

Kyle Harrison & Candice Stewart

**2013**

**Teddy Bear Club Nursery Relational Schema**

There is an evident need for Teddy Bear Club Nursery to transform their paper-based record and reporting system into an electronic version that permits more efficient administration and therefore time-saving. This assignment is to design a Relational Database system for Teddy Bear Club Nursery.

**Teddy Bear Club Nursery Relational Schema**

**AC32004–Database Systems**

**Kyle Harrison**

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Defining Domains

|  |  |  |
| --- | --- | --- |
| **Schema** | TeddyBearNurseryClub | |
| **Domain Name** | **Datatype** | **Validation Rule** |
| **ChildIdentifier** | Varchar(6) | Create a new validation rule called ChildIdentifier  that  must contain the character C followed by 5 digits between the  range of : *C00000....C99999.* |
| **AddressIdentifier** | Varchar(6) | Create a new validation rule called AddressIdentifier  that  must contain the character A followed by 5 digits between the  range of : *A00000....A99999* |
| **RoomIdentifier** | varchar(20) | Create a new validation rule called RoomIdentifier with a list of valid values consisting of : *(“Baby Room”, “Polar Room”, “Panda Room”, “Teddy’s Transformers”, “Daisy’s Discoverers”, “Oakley’s Explorers”);* |
| **DoctorIdentifier** | Varchar(6) | Create a new validation rule called DoctorIdentifier  that  must contain the character D followed by 5 digits between the  range of : *D0000....D99999* |
| **ParentIdentifier** | Varchar(6) | Create a new validation rule called ParentIdentifier  that  must contain the character P followed by 5 digits between the  range of : *P00000....P99999* |
| **RegisterIdentifier** | Varchar(6) | Create a new validation rule called RegisterIdentifier  that  must contain the character R followed by 5 digits between the  range of : *R00000....R99999* |
| **InvoiceIdentifier** | Varchar(6) | Create a new validation rule called InvoiceIdentifier  that  must contain the character I followed by 5 digits between the  range of : *I00000....I99999* |
| **VoucherSchemeIdentifier** | Varchar(6) | Create a new validation rule called VoucherProviderIdentifier  that  must contain the character V followed by 5 digits between the  range of : *S00000....S99999* |
| **VoucherRegisterIdentifier** | Varchar(6) | Create a new validation rule called VoucherRegisterIdentifier  that  must contain the character V followed by 5 digits between the  range of : *V00000....V99999* |
| **FeesIdentifier** | Varchar(6) | Create a new validation rule called ChildIdentifier   that  must contain the character F followed by 5 digits between the  range of : *F00000....F99999* |
| **PaymentHistoryIdenifier** | Varchar(6) | Create a new validation rule called ChildIdentifier   that  must contain the character H followed by 5 digits between the  range of : *H00000....H99999* |
| **PlacementType** | varchar(2) | Create a new validation rule called PlacementType with a list of valid values consisting of : *(“FT”,”PT”);* |
| **PaymentType** | varchar(20) | Create a new validation rule called PaymentType with a list of valid values consisting of : *(“Credit Card”, “Cash”, “Cheque”, “Direct Debit”, “Other”);* |
| **Date** | Date | Create a new validation rule called Date with an mask of “DD/MM/YYYY” |
| **Title** | varchar(35) | Create a new validation rule called Title with a Default value of “Miss” |
| **Name** | varchar(30) |  |
| **Street** | varchar(50) |  |
| **City** | varchar(35) | Create a new validation rule called Country with a Default value of “Dundee” |
| **Postcode** | varchar(8) | Create a new validation rule called Postcode with the mask of AAAA AAAA |
| **Telephone** | varchar(11) | Create a new validation rule with the mask of 00000000000.. 999999999 |
| **Mobile** | varchar(11) | Create a new validation rule with the mask of 00000000000.. 999999999 |
| **Email** | varchar(75) |  |
| **Country** | varchar(30) | Create a new validation rule called Country with a Default value of “United Kingdom” |
| **Currency** | Decimal(10,2) | Create a new validation rule called Currency with a Default value of 0.00 |
| **Confirm** | Boolean | Create a new validation rule called confirm with a default value of “false” |
| **Discount** | decimal(4,3) | Create a new validation rule called Discount with a default value of  “0.100” |
| **Relationship** | varchar(20) | Create a new validation rule called Relationship with a list of valid values consisting of : *(“Mother”, “Father”, “Sibling”, “Family Friend”, “Other Family Member”, “Other”);* |
| **StaffRatio** | varchar(4) | Create a new validation rule called Relationship with a list of valid values consisting of : *'1:3', '1-5', '1-8',"None") DEFAULT 'None',* |
| **AgeGroup** | varchar(4) | Create a new validation rule called Relationship with a list of valid values consisting of : ('0-12', '12-24', '2-3', '2-4', '3.5-5',"None") DEFAULT 'None', |
| **Paid** | Boolean | Create a new validation rule called Paid with a default value of “false” |
| **Vacancies** | TINYINT | Create a new validation rule called Vacancies with a Minimum value = 0 |
| **NamedPersonIdentifier** | varchar(6) | Create a new validation rule called NamedPersonIdentifier that  must contain the character N followed by 5 digits between the  range of : *N0000....N99999* |
| **EmergencyIdentifer** | varchar(6) | Create a new validation rule called **EmergencyIdentifier** that  must contain the character E followed by 5 digits between the  range of : *E0000....E99999* |
| **Teas** | TINYINT | Create a new validation rule called **Teas** with a Minimum value = 0 |
| **AddressType** | varchar(4) | Create a new validation rule called **AddressType** with a list of valid values consisting of : *(“Home”,”Work”);* |

