Prerequisites

• Operating System: Windows/Mac/Linux

• Web Server: Apache or Nginx

• Database: MySQL

• Backend: PHP (Version 7.4 or later)

• Frontend: Angular (Version 12 or later)

• Package Manager: Node.js (for Angular)

• Browser: Chrome, Firefox, or any modern browser

2.2 Installation Steps

1. Install Apache and MySQL:

o Install XAMPP (Windows/Mac) or LAMP stack (Linux) to set up Apache and MySQL.

2. Set Up MySQL Database:

o Create a new MySQL database named ticketing.

o Import the provided ticketing sql file to create the necessary tables.

3. Clone the Repository:

o Clone the project repository to your local machine.

4. Set Up Angular Project:

o Navigate to the frontend directory.

o Run npm install to install the necessary dependencies.

o Run ng serve to start the Angular development server.

5. Configure Backend:

3. Database Structure

- CREATE TABLE centers (

    centerId INT AUTO\_INCREMENT PRIMARY KEY,

    centerName VARCHAR(500) NOT NULL

);

CREATE TABLE ItSpecialists(

    itId INT AUTO\_INCREMENT PRIMARY KEY,

    itName VARCHAR(500) NOT NULL

);

CREATE TABLE employees(

    empId INT AUTO\_INCREMENT PRIMARY KEY,

    empName VARCHAR(255) NOT NULL,

    empCenterId INT NOT NULL,

    FOREIGN KEY (empCenterId) REFERENCES centers(centerId)

);

CREATE TABLE ItSpecialistsCenters ( -- link the IT specialst with the centers

    id INT AUTO\_INCREMENT PRIMARY KEY,

    centerId INT NOT NULL,

    itId INT NOT NULL,

    FOREIGN KEY (centerId) REFERENCES centers(centerId),

    FOREIGN KEY (itId) REFERENCES ItSpecialists(itId)

);

CREATE TABLE tickets(

    ticketId INT AUTO\_INCREMENT PRIMARY KEY,

    ticketStatus ENUM('pending','in process','completed') DEFAULT 'pending',

    ticketCenterId INT NOT NULL,

    ticketProblemDescription TEXT,

    ticketProblemType ENUM('software','hardware'),

    ticketDeviceType VARCHAR(100) NOT NULL,

    ticketEmployeeId INT NOT NULL,

    ticketItSpecialistId INT NOT NULL,

    ticketOsVersion VARCHAR(500) NOT NULL,

    ticketAffectedSoftware VARCHAR(500) NOT NULL,

    ticketErrorCode VARCHAR(500),

    ticketScreenshot VARCHAR(500),

    ticketDeviceSN VARCHAR(500),

    FOREIGN KEY (ticketCenterId) REFERENCES centers(centerId),

    FOREIGN KEY (ticketEmployeeId) REFERENCES employees(empId),

    FOREIGN KEY (ticketItSpecialistId) REFERENCES ItSpecialists(itId)

);

Test endpoint api via thunderClient extention in visual studio code