# Relational Models

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This table will store all the area of studies available.

Example: cs, Computer Science

### StudyField

- Id
- Name

This table will store the possible Programs stores the field And the type such as Bachelors, Minor etc.

Example: cs, Bachelors

#### **Program**

- Id
- FieldID
- Type (Check in (Bachelors, Minor))

FieldID References StudyField(Id)

Unique (FieldID, Type)

This table will store all the possible requirements for

All majors

Example: Mathematics, 6

#### Requirement

- Id
- name
- NumClasses

This table will store the requirements for each and all programs. From this Should be able to grab all the requirements for a program.

#### ProgramRequirements

- ProgramId
- RequirementID

ProgramId References Program(Id)

RequirementId references Requirement(Id)

Unique(FieldID, RequirementID)

This table will store the user's base info such as email address password etc (Will use the devise for this)

#### User

- UserId
- FirstName
- LastName
- ..
- Password

This table will store users with their prospective programs.

This is so that a user can have more than one program

## UserProgram

- Id
- userId
- programId

unique (userld, Programld)

This table will store requirements and their respective User Programs
This will tell us this requirement is for this user and for this program through programID

#### UserProgramRequirements

- id
- RequirementID
- UserProgramId

Unique(requirementId, UserProgramId)

FOREIGN KEY RequirementId REFERENCES Requirement(

This table will map a class to a specific requirement for a program for a user This is so that users can user the same class for two or more requirements

#### ClassRequirement

- id
- UserProgramRequirementsId
- UserClassId

Unique(RequirementId, UserClassId)

Table will store the classes that each user takes

#### **UserClass**

- Id
- CourseNumber
- LetterGrade
- StartDate
- EndDate

FOREIGN KEY CourseNumber REFERENCES OfferedClass.CourseNumber

This table will be used to store Components such as quizzes, labs etc for all users

# Component

- id
- UserClassId
- name
- weight
- numAssigDropped (default 0)

FOREIGN KEY UserClassId REFERENCES UserClass.Id

This table will be used to store all assignments for all users

#### Assignment

- id
- componentId
- Name
- score
- maxscore

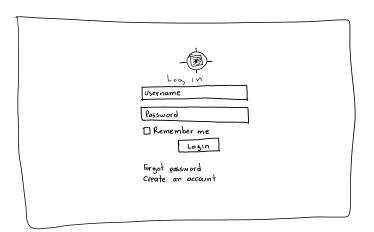
FOREIGN KEY componentId REFERENCES Component.Id

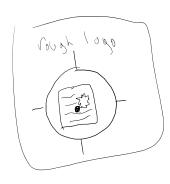
This table is a readonly table that stores all the Classes offered from which the user can choose from **OfferedClass** 

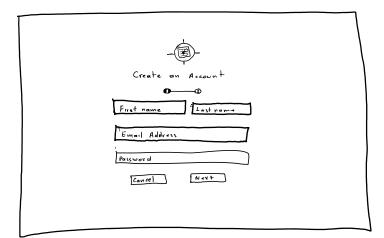
- CourseNumber
- name

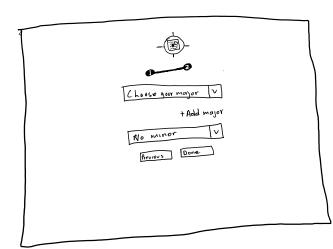
# Controllers

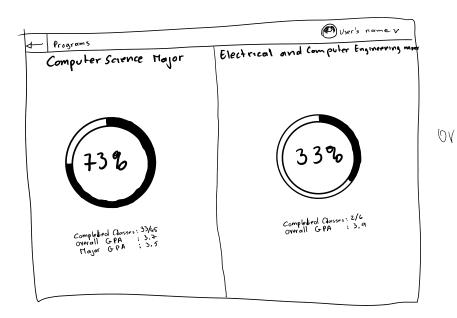
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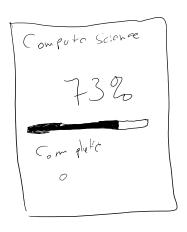












4 Computer science (D) User's name						
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AR 1101	IA A	. /	×	CS 1101 A ALL	ðΙX	PH1110 B (16 0)
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