

FACULTY RECOMMENDER SYSTEM

USER REQUIREMENT SPECIFICATION

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1. Introduction

Purpose of the Project: The purpose of this project is to develop a comprehensive Database Management System (DBMS) for an educational institution, which will facilitate the management of teacher, student, course, team, department, domain, project, and paper records.

Scope of the Project: The scope of this project includes the design and implementation of a DBMS to manage various aspects of the educational institution's data. It encompasses user management, course management, team formation, department management, domain categorization, project tracking, and paper publication tracking.

2. Project Description

Project Overview: The project involves creating a DBMS that will streamline and optimize data management processes within the educational institution. It will provide a centralized platform for administrators, teachers, and students to access, update, and analyze data related to teachers, students, courses, teams, departments, domains, projects, and papers.

Major Project Functionalities: ->The major functionalities of the DBMS project include:

- >User management for teachers and students.
- >Course management, including course creation and assignment to departments.
- >Team formation for collaborative projects.
- >Department management for organizational structure.
- >Domain categorization for projects and papers.
- >Project tracking, including ongoing and finished projects.
- >Paper publication tracking with authors and publication dates.

3. System Features and Function Requirements

System Feature 1: User Management

Description of Feature: The system should allow administrators to add, modify, and delete teacher and student records.

Functional Requirements:

- >Users must have unique IDs.
- >Teachers' records should include contact information, department, room number, domain, educational qualifications, years of teaching, and work experience.
- >Students' records should include registration numbers, section, email, and CGPA.

System Feature 2: Course Management

Description of Feature: The system should enable administrators to manage course information.

Functional Requirements:

- >Courses should have unique IDs, names, and be assigned to specific departments.
- >An anchor should be designated for each course.

System Feature 3: Team Management

Description of Feature: The system should handle team formation for collaborative projects.

Functional Requirements:

- >Teams should be assigned unique IDs and should have member lists.
- >Each team should be associated with a project, team leader, mentor, and maximum number of members.
- >Teams can have an active or dead status.

System Feature 4: Department Management

Description of Feature: The system should define and manage departments.

- >Functional Requirements:
- >Departments should have unique IDs, names, Heads of
- >Department (HODs), and locations.

System Feature 5: Domain Management

Description of Feature: The system should categorize domains.

Functional Requirements:

->Domains should be assigned unique IDs and names, and each domain should be linked to a department.

System Feature 6: Project Management

Description of Feature: The system should track projects.

Functional Requirements:

->Projects should be identified by unique IDs and have titles.

Each project should be associated with a domain and marked with ongoing or finished status.

System Feature 7: Paper Management

Description of Feature: The system should track paper publications.

Functional Requirements:

->Papers should have titles, authors (teams), publishers, publication dates, and domains.

->Each paper should be linked to the teacher who supervised the team.

->This User Requirement Specification outlines the purpose, scope, project overview, and major functionalities of the DBMS project, along with detailed descriptions and functional requirements for each system feature.