CREATE TABLE Course (id\_course int AUTO\_INCREMENT, NRC varchar(15), period varchar(25), name varchar(75), PRIMARY KEY (id\_course));

CREATE TABLE Person(id\_person int AUTO\_INCREMENT, name varchar(75), phoneNumber varchar(15), email varchar(65), id\_course int, PRIMARY KEY(id\_person), FOREIGN KEY(id\_course) REFERENCES Course(id\_course)); CREATE TABLE Coordinator(id\_person int, cubicle int, staff\_number varchar(25), PRIMARY KEY(id\_person), FOREIGN KEY(id\_person) REFERENCES Person(id\_person) ON DELETE CASCADE);

CREATE TABLE Professor(id\_person int, cubicle int, staff\_number varchar(25), PRIMARY KEY(id\_person), FOREIGN KEY(id\_person) REFERENCES Person(id\_person));

CREATE TABLE Company(id\_company int AUTO\_INCREMENT, name varchar(75), address varchar(75), email varchar(65), state varchar(45), phoneNumber varchar(15), direct\_users int, indirect\_users int, sector enum('Primary', 'Secondary', 'Tertiary'), city varchar(65), id\_coordinator int, id\_course int, PRIMARY KEY(id\_company), FOREIGN KEY(id\_coordinator) REFERENCES Coordinator(id\_person), FOREIGN KEY(id\_course) REFERENCES Course(id\_course));

CREATE TABLE Project(id\_project int AUTO\_INCREMENT, name varchar(75), duration float, schedule varchar(75), general\_purpose text, general\_description text, id\_company int, charge\_Responsable varchar(35), name\_Responsable varchar(75), email\_Responsable varchar(65), PRIMARY KEY(id\_project), FOREIGN KEY(id\_company) REFERENCES Company(id\_company));

CREATE TABLE Project\_Mediate\_Objetives(objetive varchar(65), id\_project int, FOREIGN KEY(id\_project) REFERENCES Project(id\_project) ON DELETE CASCADE);

CREATE TABLE Project\_Methodologies(methodology varchar(65), id\_project int, FOREIGN KEY(id\_project) REFERENCES Project(id\_project) ON DELETE CASCADE);

CREATE TABLE Project\_Resources(resource varchar(65), id\_project int, FOREIGN KEY(id\_project) REFERENCES Project(id\_project) ON DELETE CASCADE); CREATE TABLE Project\_Responsabilities(responsability varchar(65), id\_project int, FOREIGN KEY(id\_project) REFERENCES Project(id\_project) ON DELETE CASCADE);

CREATE TABLE Project\_Activities(activity varchar(65), id\_project int, FOREIGN KEY(id\_project) REFERENCES Project(id\_project) ON DELETE CASCADE); CREATE TABLE Project\_Immediate\_Objetives(objetive varchar(65), id\_project int, FOREIGN KEY(id\_project) REFERENCES Project(id\_project) ON DELETE CASCADE);

CREATE TABLE Practitioner(id\_person int, enrollment varchar(35), id\_project int, id\_professor int, PRIMARY KEY(id\_person), FOREIGN KEY(id\_person) REFERENCES Person(id\_person), FOREIGN KEY(id\_project) REFERENCES Project(id\_project), FOREIGN KEY(id\_professor) REFERENCES Professor(id\_person)); CREATE TABLE Practitioner\_Selected\_Projects(selected\_project int ,id\_person int, FOREIGN KEY(selected\_project) REFERENCES Project(id\_project), FOREIGN KEY(id\_person) REFERENCES Practitioner(id\_person)); CREATE TABLE Activity (id\_activity int AUTO\_INCREMENT, name varchar(75), description text, deadline datetime, id\_professor int, PRIMARY KEY(id\_activity), FOREIGN KEY(id\_professor) REFERENCES Professor(id\_person)); CREATE TABLE Delivery(id\_delivery int AUTO\_INCREMENT, id\_activity int , id\_practitioner int, observation text ,score float, file longblob, filename enum('Partial\_Report','Monthly\_Report','Schedule','Assignment\_Office','Acceptance\_ Office', 'Self Appraisal', 'Company Evaluation'), PRIMARY KEY(id delivery), FOREIGN KEY(id activity) REFERENCES Activity(id activity), FOREIGN KEY(id practitioner) REFERENCES Practitioner(id\_person) ON DELETE CASCADE);

