University Student Management System

|  |  |
| --- | --- |
| **FUNCTIONALITY** | |
| **STUDENT** | **ADMIN** |
| Instantiate self (add personal details) AND SELECT COURSE (select 2 majors) | Create another admin |
| View their own details | View their own details |
| Change their own personal details | View a students details (but not change) |
|  | Change their own details |
| Change password | Change password |
| New registration | Change a students Registration |
| View past registrations | Capture (add) results |
| View their results | View reports (individual [1 students results] and total) |

\*\*\*STUDENT CANT CHANGE THEIR REGISTRATION. ONLY ADMIN CAN

\*\*STUDENT/ADMIN CANT CHANGE THE COURSE ONCE SET

[GUI] One/same form where the student and staff can view and edit their personal details -> thus they all need to have the same PD fields

|  |
| --- |
| **STUDENT** |
| StudentNo (PK) |
| IDNumber |
| Name |
| Surname |
| CellNumber |
|  |
| password |
| FirstStudyYear (can take null, gets filled in when registering) |
| CourseID (FK) |

|  |
| --- |
| **ADMIN STAFF** |
| StaffNo (PK) |
| Personal Details |
| password |
|  |

|  |
| --- |
| **DISCIPLINE** |
| DisciplineID (PK) |
| Name |
| College (FK) |

|  |
| --- |
| **COLLEGE** |
| ABBReviation (PK) |
| Name |

|  |
| --- |
| **MODULE** |
| ModCODE (PK) |
| Name |
| Discipline (FK) |
| AcademicLevel |
| Credit |
| Prerequisite |
| Semester |

|  |
| --- |
| **REGISTRATION** (Association Class bet. Student and Module) |
| RegID (PK) |
| StudentNo (FK) |
| ModCode (FK) |
| Year [taken from GUI -> current computer year] |
| ModuleMark (can take null, populated later on by Academic) |
|  |

|  |
| --- |
| **COURSE** (Degree) [Associtation class of all majors combinations] |
| CourseID |
| College (FK) |
| Credits (total credits to complete degree) |
| ~~DegreeLength (min time)~~ |
| DisciplineID (FK) [Major 1] |
| DisciplineID (FK)  [Major 2] |

|  |
| --- |
| **MAJOR-MODULE [AC]** (all other modules that can be done for a specific major besides the majors own modules) |
| ID |
| CourseID (FK) |
| ModuleCode (FK) |
|  |
|  |
|  |

(simplification) ALL DEGREES ARE 3 years in length (Academic Level from 1 to 3)

(Simplification) ALL Courses will have 4 modules per semester (8 per year)

\*\*a module can either be done in either semester 1 or 2

AC L1 = 5 credits => Year 1 = 8 \* 5 = 40 credits

AC L2 = 10 credits => Year 1 = 8 \* 10 = 80 credits

AC L3 = 15 credits => Year 1 = 8 \* 15 = 120 credits

Total Credits – 40 + 80 + 120 = 240

Select College -> Select 2 (different) majors(disciplines) -> Select Modules

Selecting a major will display all modules for that major (and academic level) and also all other modules)

[GUI] (First years) When creating a new student, they select a college then the course they are doing (Display courses after selecting college)

(Following years) they go straight to new reg,

(degree completed) grey out everything and say degree completed

[how to know if degree Is completed] check total credits and if all AC L3 modules completed

Atleast two SQL aggregation queries: avg student mark, avg ‘class’ mark, student credits

For now leave out changing degree

|  |
| --- |
| **TEACHING**\*\* |
| ID |
| AcademicStaff(FK) |
| Module(FK) |
|  |
|  |

Admin – view/chage reg, add mark

|  |
| --- |
| **AcademicStaff** |
| AcademicID (PK) |
| School (FK) |
|  |

\*\*

For simplification we are removing School from the Academic hierarchy and just having Discipline to College