*N.B. All varchars() are interchangeable with String to support other versions of SQL.*

Defining Relations

Child Relation  
**Relation** Child  
            ChildID: ChildIdentifier        **NOT NULL**  
            FirstName: Name             **NOT NULL**  
            Surname: Name             **NOT NULL**  
            DOB: Date                 **NOT NULL**  
            StartDate: Date             **NOT NULL**  
            LeavingDate: Date             **NULL**

RoomName: RoomIdentifier     **NOT NULL**

AddressID: AddressIdentifier **NOT NULL**

**Primary Key** (ChildID)  
**Foreign Key** RoomName **REFERENCES** Room.RoomName **NOT NULL**  
  
Register

**Relation** Register

RegisterID : RegisterIdentifier        **NOT NULL**

ChildID: ChildIdentifier            **NOT NULL**

ConsentID: ConsentIdentifier        **NOT NULL**

PreferredStartDate: Date              **NULL**

PlacementType: PlacementType **NOT NULL**

DoctorID: DoctorIdentifier            **NOT NULL**

**Primary Key** ( RegisterID)  
**Foreign Key** ( ChildID ) **REFERENCES** Child.Child ID **NOT NULL**  
**Foreign Key** ( DoctorID ) **REFERENCES** Doctor.DoctorID **NOT NULL**  
**Foreign Key** (ConsentID) **REFERENCES** Consent.ConsentID **NOT NULL**  
  
Doctor Relation  
**Relation** Doctor

**DoctorID: DoctorIdentifier  NOT NULL**

**FirstName: Name            NOT NULL**

**Surname: Name            NOT NULL**

**Address: Street            NOT NULL**

***Primary Key*** *( Doctor ID )*

**Foreign Key** ( Address ID ) **REFERENCES** Address.AddressID **NOT NULL**  
  
Absence Relation  
**Relation** Absence  
            AbsenceID: AbsenceIdentifier      **NOT NULL**  
            Child ID: ChildIdentifier        **NOT NULL**  
            AbsenceDate: Date                **NOT NULL**  
**Primary Key** ( AbsenceID )  
**Foreign Key** ( ChildID ) **REFERENCES** Child.ChildID **NOT NULL**

Parent Address  
**Relation** ParentAddress  
    ParentID: ParentIdentifier        **NOT NULL**  
    AddressID: AddressIdentifier        **NOT NULL**  
    AddressType: AddressType        **NOT NULL**  
**Primary Key** (ParentID, AddressID)

Room Relation  
**Relation** Room  
            RoomName: RoomIdentifier        **NOT NULL**  
            DailyCharge: Currency            **NOT NULL**   
            WeeklyCharge: Currency        **NOT NULL**  
            TeaCharge: Teas            **NOT NULL**  
            RoomVacancy: Vacancies        **NOT NULL**

AgeGroup: AgeGroup **NOT NULL**

StaffRatio: StaffRatio **NOT NULL  
Primary Key** (RoomName)

