



# [GROUP 75]

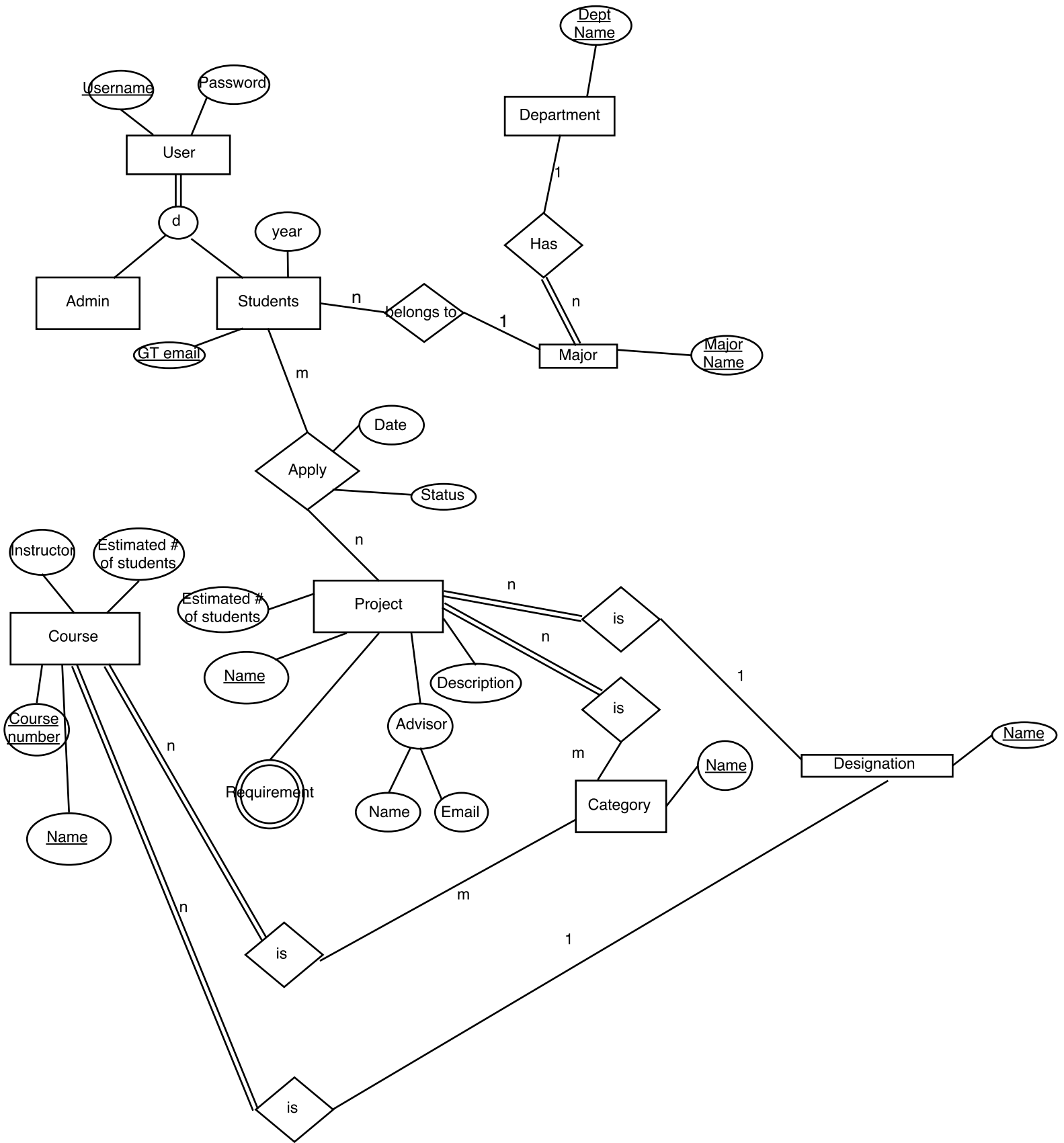
[Phase 2]

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# Relational Diagram

user

<u>username</u>	password
-----------------	----------

admin

<u>username</u>
-----------------

student

<u>username</u>	gtEmail	year	majorName
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project

