems

Specify any integration requirements with existing systems on campus.

3. Non-Functional Requirements

3.1 Performance

The system shall support a minimum of 5000 registered users.

Response time for most actions shall be within 3 seconds.

3.2 Security

User authentication shall be securely implemented.

Access to sensitive information (e.g., idea details, industry registration) shall be restricted based on user roles.

3.3 Usability

The user interface shall be intuitive and accessible.

The system shall provide appropriate feedback and guidance for form submissions.

4. Constraints

4.1. Technological Constraints

4.1.1. Compatibility: Ensure compatibility with various browsers, devices, and operating systems commonly used on the campus.

Integration: Consider existing systems and technologies in use on the campus that the web app needs to integrate with.

4.2. Infrastructure Constraints

Network Bandwidth: Take into account the available network bandwidth on the campus, as this can impact the performance of the web app.

Server Resources: Consider the limitations of server resources, such as processing power, storage, and memory.

4.3. Security Constraints

Data Security: Adhere to security standards and regulations to protect sensitive data. Implement secure authentication and authorization mechanisms.

Compliance: Ensure the web app complies with industry and campus security policies, regulations, and standards.

4.4. User Constraints

User Skills: Consider the technical skills and knowledge of the users. Design the interface to be user-friendly and accessible to a diverse audience.

Training: If necessary, account for the need for training sessions to familiarize users with the web app.

4.5. Legal and Regulatory Constraints

Data Privacy: Comply with data protection laws and regulations, ensuring that user data is handled and stored appropriately.

Accessibility: Ensure the web app meets accessibility standards to accommodate users with disabilities.

4.6. Budget and Resource Constraints

Financial Resources: Work within the allocated budget for the development, maintenance, and support of the web app.

Human Resources: Consider the availability and expertise of the development and support teams.

4.7. Time Constraints

Development Timeframe: Adhere to project timelines and deadlines for the delivery of the web app.

Maintenance Window: Plan for maintenance periods and updates without disrupting critical operations.

4.8. Scalability Constraints

Scalability Requirements: Consider the potential growth of users and data. Ensure the web app can scale horizontally or vertically as needed.

4.9. Performance Constraints

Response Time: Define acceptable response times for various actions within the web app.

Load Balancing: Implement load balancing mechanisms to distribute traffic efficiently.

The system shall be compatible with major web browsers (Chrome, Firefox, Bing) etc and with mobile view facility.