Attendance Relation

**Relation**Attendance

AttendanceID: AttendanceIdentifier    **NOT NULL**

FeeID: FeeIdentifier            **NOT NULL**

ChildID: ChildIdentifier            **NOT NULL**

WeekStart: Date                **NOT NULL**

Monday: Attendance **NOT NULL**

Tuesday: Attendance             **NOT NULL**

Wednesday: Attendance             **NOT NULL**

Thursday: Attendance **NOT NULL**

Friday: Attendance **NOT NULL**

RoomName: RoomIdentifier        **NOT NULL**

Teas: Teas                    **NOT NULL**

**Primary Key** (AttendanceID)

**Foreign Key** (RoomName) **REFERENCES** Room.RoomName **NOT NULL**  
**Foreign Key** (ChildID) **REFERENCES** Child.ChildID **NOT NULL**  
**Foreign Key** (FeeID) **REFERENCES** Fee.FeeID **NOT NULL**

Consent

**Relation** Consent

ConsentID: ConsentIdentifier           **NOT NULL**

ChildID: ChildIdentifier                **NOT NULL**

NurseryPolicies: Policy                **NOT NULL**

NurseryPoliciesDate: Date               **NOT NULL**

Walks: Confirm                    **NOT NULL**

CoachTrips: Confirm                **NOT NULL**

PublicTransport: Confirm                **NOT NULL**

PhotoTaken: Confirm                **NOT NULL**

PhotoUsedInNursery: Confirm            **NOT NULL**

PhotoUsedOnWebsite: Confirm            **NOT NULL**

PhotoUsedInPublicityMaterial: Confirm        **NOT NULL**

PhotoUsedInReportDocuments: Confirm    **NOT NULL**

ApplicationOfSunCream: Confirm            **NOT NULL**

ReceiveMedicalTreatment: Confirm        **NOT NULL**

CalpolAdministration: Confirm            **NOT NULL**

**Primary Key** ( Consent ID)  
**Foreign Key** ( Child ID ) **REFERENCES** Child.Child ID **NOT NULL**

#### Parent Relation

**Relation** Parent

ParentID: ParentIdentifier    **NOT NULL**

Title: Title                 **NOT NULL**

FirstName: Name**NOT NULL**

Surname: Name**NOT NULL**

NameKnownByAtWork: Name     **NULL**

HomeAddress: Street        **NOT NULL**

WorkAddress: Street        **NOT NULL**

HomePhone: Telephone        **NOT NULL**

WorkPhone Telephone         **NULL**

MobilePhone: Mobile         **NULL**

Email: Email             **NULL**

**Primary Key** (Parent ID)

Child has Parent Relation  
**Relation** ChildParent

ParentID: ParentIdentifier   **NOT NULL**

ChildID: ChildIdentifier        **NOT NULL**

Relationship: Realtionship    **NOT NULL**

**Primary Key** ( Parent ID, Child ID )   
  
Child has Emergency Contact Relation  
**Relation** ChildEmergency Contact

EmergencyContactID: EmergencyIdentifier    **NOT NULL**

ChildID: ChildIdentifier            **NOT NULL**

Relationship: Realtionship            **NOT NULL**

**Primary Key** ( Parent ID, Child ID )   
  
Emergency Contacts

**Relation**  EmergencyContact

EmergencyContactID: EmergencyIdentifier  **NOT NULL**

FirstName:    Name                    **NOT NULL**

Surname: Name                    **NOT NULL**

AddressID: AddressIdentifier            **NOT NULL**

HomePhone: Telephone                **NOT NULL**

MobilePhone: Mobile                 **NULL**

Relationship: Relationship                **NOT NULL**

**Primary Key** (EmergencyContactID)  
**Foreign Key** ( Address ID ) **REFERENCES** Address.AddressID **NOT NULL**  
  
Child has Named Person

**Relation** ChildNamedperson  
            ChildID: ChildIdentifier             **NOT NULL**  
            NamedPersonID: NamedPersonIdentifie **NOT NULL**  
**Primary key** ( Child ID, Named Person ID )  
  
Emergency Contacts  
**Relation** NamedPerson

NamedPersonID: NamedPersonIdentifier   **NOT NULL**

FirstName: Name                     **NOT NULL**

Surname: Name                    **NOT NULL**

Relationship: Reltionship                 **NOT NULL**

**Primary Key** ( NamedPersonID)

Address Relation  
**Relation** Address  
            AddressID: AddressIdentifier    **NOT NULL**  
            AddressLine1: Street        **NOT NULL**  
            AddressLine2: Street        **NOT NULL**      
            City : City            **NOT NULL**  
            State/Province: County        **NOT NULL**  
            PostalCode: Postcode       **NOT NULL**

