**Design & Implementation of a Web Based Registration System for U.A University**

CS 5910 BL1

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**Problem Statement**

In our endeavor to enhance the functionality of our college website, we aim to create a user-friendly platform that caters to the needs of visitors, students, faculty, and administrative staff alike. This website will serve as a digital gateway, offering personalized features and resources upon login, tailored to each user's specific role within our academic community.

**Student**

* **Student Role:** *Problem Statement*: The student role requires a digital learning platform that allows students to manage their academic profiles, access course schedules, and perform various actions related to their education.

* **Restricted Software Requirements Specification for Students:** *Problem Statement*: The restricted software requirements for students involve implementing functionalities like course registration, schedule management, academic record access, and personal information updates. The challenge is to create a secure and user-friendly system that enforces these restrictions effectively.

* **Forbidden Software Requirements Specification for Students:** *Problem Statement*: The forbidden software requirements for students outline limitations such as course registration rules, access to personal data, and restrictions on grade changes. The problem is to develop mechanisms to prevent students from violating these rules while maintaining a seamless user experience.

**Admin**

* **Admin Role:** *Problem Statement*: The admin role necessitates an administrative interface for managing users, academic programs, and course scheduling. This includes creating, updating, and deleting various entities while adhering to specific constraints.

* **Restricted Software Requirements Specification for Admin:** *Problem Statement*: The restricted software requirements for administrators encompass user management, scheduling, and data creation. The challenge is to design a robust system that empowers administrators to efficiently handle these tasks within defined limitations.

* **Forbidden Software Requirements Specification for Admin:** *Problem Statement*: The forbidden software requirements for administrators specify constraints like faculty course load limits, room location rules, and department-specific assignments. The problem is to build an admin interface that enforces these constraints to maintain system integrity.

**Faculty**

* **Faculty Role:** *Problem Statement*: Faculty members need access to course schedules, class rosters, student information, and the ability to manage their academic responsibilities efficiently.
* **Restricted Software Requirements Specification for Faculty:** *Problem Statement*: The restricted software requirements for faculty involve access to course information, student records, and the ability to update personal information. The challenge is to create an interface that supports these functions while respecting privacy and security rules.

* **Forbidden Software Requirements Specification for Faculty:** *Problem Statement*: The forbidden software requirements for faculty include teaching workload limits, departmental restrictions, and data access restrictions. The problem is to design a system that enforces these rules and safeguards data integrity while enabling faculty to perform their duties effectively.

**The Statistics Office**

* *Problem Statement*: The Statistics Office plays a critical role in gathering, analyzing, and reporting data related to graduation percentages and other relevant metrics. They need a data management system that facilitates data collection, analysis, and reporting efficiently and accurately.
* **Software Requirements Specification for the Statistics Office:** *Problem Statement*: The software requirements for the Statistics Office include functionalities for data collection, data analysis, and report generation. The challenge is to design a system that enables the Statistics Office to collect and process data on graduation percentages, retention rates, and other relevant statistics, ensuring data accuracy and integrity.