CREATE TABLE Users (

user\_id INT PRIMARY KEY AUTO\_INCREMENT,

name VARCHAR(100) NOT NULL,

email VARCHAR(100) NOT NULL UNIQUE,

role VARCHAR(50) NOT NULL, -- 'ProjectManager', 'Developer', 'Tester'

password VARCHAR(255) NOT NULL

);

CREATE TABLE Projects (

project\_id INT PRIMARY KEY AUTO\_INCREMENT,

project\_name VARCHAR(100) NOT NULL,

start\_date DATE NOT NULL,

status VARCHAR(50) NOT NULL, -- 'In Progress', 'Completed'

project\_manager\_id INT,

FOREIGN KEY (project\_manager\_id) REFERENCES Users(user\_id)

);

CREATE TABLE Bugs (

bug\_id INT PRIMARY KEY AUTO\_INCREMENT,

title VARCHAR(255) NOT NULL,

description TEXT NOT NULL,

severity\_level VARCHAR(50) NOT NULL, -- 'Low', 'Medium', 'High', etc.

status VARCHAR(50) NOT NULL, -- 'Open', 'In Progress', 'Closed'

created\_by INT, -- Tester who reported the bug

created\_on TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

assigned\_to INT, -- Developer to whom the bug is assigned

project\_id INT,

FOREIGN KEY (created\_by) REFERENCES Users(user\_id),

FOREIGN KEY (assigned\_to) REFERENCES Users(user\_id),

FOREIGN KEY (project\_id) REFERENCES Projects(project\_id)

);

CREATE TABLE ProjectAssignments (

assignment\_id INT PRIMARY KEY AUTO\_INCREMENT,

project\_id INT,

user\_id INT,

role VARCHAR(50) NOT NULL, -- 'Developer', 'Tester'

FOREIGN KEY (project\_id) REFERENCES Projects(project\_id),

FOREIGN KEY (user\_id) REFERENCES Users(user\_id)

);