Country: Country        **NOT NULL**

**Primary Key** ( AddressID )  
  
Fee Relation  
**Relation** MonthlyFee  
    FeeID: FeeIdentifier            **NOT NULL**  
    DateCharged: Date            **NOT NULL**  
    RoomName: RoomIdentifier        **NOT NULL**  
    ChildID: ChildIdentifier        **NOT NULL**  
    ParentID: ParentIdentifier        **NOT NULL**  
**Primary Key** (FeeID)  
**Foreign Key** (RoomName) **REFERENCES** Room.RoomName **NOT NULL**  
**Foreign Key** (ChildID)**REFERENCES** Child.ChildID **NOT NULL**  
**Foreign Key** (ParentID)**REFERENCES** Parent.ParentID **NOT NULL**  
  
Monthly Invoice Relation  
**Relation** MonthlyInvoice  
   InvoiceID: InvoicIdentifier                **NOT NULL**  
    VoucherSchemeProviderID: VoucherProviderIdentifier   **NOT NULL**  
    FeeID: FeeIdentifier                      **NOT NULL**  
    LateFee: Currency                       **NOT NULL**  
    OutstandingFee: Currency                    **NOT NULL**  
    Deductions: Currency                        **NOT NULL**  
**Primary Key** (MonthlyInvoiceID)  
**Foreign Key** (FeeID) **REFERENCES** Fee.FeeID **NOT NULL**  
  
Payment History Relation  
**Relation** PaymentHistory  
    PaymentID: PaymentIdentifier        **NOT NULL**  
    ParentID: ParentIdentifier            **NOT NULL**  
    MonthlyInvoiceID: InvoiceIdentifier   **NOT NULL**  
    Paid: confirm                    **NOT NULL**  
    PaymentType: PaymentType           **NOT NULL**  
    DateDue: Date                   **NOT NULL**  
    DatePaid: Date                    **NULL**  
    AmountDue: Currency              **NOT NULL**  
**Primary Key** (PaymentID)  
**Foreign Key** (InvoiceID) **REFERENCES** MonthlyInvoice. InvoiceID **NOT NULL**  
**Foreign Key** (ParentID) **REFERENCES** Parent.ParentID **NOT NULL**  
  
Voucher Scheme Provider Relation  
**Relation** VoucherSchemeProvider  
    VoucherSchemeProviderID: VoucherSchemeIdentifier    **NOT NULL**  
    VoucherSchemeID: VoucherRegisterIdentifier        **NOT NULL**  
    Name: Name                            **NOT NULL**  
    DiscountAmount: Currency                    **NOT NULL**  
**Primary Key** (VoucherSchemeProviderID)  
**Foreign Key** (VoucherSchemeID) **REFERENCES** VoucherScheme.VoucherSchemeID **NOT NULL**  
Deposit Relation  
**Relation** Deposit  
    DepositID: DepositIdentifier    **NOT NULL**  
    DepositPaid: Paid        **NOT NULL**  
    ParentID: ParentIdentifier    **NOT NULL**  
    DepositReturn: confirm    **NOT NULL**  
    DepositDatePaid: Date        **NOT NULL**  
    DepositDateReturn: Date     **NULL**  
    Amount: Currency        **NOT NULL**  
**Primary Key** (DepositID)  
**Foreign Key** (ParentID) **REFERENCES** Parent.ParentID **NOT NULL**

VoucherSchemeRegister Relation  
**Relation** VoucherSchemeRegister  
    VoucherSchemeID: VoucherRegisterIdentifier    **NOT NULL**  
    ParentID: ParentIdentifier                **NOT NULL**  
    ChildID: ChildIdentifier              **NOT NULL**  
    StartDate: Date                       **NOT NULL**  
    VoucherApproved: Confirm                **NOT NULL**

DateSigned: Date                    **NOT NULL**

**Primary Key** (VoucherSchemeID)  
**Foreign Key** (ChildID)**REFERENCES** Child.ChildID **NOT NULL**  
**Foreign Key** (ParentID)**REFERENCES** Parent.ParentID **NOT NULL**

