SAMPLE PROJECT PROPOSAL in IT 373

Project Title:

"CampusConnect: A Django-Powered Campus Community Portal"

Group Member:

- 1. Member 1
- 2. Member 2
- 3. Member 3

Project Overview:

The proposed web application, CampusConnect, aims to create an online platform for students and faculty to engage, share resources, and communicate effectively within the campus. The application will serve as a centralized hub for academic announcements, event management, discussion forums, and resource sharing.

Objectives:

- To familiarize students with the Django web framework for developing full-stack web applications.
- To enhance students' understanding of MVC architecture and web development best practices.
- To provide hands-on experience in creating a dynamic, interactive, and scalable web application.

Project Features:

- User Authentication and Authorization:
 - Secure login and registration system for students and faculty.
 - o Role-based access control (admin, student, and faculty).
 - Announcements and Updates:
- Admin and faculty can post announcements.
 - o Students can view and comment on updates.
- Event Management:
 - o Calendar integration to schedule and display campus events.
 - o RSVP functionality for students to confirm attendance.
- Discussion Forums:
 - o Category-based discussion threads (e.g., academics, extracurriculars).
 - Upvoting and commenting on posts.
- Resource Sharing:
 - o Upload and download academic materials (notes, presentations, etc.).
 - o File size limits and format validation.
- Responsive Design:
 - User-friendly interface optimized for both desktop and mobile devices.

Technology Stack:

- Backend: Django Web Framework (Python)
- Frontend: HTML, CSS, JavaScript, Bootstrap
- Database: SQLite (Development), PostgreSQL (Production)
- Hosting Platform: PythonAnywhere / Heroku
- Version Control: Git (GitHub/GitLab)

Development Phases:

- Project Initialization:
 - o Create a virtual environment.
 - o Set up a Django project and configure basic settings.
- Database Design:
 - o Model design for users, announcements, events, forums, and resources.
 - o Migrate models to the database.
- Feature Implementation:
 - o Build and integrate authentication system.
 - o Implement CRUD functionality for announcements, events, and resources.
 - o Develop discussion forum module with interactive features.
- Testing and Debugging:
 - o Conduct unit testing for all modules.
 - o Address bugs and ensure cross-browser compatibility.
- Deployment:
 - o Deploy the application on a cloud platform.
 - o Ensure SSL certification and production-ready settings.

Expected Deliverables:

- Fully functional Django web application.
- User documentation including installation, setup, and usage instructions.
- Presentation and demonstration of the application.

Timeline:

Week	Activity
Week 1	Project Proposal and Approval
Week 2	Initial Setup and Database Design
Week 3-5	Feature Development and Integration
Week 6	Testing and Debugging
Week 7	Deployment and Finalization
Week 8	Presentation and Evaluation