

Database Tables

Data Tables:

1. Course

This table stores all the information on the course provided to students.

```
mysql> describe course;
```

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	NULL	auto_increment
name	varchar(40)	NO		Course	
capacity	float(2,0)	NO		20	
seats_left	float(2,0)	NO		20	
IC_id	int	YES	MUL	NULL	

```
5 rows in set (0.00 sec)
```

2. Student

This table stores all the information on students registered

```
mysql> describe student;
```

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	NULL	auto_increment
name	varchar(40)	NO		Student	
username	varchar(20)	NO	UNI	NULL	

```
3 rows in set (0.00 sec)
```

3. Teacher

This table stores all the information on teachers and teaching assistants

```
mysql> describe teacher;
```

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	NULL	auto_increment
name	varchar(40)	NO		Teacher	
username	varchar(20)	NO	UNI	NULL	

```
3 rows in set (0.00 sec)
```

4. Assists

This table consist of all those teachers who are also teaching assistants.

```
mysql> describe assists;
+-----+-----+-----+-----+-----+-----+
| Field      | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| teacher_id | int  | NO   | PRI | NULL    |       |
| course_id  | int  | NO   | PRI | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

5. Takes

This table is a relation between student table and course table

```
mysql> describe takes;
+-----+-----+-----+-----+-----+-----+
| Field      | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| student_id | int  | NO   | PRI | NULL    |       |
| course_id  | int  | NO   | PRI | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

6. Substitution Courses

This table consist of all those courses which a student wants to substitute with another course.

```
mysql> describe sub_course;
+-----+-----+-----+-----+-----+-----+
| Field      | Type                                | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| curr_course_id | int                                | NO   | PRI | NULL    |       |
| subn_course_id | int                                | NO   | PRI | NULL    |       |
| student_id    | int                                | NO   | PRI | NULL    |       |
| status        | enum('PENDING','SUCCESSFULL','FAILED') | YES  |     | PENDING |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.01 sec)
```

7. Addition Courses

This table consist of all those courses which a student wants to add.

```
mysql> describe add_course;
+-----+-----+-----+-----+-----+-----+
| Field      | Type                | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| course_id  | int                 | NO   | PRI | NULL    |       |
| student_id | int                 | NO   | PRI | NULL    |       |
| status     | enum('PENDING','SUCCESSFULL','FAILED') | YES  |     | PENDING |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)
```

8. Withdrawal Courses

This table consist of all those courses which the student wants to withdraw.

```
mysql> describe withdraw_course;
+-----+-----+-----+-----+-----+-----+
| Field      | Type                | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| course_id  | int                 | NO   | PRI | NULL    |       |
| student_id | int                 | NO   | PRI | NULL    |       |
| status     | enum('PENDING','SUCCESSFULL','FAILED') | YES  |     | PENDING |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)
```

Views:

1. myCourses:

This view shows all the courses taken by a particular student

```
mysql> describe myCourses;
+-----+-----+-----+-----+-----+-----+
| Field      | Type                | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| course_id  | int                 | NO   |     | 0        |       |
| course_name | varchar(40)         | NO   |     | Course   |       |
| IC_id      | int                 | YES  |     | NULL     |       |
| course_IC  | varchar(40)         | YES  |     | NULL     |       |
| course_capacity | float(2,0)        | NO   |     | 20       |       |
| student_id | int                 | NO   |     | NULL     |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

2. myAdditions:

This view shows all the addition request applied by a student

```
mysql> describe myAdditions;
```

Field	Type	Null	Key	Default	Extra
course_id	int	NO		0	
course_name	varchar(40)	NO		Course	
seats_left	float(2,0)	NO		20	
student_id	int	NO		0	
status	enum('PENDING', 'SUCCESSFULL', 'FAILED')	YES		PENDING	

5 rows in set (0.01 sec)

3. mySubstitutions:

This view shows all the Substitution request applied by a student.

```
mysql> describe myCourses;
```

Field	Type	Null	Key	Default	Extra
course_id	int	NO		0	
course_name	varchar(40)	NO		Course	
IC_id	int	YES		NULL	
course_IC	varchar(40)	YES		NULL	
course_capacity	float(2,0)	NO		20	
student_id	int	NO		NULL	

6 rows in set (0.00 sec)

4. myWithdrawals:

This view shows all the Withdrawal request applied by the student.

```
mysql> describe myWithdrawals;
```

Field	Type	Null	Key	Default	Extra
course_id	int	NO		NULL	
course_name	varchar(40)	YES		NULL	
seats_left	double(2,0)	YES		NULL	
student_id	int	NO		NULL	
status	enum('PENDING', 'SUCCESSFULL', 'FAILED')	YES		PENDING	

5 rows in set (0.00 sec)

E R Diagram