MySQL Statements

*-- MySQL SCHEMA - Kyle Harrison*

*--*

*-- Host: 127.0.0.1 Database: TeddyBearNurseryClub*

*-- User: Password:*

*-- ------------------------------------------------------*

*-- Tested on Server version 5.5.27 - MySQL Community Server*

CREATE SCHEMA IF NOT EXISTS TeddyBearNurseryClub;

USE TeddyBearNurseryClub;

--

**-- Table structure for table Child**

--

CREATE TABLE IF NOT EXISTS Child (

ChildID varchar(6) NOT NULL,

FirstName varchar(30) NOT NULL DEFAULT '',

Surname varchar(30) NOT NULL DEFAULT '',

DOB date NOT NULL ,

StartDate date NOT NULL,

LeavingDate date DEFAULT NULL,

RoomName enum('Baby Room', 'Polar Room', 'Panda Room', 'Teddy’s Transformers', 'Daisy’s Discoverers', 'Oakley’s Explorers',"None") NOT NULL DEFAULT 'None',

AddressID varchar(6) NOT NULL DEFAULT '',

PRIMARY KEY (ChildID)) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--

**-- Table structure for table Address**

--

CREATE TABLE IF NOT EXISTS Address (

AddressID varchar(6) NOT NULL,

AddressLine varchar(50) NOT NULL DEFAULT '',

AddressLineTwo varchar(50) NOT NULL DEFAULT '',

City varchar(35) NOT NULL DEFAULT 'Dundee',

County varchar(30) NOT NULL DEFAULT 'Angus',

Postcode varchar(8) NOT NULL DEFAULT '',

Country varchar(30) NOT NULL DEFAULT 'United Kingdom',

PRIMARY KEY (AddressID)) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--

**-- Table structure for table Register**

--

CREATE TABLE IF NOT EXISTS Register (

RegisterID varchar(6) NOT NULL,

ChildID varchar(6) NOT NULL,

ConsentID varchar(6) NOT NULL,

DepositID varchar(6) NOT NULL,

DoctorID varchar(6) NOT NULL,

PlacementType enum('Full Time', 'Part Time') NOT NULL DEFAULT 'Part Time',

PreferedStartDate date DEFAULT NULL,

PRIMARY KEY (RegisterID)) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--

**-- Table structure for table ChildParent**

--

CREATE TABLE IF NOT EXISTS ChildParent (

ChildID varchar(6) NOT NULL,

ParentID varchar(6) NOT NULL,

Relationship enum('Mother', 'Father', 'Step-Mother', 'Step-Father', 'Guardian', "Other") NOT NULL DEFAULT 'Mother',

PRIMARY KEY (ChildID, ParentID)) ENGINE=InnoDB DEFAULT CHARSET=latin1 ;

