DATABASE DESIGN AND DEVELOPMENT PROJECT

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INTRODUCTION

Project to design and construct a database that can be deployed in a commercial database management system. The entity-relationship diagram represents a small dental practice database and its associated fields. The relational schema contains 6 tables and its attributes, primary and foreign keys and the relationship between them. The main entities of the Dental Practice are patient, dentist, appointment, Appointment Detail, treatment and payment.

Dental practice and its attributes:

- Patient Entity: Attributes of Patient are PatNumber, PatFirstName, PatLastName, PhoneNumber, Address, City, County, EirCode and DateOfBirth.
- Dentist Entity: Attributes of Dentist are DentistNumber, DentistFirstName, YearsOfService and Salary
- Appointment Entity: Attributes of Appointment are AppNumber, Date, DateOfStartOfTreatment, DateOfEndOfTreatment, Cancellation and PatNumber
- Appointment Detail Entity: Attributes of Appointment Detail are AppNumber, ProcedureNumber and date
- Treatment Entity: Attributes of Treatment are ProcedureNumber, ProcedureDate, description, PatNumber and cost
- Payment Entity: Attributes of Payment are PaymentNumber, PaymentAmount, PaymentDesc and PatNumber

Description of Dental Practice Database:

- Each entity (Patient, Dentist, Treatment, Appointment, Appointment Detail and payment) contains primary key and foreign keys.
- The entity AppointmentDetail is attached with both ProcedureNumber and AppNumber foreign keys.
- All the entities in the database: Patient, Dentist etc. are normalised in order to reduce duplicity of records.

##REQUIREMENTS

* As the project comes inside a zip compressed folder, all the files including the SQL export script need to be extracted to a secure location in the user's machine.

##INSTALLATION

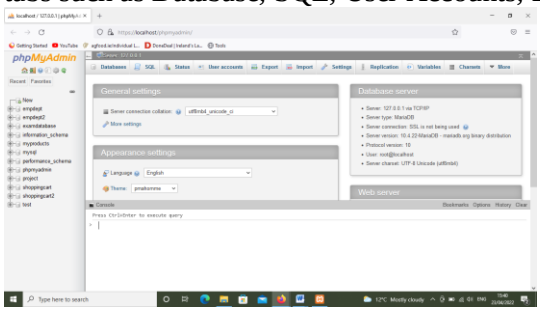
STEP 1- Navigate to XAMPP in your system or simply launch it by clicking the XAMPP Icon. The Control Panel is now visible and can be used to initiate or halt the working of any module.

STEP 2- Click on the **"Start"** button corresponding to **Apache** and **MySQL** modules. Once it starts working, the user can see the following screen:

STEP 3- Now click on the **"Admin"** button corresponding to the **MySQL** module. This automatically redirects the user to a web browser to the following address-

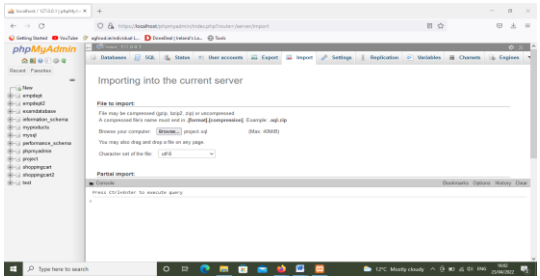
http://localhost/phpmyadmin

The main page should look similar to the following screenshot below. The user can see a number of tabs such as Database, SQL, User Accounts, Export, Import, Settings, etc.



STEP 4- Import an SQL file. The SQL export file `project.sql` is included in the zip file.

Before importing the .sql file, a database called `project` needs to be created. Once the database has been created, on the phpMyAdmin screen, select the `project database`. Select the Import tab. Choose the `project.sql` file to import



##REFERENCES

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https://www.javatpoint.com/creating-mysql-database-with-xampp