

Project Title: Knowledge Sharing Platform for Faculty Members

Problem Statement:

Educational institutions are continuously encouraging their faculty members to attend various workshops, Faculty Development Programs (FDPs), and conferences to enhance their expertise in emerging technologies. After attending these professional development programs, faculty members are required to share the knowledge and resources they have acquired with their colleagues. This knowledge-sharing process should be facilitated through an online platform.

Objective:

The goal is to develop an online platform that enables faculty members to upload, share, and access resources gained from workshops, FDPs, and conferences. The platform will allow users to upload various types of knowledge resources such as PowerPoint presentations (PPT), videos, and PDFs. Additionally, the platform will include a review and approval process where resources are initially uploaded in a deactivated state and require approval from a supervisor or department head before becoming publicly accessible.

Key Features and Requirements:

1. Faculty Member Signup:

- Provide a simple sign-up portal that supports Single Sign-On (SSO) using Google or other email services.
- Users will need to register and authenticate to gain access to the platform.

2. Event Information Submission:

- Upon registration, faculty members can input the following event details:
 - Event Name
 - Start and End Dates
 - Organized By
 - Title and Type of Event (e.g., FDP, Workshop, Conference)
 - Keywords related to the event

- Faculty members can also upload multiple resources such as PPTs, videos, and PDFs related to the event.

3. **Resource Status Management:**

- Uploaded resources will be in a **deactivated** status by default.
- Resources can only be activated after being reviewed and approved by a supervisor or department head.
- Supervisors will be able to view and approve the content, changing the status from **deactivated** to **activated**.

4. **Approval Workflow:**

- Resources will undergo a review process by supervisors before being made available to other faculty members.
- Supervisors can approve or reject the resources. Upon approval, resources will be accessible to all users on the platform.

5. **Resource Analytics:**

- The platform will track and display how many times each resource has been accessed by faculty members.
- This feature provides insight into the popularity and usefulness of the shared resources.

6. **Resource Search:**

- Faculty members will be able to search for resources using keywords related to the event or resource.
- The platform will display the search results with pagination to enhance usability, showing only relevant results based on the search query.

7. **Pagination:**

- For ease of browsing, search results will be displayed with pagination to prevent information overload and improve user experience.

Technology Stack:

- **Frontend:**

- **AngularJS:** For building the dynamic, user-friendly interface.
- **CSS Framework:** To ensure the platform is responsive and provides a modern look and feel.
- **Backend:**
 - **ASP.NET Framework with C#:** For building a RESTful API to handle backend operations such as user authentication, resource uploads, and approvals.
 - **Dapper ORM:** A lightweight ORM for efficient database interactions, providing a fast and minimal overhead solution for accessing the database.
- **Database:**
 - **MySQL/Oracle:** For storing and managing the platform's data, including user details, event information, resources, and access logs.