--

**-- Table structure for table Consent**

--

CREATE TABLE IF NOT EXISTS Consent (

ConsentID varchar(6) NOT NULL,

DoctorID varchar(6) NOT NULL,

NurseryPolicies bit(1) NOT NULL DEFAULT 0,

NurseryPoliciesDate date NOT NULL,

AdministerCapol bit(1) NOT NULL DEFAULT 0,

AdministerCapolDate date NOT NULL,

ApplySunCream bit(1) NOT NULL DEFAULT 0,

ApplySunCreamDate date NOT NULL,

CoachTrips bit(1) NOT NULL DEFAULT 0,

NurseryPhotos bit(1) NOT NULL DEFAULT 0,

PhotosTaken bit(1) NOT NULL DEFAULT 0,

PublicTransport bit(1) NOT NULL DEFAULT 0,

PublicityPhoto bit(1) NOT NULL DEFAULT 0,

ReceiveMedicalTreatmentDate date NOT NULL,

RecieveMedicalTreatment bit(1) NOT NULL DEFAULT 0,

ReportPhoto bit(1) NOT NULL DEFAULT 0,

Walks bit(1) NOT NULL DEFAULT 0,

WebsitePhotos bit(1) NOT NULL DEFAULT 0,

PRIMARY KEY (ConsentID)) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--

**-- Table structure for table Doctor**

--

CREATE TABLE IF NOT EXISTS Doctor (

DoctorID varchar(6) NOT NULL,

FirstName varchar(30) NOT NULL DEFAULT '',

Surname varchar(50) NOT NULL DEFAULT '',

AddressID varchar(6) NOT NULL,

PRIMARY KEY (DoctorID)) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--

**-- Table structure for table Absence**

--

CREATE TABLE IF NOT EXISTS Absence (

AbsenceID varchar(6) NOT NULL,

ChildID varchar(6) NULL,

AbsenceDate date NOT NULL,

PRIMARY KEY (AbsenceID)) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--

**-- Table structure for table Room**

--

CREATE TABLE IF NOT EXISTS Room (

RoomName enum('Baby Room', 'Polar Room', 'Panda Room', 'Teddy’s Transformers', 'Daisy’s Discoverers', 'Oakley’s Explorers',"None") NOT NULL DEFAULT 'None',

DailyCharge decimal(10, 2) NOT NULL DEFAULT 0.00,

WeeklyCharge decimal(10, 2) NOT NULL DEFAULT 0.00,

TeaCharge decimal(10, 2) NOT NULL DEFAULT 0.00,

RoomVacancy tinyint UNSIGNED NOT NULL DEFAULT 0,

AgeGroup enum('0-12', '12-24', '2-3', '2-4', '3.5-5',"None") NOT NULL DEFAULT 'None',

StaffRatio enum('1:3', '1-5', '1-8',"None") NOT NULL DEFAULT 'None',

PRIMARY KEY (RoomName))ENGINE=InnoDB DEFAULT CHARSET=latin1;

--

**-- Table structure for table Attendance**

--

CREATE TABLE IF NOT EXISTS Attendance (

AttendanceID varchar(6) NOT NULL,

ChildID varchar(6) NULL,

FeeID varchar(6) NULL,

RoomName enum('Baby Room', 'Polar Room', 'Panda Room', 'Teddy’s Transformers', 'Daisy’s Discoverers', 'Oakley’s Explorers',"None") NOT NULL DEFAULT 'None',

WeekStart date NOT NULL,

Teas tinyint UNSIGNED NOT NULL DEFAULT 0,

Monday bit(1) NOT NULL default 0,

Tuesday bit(1) NOT NULL default 0,

Wednesday bit(1) NOT NULL default 0,

Thursday bit(1) NOT NULL default 0,

Friday bit(1) NOT NULL default 0,

PRIMARY KEY (AttendanceID))ENGINE=InnoDB DEFAULT CHARSET=latin1 ;

--

**-- Table structure for table Parent**

--

CREATE TABLE IF NOT EXISTS Parent (

ParentID varchar(6) NOT NULL,

Title varchar(35) NOT NULL DEFAULT 'Miss',

FirstName varchar(30) NOT NULL DEFAULT '',

Surname varchar(50) NOT NULL DEFAULT '',

HomeTelephone varchar(11) NOT NULL DEFAULT '',

WorkTelephone varchar(11) DEFAULT NULL,

MobileTelephone varchar(11) NOT NULL DEFAULT '',

Email varchar(75) DEFAULT NULL,

NamedKnownatWork varchar(50) DEFAULT NULL,

PRIMARY KEY (ParentID))ENGINE=InnoDB DEFAULT CHARSET=latin1 ;

--

**-- Table structure for table EmergencyContact**

--

CREATE TABLE IF NOT EXISTS EmergencyContact (

EmergencyContactID varchar(6) NOT NULL,

FirstName varchar(30) NOT NULL DEFAULT '',

Surname varchar(50) NOT NULL DEFAULT '',

AddressID varchar(6) NOT NULL,

HomePhone varchar(11) NOT NULL DEFAULT '',

MobilePhone varchar(11) DEFAULT NULL,

PRIMARY KEY (EmergencyContactID))ENGINE=InnoDB DEFAULT CHARSET=latin1 ;

--

**-- Table structure for table VoucherSchemeProvider**

--

CREATE TABLE IF NOT EXISTS VoucherSchemeProvider (

VoucherSchemeProviderId varchar(6) NOT NULL,

Name varchar(100) NOT NULL,

Discount decimal(4, 3) NOT NULL DEFAULT '0.100',

PRIMARY KEY (VoucherSchemeProviderId))ENGINE=InnoDB DEFAULT CHARSET=latin1 ;