CREATE VIEW view\_project AS SELECT id\_project, name ,duration, schedule, id\_company, charge\_responsable, name\_responsable, email\_responsable from Project;

```
DELIMITER $$
CREATE PROCEDURE addProfessor(name_p varchar(75), phone_p varchar(15),
email_p varchar(65), id_cs INT, cubic_c INT, staff_number_c varchar(25))
BEGIN
DECLARE EXIT HANDLER FOR SQLEXCEPTION
BEGIN
SHOW ERRORS LIMIT 1;
RESIGNAL;
ROLLBACK;
END:
DECLARE EXIT HANDLER FOR SQLWARNING
BEGIN
SHOW WARNINGS LIMIT 1;
RESIGNAL;
ROLLBACK;
END;
START TRANSACTION;
INSERT INTO Person(name, phoneNumber, email, id_course) VALUES(name_p,
phone_p, email_p, id_cs);
SELECT LAST_INSERT_ID() INTO @id_p;
```

```
INSERT INTO Professor(id_person, cubicle, staff_number) VALUES(@id_p, cubic_c,
staff_number_c);
COMMIT;
END $$
DELIMITER;
DELIMITER $$
CREATE PROCEDURE addCoordinator(name_p varchar(75), phone_p varchar(15),
email_p varchar(65), id_cs INT, cubic_c INT, staff_number_c varchar(25))
BEGIN
DECLARE EXIT HANDLER FOR SQLEXCEPTION
BEGIN
SHOW ERRORS LIMIT 1;
RESIGNAL:
ROLLBACK;
END;
DECLARE EXIT HANDLER FOR SQLWARNING
BEGIN
SHOW WARNINGS LIMIT 1;
RESIGNAL;
ROLLBACK;
END;
START TRANSACTION;
INSERT INTO Person(name, phoneNumber, email, id_course) VALUES(name_p,
phone_p, email_p, id_cs);
SELECT LAST_INSERT_ID() INTO @id_p;
INSERT INTO Coordinator(id_person, cubicle, staff_number) VALUES(@id_p,
cubic c, staff number c);
COMMIT;
END $$
DELIMITER;
DELIMITER $$
CREATE PROCEDURE addDelivery(activity int, practitioner int, file_to longblob,
filename_to varchar(65))
BEGIN
DECLARE name_act INT;
SELECT NOW() INTO @now;
SELECT deadline INTO @deadline_activity FROM Activity WHERE id_activity =
activity;
IF @now < @deadline_activity THEN
```

```
INSERT INTO Delivery (id_activity, id_practitioner, observation, score, file, filename)
VALUES(activity, practitioner, null, null, file_to, filename_to);
ELSE
    SIGNAL SQLSTATE '45000'
    SET MESSAGE_TEXT = 'Activitys deadline is over';
END IF;
END $$
DELIMITER;
DELIMITER $$
CREATE PROCEDURE assignProject(person INT, project INT)
BEGIN
DECLARE EXIT HANDLER FOR SQLEXCEPTION
BEGIN
SHOW ERRORS LIMIT 1;
RESIGNAL;
ROLLBACK;
END;
DECLARE EXIT HANDLER FOR SQLWARNING
BEGIN
SHOW WARNINGS LIMIT 1;
RESIGNAL;
ROLLBACK;
END;
START TRANSACTION;
SELECT COUNT(id_project) INTO @count FROM Practitioner WHERE id_project =
project:
IF @count < 3 THEN
    UPDATE Practitioner SET id_project = project WHERE id_person = person;
ELSE
    SIGNAL SQLSTATE '45000'
    SET MESSAGE_TEXT = 'Table size limit reached';
END IF;
COMMIT;
END $$
DELIMITER;
```

```
CREATE PROCEDURE selectProject(person INT, project INT)
BEGIN
DECLARE EXIT HANDLER FOR SQLEXCEPTION
BEGIN
SHOW ERRORS LIMIT 1;
RESIGNAL;
ROLLBACK;
END;
DECLARE EXIT HANDLER FOR SQLWARNING
SHOW WARNINGS LIMIT 1;
RESIGNAL;
ROLLBACK;
END;
START TRANSACTION;
SELECT COUNT(id_person) INTO @countSelected FROM
Practitioner_selected_projects WHERE id_person = person;
IF @countSelected < 3 THEN
    INSERT INTO Practitioner_Selected_Projects(selected_project, id_person)
VALUES(project, person);
ELSE
    SIGNAL SQLSTATE '45000'
    SET MESSAGE_TEXT = 'Table size limit reached';
END IF;
COMMIT;
END $$
DELIMITER;
DELIMITER $$
CREATE PROCEDURE removeProject(id_remove INT)
BEGIN
DECLARE EXIT HANDLER FOR SQLEXCEPTION
BEGIN
SHOW ERRORS LIMIT 1;
RESIGNAL;
ROLLBACK;
END;
DECLARE EXIT HANDLER FOR SQLWARNING
BEGIN
SHOW WARNINGS LIMIT 1;
```

```
RESIGNAL;
ROLLBACK;
END;
START TRANSACTION;
UPDATE Practitioner SET id_project = NULL WHERE id_project = id_remove;
DELETE FROM Project WHERE id_project = id_remove;
COMMIT:
END $$
DELIMITER;
DELIMITER $$
CREATE PROCEDURE addPractitioner(name_p varchar(75), phone_p varchar(15),
email_p varchar(65), id_cs INT, enrollment_p varchar(35))
BEGIN
DECLARE EXIT HANDLER FOR SQLEXCEPTION
BEGIN
SHOW ERRORS LIMIT 1;
RESIGNAL;
ROLLBACK;
END;
DECLARE EXIT HANDLER FOR SQLWARNING
BEGIN
SHOW WARNINGS LIMIT 1;
RESIGNAL;
ROLLBACK;
END;
START TRANSACTION:
INSERT INTO Person(name, phoneNumber, email, id course) VALUES(name p.
phone_p, email_p, id_cs);
SELECT LAST_INSERT_ID() INTO @id_p;
INSERT INTO Practitioner(id_person, enrollment, id_project, id_professor)
VALUES(@id_p, enrollment_p, null, null);
COMMIT;
END $$
DELIMITER;
DELIMITER $$
CREATE PROCEDURE removeMultivaluedAttributesProject(id INT)
DECLARE EXIT HANDLER FOR SQLEXCEPTION
BEGIN
```

```
SHOW ERRORS LIMIT 1;
RESIGNAL;
ROLLBACK;
END;
DECLARE EXIT HANDLER FOR SQLWARNING
SHOW WARNINGS LIMIT 1;
RESIGNAL;
ROLLBACK;
END;
START TRANSACTION;
DELETE FROM Project_Activities WHERE id_project = id;
DELETE FROM Project_Responsabilities WHERE id_project = id;
DELETE FROM Project_Mediate_Objetives WHERE id_project = id;
DELETE FROM Project_Methodologies WHERE id_project = id;
DELETE FROM Project_Resources WHERE id_project = id;
DELETE FROM Project_Immediate_Objetives WHERE id_project = id;
COMMIT;
END $$
DELIMITER;
```