<u>name</u>	estNum	description	advName	advEmail	designName
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project\_requirements

<u>pName</u>	<u>pRequirement</u>
--------------	---------------------

department

<u>deptName</u>
-----------------

major

<u>majorName</u>	deptName
------------------	----------

designation

<u>name</u>
-------------

category

<u>name</u>
-------------

course

<u>courseNumber</u>	name	instructor	designation	estNumberStudents
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applies\_for

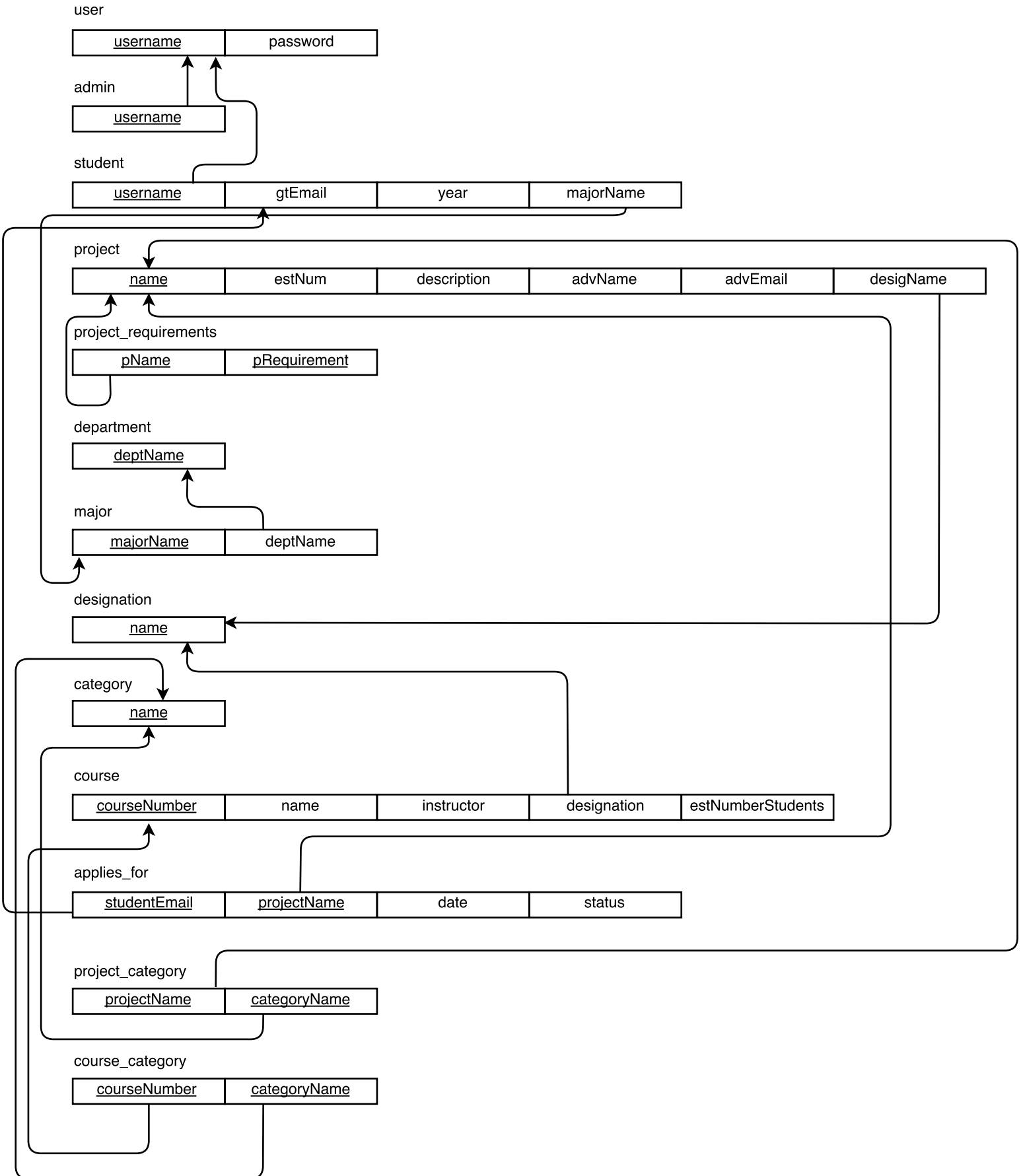
<u>studentEmail</u>	<u>projectName</u>	date	status
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project\_category