--

**-- Table structure for table MonthlyFee**

--

CREATE TABLE IF NOT EXISTS MonthlyFee (

FeeID varchar(6) NOT NULL,

DateCharged date NOT NULL,

ChildID varchar(6) NOT NULL,

ParentID varchar(6) NOT NULL,

RoomName enum('Baby Room', 'Polar Room', 'Panda Room', 'Teddy’s Transformers', 'Daisy’s Discoverers', 'Oakley’s Explorers',"None") NOT NULL DEFAULT 'None',

PRIMARY KEY (FeeID))ENGINE=InnoDB DEFAULT CHARSET=latin1 ;

--

**-- Table structure for table MonthlyInvoice**

--

CREATE TABLE IF NOT EXISTS MonthlyInvoice (

InvoiceID varchar(6) NOT NULL,

FeeID varchar(6) NOT NULL,

VoucherSchemeID varchar(6) NOT NULL,

PayDate date NOT NULL,

LateFees decimal(10, 2) NOT NULL DEFAULT 0.00,

Outstanding decimal(10, 2) NOT NULL DEFAULT 0.00,

Deductions decimal(10, 2) NOT NULL DEFAULT 0.00,

PRIMARY KEY (InvoiceID))ENGINE=InnoDB DEFAULT CHARSET=latin1 ;

--

**-- Table structure for table PaymentHistory**

--

CREATE TABLE IF NOT EXISTS PaymentHistory (

PaymentID varchar(6) NOT NULL,

InvoiceID varchar(6) NOT NULL,

ParentID varchar(6) NULL,

Paid bit(1) NOT NULL default 0,

PaymentType enum('Credit Card', 'Cash', 'Cheque', 'Direct Debit', 'Other') NOT NULL DEFAULT 'Direct Debit',

DateDue date NOT NULL,

AmountDue decimal(10, 2) NOT NULL DEFAULT 0.00,

DatePaid date DEFAULT NULL,

PRIMARY KEY (PaymentID))ENGINE=InnoDB DEFAULT CHARSET=latin1 ;

--

**-- Table structure for table Deposit**

--

CREATE TABLE IF NOT EXISTS Deposit (

DepositID varchar(6) NOT NULL,

DepositPaid bit(1) NOT NULL default 0,

DepositReturned bit(1) NOT NULL default 0,

Amount decimal(10, 2) NOT NULL DEFAULT 0.00,

DepositPaidDate date NOT NULL,

DepositRefundedDate date DEFAULT NULL,

PRIMARY KEY (DepositID))ENGINE=InnoDB DEFAULT CHARSET=latin1 ;

--

**-- Table structure for table VoucherSchemeRegister**

--

CREATE TABLE IF NOT EXISTS VoucherSchemeRegister (

VoucherSchemeID varchar(6) NOT NULL,

VoucherSchemeProviderId varchar(6) NOT NULL,

ChildID varchar(6) NOT NULL,

ParentID varchar(6) NOT NULL,

IntendedStartDate date NOT NULL,

RegisteredWithCouncil bit(1) NOT NULL default 0,

DateSigned date NOT NULL,

PRIMARY KEY (VoucherSchemeID))ENGINE=InnoDB DEFAULT CHARSET=latin1 ;

--

**-- Table structure for table ChildEmergencyContact**

--

CREATE TABLE IF NOT EXISTS ChildEmergencyContact (

ChildID varchar(6) NOT NULL,

EmergencyContactID varchar(6) NOT NULL,

Relationship varchar(20) NOT NULL DEFAULT 'Relative')

ENGINE=InnoDB DEFAULT CHARSET=latin1;

--

**-- Constraints for table Child**

--

ALTER TABLE Child ADD CONSTRAINT Occupies FOREIGN KEY (RoomName) REFERENCES Room (RoomName)

ON UPDATE CASCADE ON DELETE RESTRICT;

ALTER TABLE Child ADD CONSTRAINT ResidesAt FOREIGN KEY (AddressID) REFERENCES Address (AddressID)

ON UPDATE CASCADE ON DELETE RESTRICT;

--

**-- Constraints for table Register**

--

ALTER TABLE Register ADD CONSTRAINT Enrolls FOREIGN KEY (ChildID) REFERENCES Child (ChildID)

ON UPDATE CASCADE ON DELETE RESTRICT;

ALTER TABLE Register ADD CONSTRAINT RequiresConsent FOREIGN KEY (ConsentID) REFERENCES Consent (ConsentID)

ON UPDATE CASCADE ON DELETE RESTRICT;

ALTER TABLE Register ADD CONSTRAINT RequiresDeposit FOREIGN KEY (DepositID) REFERENCES Deposit (DepositID)

