

**Assignment: Sprint 1**

**Group#6**

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**Introduction**

* **Definition:**
* A University Management System is a system that manages the records of students, teachers and staff regarding admission, salary and fee as well.
* **Core Functionalities:**
* Manage fee structure
* Roll number generation
* Admission management
* Result management
* Salary management
* Add/Delete staff member and faculty member

**Objectives**

* Manage student, faculty and staff information
* Efficient utilization of human resources
* To reduce unnecessary paperwork

**List of components:**

|  |  |
| --- | --- |
| **Client Application** | **Database Server** |
| * Displays data * Modifies data * Communicate business rules to user * Provides all user interaction * Communicates with database server to process information * Provide system to input information * Display information | * Receive request from user * Manages data interaction * Enforces data integrity * Provide data security * Controlling * And monitoring user access to the database * Planning for backup and recovery of database information * Maintaining archived data * Generating various reports by querying from database as per need * Managing and monitoring data * Replication |

**DFD of University Management System:**

Username/Password

**Login**

Administrator

Admission

Accounts

Student admission Student, faculty and staff Fee structure

Details Information and salary info

**Use Case Diagram Of Administrtor Module**

Admin

**Use Case Diagram Of Admission Module**

Operator

**Use Case Diagram Of Accounts Module**

Accountant

**UML Class Diagram OF University Management System:**

+Username

+Password

-Validate ()

**Login**

**Faculty**

**Staff**

**Student**

+Student Details

+Admission Fee

-Add Records ()

-Delete Records ()

-Update Records ()

+Student Details

+Faculty Details

+Staff Details

-Add Records ()

-Delete Records ()

-Update Records ()

+Fee Structure

+Faculty Salary

+Staff Salary

-Add Records ()

-Delete Records ()

-Update Records ()

**Accounts**

**Admission**

**Admin**

+ ID (PK)

+ Name

+ Mobile no.

+Designation

-Add Staff ()

-Delete Staff ()

-Update Staff ()

+ ID (PK)

+ Name

+ Mobile no.

+Department

+Designation

-Add Faculty ()

-Delete Faculty ()

-Update Faculty ()

+ Student ID (PK)

+ Student Name

+Mobile no.

+Department

+Semester

-Add Student ()

-Delete Student ()

-Update Student ()

**Conclusion and future work**

* The need of managing the information electronically is growing rapidly in all areas in our life and work. One of these areas, considered to be crucial for the country and particularly for the university is education and realization of the young specialists in computer science. Therefore this WIS is very useful and will provide them with the necessary information about actual research and practical projects and opportunities to work with various teams and organizations. The next step is to choose the environment for the system development and to try to improve it with additional functionalities for example for automatic assignment between students and projects topics on the base of the keywords in topics description and student’s knowledge.

**References:**

* https://code-projects.org//
* https://www.slideshare.net/mobile/amit/35796214
* https://www.visual-paradigm.com/guide/uml-unified-modeling-language/
* https://www.quora.com/Database-system