Project Report

Database Design & Development 2023

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Introduction

The purpose of this database is to manage the operations of a busy veterinary practice in Galway. The database includes entities for appointments, animals, billing, medication, staff, payments, payment types, addresses, Contacts and pet owners.

Assumptions:

- Each appointment has only one animal associated with it.
- Each animal has only one pet owner.
- Each medication is associated with only one animal.
- Each staff member has only one role.
- The billing entity will be used to track both payments and outstanding balances.

Relationships:

- One animal can have many appointments, but each appointment is associated with only one animal.
- One pet owner can have many animals, but each animal is associated with only one pet owner.
- One medication can be associated with many appointments, but each appointment is associated with only one medication.
- One staff member can have many appointments, but each appointment is associated with only one staff member.

ERD

This Entity Relationship Diagram shows the tables and relationships. Created using Xampp. You can find the ERD Pdf file in zip folder G00299043_Griffey.

Database Script

The database script is also in folder G00299043_Griffey. It is an export of the database from xampp which contains over 500 lines of SQL code to create Tables for the database, populate test data for these tables and then create relationships between them.

SQL Query Script

The SQL Query Script contains 4 SQL queries to use on this database. These include SELECT, INSERT, UPDATE AND DELETE.

```sql
SELECT * FROM `staff` WHERE addressID = 'add000001';

INSERT INTO `contact` (`contactCode`, `email`, `phone`, `extension`) VALUES ('con000023', 'Ben.od@goutlook.ie', NULL, NULL);

UPDATE `contact` SET `phone` = '+353892224902' WHERE `contact`.`contactCode` = 'con000023';

DELETE FROM `contact` WHERE `contact`.`contactCode` = 'con000023';
```

Codd's Rules

There is also a PDF file outlining Codd's rules with examples from the database created.

Database Implementation

To implement this database, follow these instructions:

1. Download g00299043_vet_practice.sql from folder G00299043_Griffey
2. In myphpadmin, Create Database g00299043_vet_practice and Import this file into xampp
3. Once the Database has been imported you can open the file G00299043 - SQL Query Script from folder G00299043_Griffey and run the entire script in SQL or each query individually.