<u>projectName</u>	<u>categoryName</u>
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course\_category

<u>courseNumber</u>	<u>categoryName</u>
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```

CREATE TABLE user
(
username    VARCHAR(60)    NOT NULL,
password    VARCHAR(60)    NOT NULL,
PRIMARY KEY (username)
);

```

```

CREATE TABLE admin
(
username    VARCHAR(60)    NOT NULL,
PRIMARY KEY (username),
FOREIGN KEY (username)      REFERENCES user(username)
);

```

```

CREATE TABLE student
(
gtEmail      VARCHAR(60)    NOT NULL,
year         VARCHAR(60)    NOT NULL          DEFAULT "Freshman",
username     VARCHAR(60)    NOT NULL,
majorName    VARCHAR(60),
PRIMARY KEY (username),
FOREIGN KEY (username)      REFERENCES user(username),
FOREIGN KEY (majorName)     REFERENCES major(majorName),
UNIQUE (gtEmail)
);

```

```

CREATE TABLE project
(
name         VARCHAR(60)    NOT NULL,
estNum       INT            NOT NULL,
description   VARCHAR(140)  NOT NULL,
advName      VARCHAR(60)    NOT NULL,
advEmail     VARCHAR(60)    NOT NULL,
desigName    VARCHAR(60),
PRIMARY KEY (name),
FOREIGN KEY (desigName)     REFERENCES designation(name)
);

```

```

CREATE TABLE project_requirements
(
pName        VARCHAR(60)    NOT NULL,
pRequirement VARCHAR(60)    NOT NULL,
PRIMARY KEY (pName, pRequirement),

```

```
FOREIGN KEY (pName) REFERENCES project(name)
);
```

```
CREATE TABLE department
(
deptName VARCHAR(60) NOT NULL,
PRIMARY KEY(name)
);
```

```
CREATE TABLE major
(
majorName VARCHAR(60) NOT NULL,
deptName VARCHAR(60) NOT NULL,
PRIMARY KEY (majorName),
FOREIGN KEY (deptName) REFERENCES department(name)
);
```

```
CREATE TABLE designation
(
name VARCHAR(60) NOT NULL,
PRIMARY KEY (name)
);
```

```
CREATE TABLE category
(
name VARCHAR(60) NOT NULL,
PRIMARY KEY (name)
);
```

```
CREATE TABLE course
(
courseNumber VARCHAR(60) NOT NULL,
name VARCHAR(60) NOT NULL,
instructor VARCHAR(60) NOT NULL,
designation VARCHAR(60) NOT NULL,
estNumberStudents INT NOT NULL,
PRIMARY KEY (courseNumber),
UNIQUE (name),
FOREIGN KEY (designation) REFERENCES designation(name)
);
```

```
CREATE TABLE applies_for
(
studentEmail          VARCHAR(60)      NOT NULL,
projectName           VARCHAR(60)      NOT NULL,
date                  TIMESTAMP         DEFAULT NOW(),
status                VARCHAR(60)      NOT NULL,
PRIMARY KEY (studentEmail, projectName),
FOREIGN KEY (studentEmail) REFERENCES student(email),
FOREIGN KEY (projectName) REFERENCES project(name)
);
```

```
CREATE TABLE project_category
(
projectName           VARCHAR(60)      NOT NULL,
categoryName          VARCHAR(60)      NOT NULL,
PRIMARY KEY (projectName, categoryName),
FOREIGN KEY (projectName) REFERENCES project(name),
FOREIGN KEY (categoryName) REFERENCES category(name)
);
```

```
CREATE TABLE course_category
(
courseNumber          INT               NOT NULL,
categoryName          VARCHAR(60)      NOT NULL,
PRIMARY KEY (courseNumber, categoryName),
FOREIGN KEY (courseNumber) REFERENCES course(courseNumber),
FOREIGN KEY (categoryName) REFERENCES category(name)
);
```