ON UPDATE CASCADE ON DELETE RESTRICT;

ALTER TABLE Register ADD CONSTRAINT RequiresDoctor FOREIGN KEY (DoctorID) REFERENCES Doctor (DoctorID)

ON UPDATE CASCADE ON DELETE RESTRICT;

--

**-- Constraints for table ChildParent**

--

ALTER TABLE ChildParent ADD CONSTRAINT OffspringOff FOREIGN KEY (ChildID) REFERENCES Child (ChildID)

ON UPDATE CASCADE ON DELETE CASCADE;

ALTER TABLE ChildParent ADD CONSTRAINT ResponsibleFor FOREIGN KEY (ParentID) REFERENCES Parent (ParentID)

ON UPDATE CASCADE ON DELETE CASCADE;

--

-- Constraints for table ChildEmergencyContact

--

ALTER TABLE ChildEmergencyContact ADD CONSTRAINT RequiresContact FOREIGN KEY (ChildID) REFERENCES Child (ChildID)

ON UPDATE CASCADE ON DELETE CASCADE;

ALTER TABLE ChildEmergencyContact ADD CONSTRAINT RequiredForEmergency FOREIGN KEY (EmergencyContactID) REFERENCES EmergencyContact (EmergencyContactID)

ON UPDATE CASCADE ON DELETE CASCADE;

--

**-- Constraints for table Consent**

--

ALTER TABLE Consent ADD CONSTRAINT RegistedTo FOREIGN KEY (DoctorID) REFERENCES Doctor (DoctorID)

ON UPDATE CASCADE ON DELETE RESTRICT;

--

**-- Constraints for table Doctor**

--

ALTER TABLE Doctor ADD CONSTRAINT PracticeAt FOREIGN KEY (AddressID) REFERENCES Address (AddressID)

ON UPDATE CASCADE ON DELETE RESTRICT;

--

**-- Constraints for table EmergencyContact**

--

ALTER TABLE EmergencyContact ADD CONSTRAINT Requires FOREIGN KEY (AddressID) REFERENCES Address (AddressID)

ON UPDATE RESTRICT ON DELETE RESTRICT;

--

**-- Constraints for table MonthlyFee**

--

ALTER TABLE MonthlyFee ADD CONSTRAINT AccumulatedBy FOREIGN KEY (ChildID) REFERENCES Child (ChildID)

ON UPDATE RESTRICT ON DELETE RESTRICT;

ALTER TABLE MonthlyFee ADD CONSTRAINT PaidBy FOREIGN KEY (ParentID) REFERENCES Parent (ParentID)

ON UPDATE RESTRICT ON DELETE RESTRICT;

ALTER TABLE MonthlyFee ADD CONSTRAINT calculatedFrom FOREIGN KEY (RoomName) REFERENCES Room (RoomName)

ON UPDATE RESTRICT ON DELETE RESTRICT;

--

**-- Constraints for table MonthlyInvoice**

--

ALTER TABLE MonthlyInvoice ADD CONSTRAINT Discounts FOREIGN KEY (VoucherSchemeID) REFERENCES VoucherSchemeRegister (VoucherSchemeID)

ON UPDATE RESTRICT ON DELETE RESTRICT;

ALTER TABLE MonthlyInvoice ADD CONSTRAINT GeneratesFee FOREIGN KEY (FeeID) REFERENCES MonthlyFee (FeeID)

ON UPDATE RESTRICT ON DELETE RESTRICT;

--

**-- Constraints for table VoucherSchemeRegister**

--

ALTER TABLE VoucherSchemeRegister ADD CONSTRAINT Provides FOREIGN KEY (VoucherSchemeProviderId) REFERENCES VoucherSchemeProvider (VoucherSchemeProviderId)

ON UPDATE CASCADE ON DELETE RESTRICT;

ALTER TABLE VoucherSchemeRegister ADD CONSTRAINT Uses FOREIGN KEY (ChildID) REFERENCES Child (ChildID)

ON UPDATE CASCADE ON DELETE CASCADE;

ALTER TABLE VoucherSchemeRegister ADD CONSTRAINT Accredited FOREIGN KEY (ParentID) REFERENCES Parent (ParentID)

ON UPDATE CASCADE ON DELETE CASCADE;

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**-- Constraints for table Absence**

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ALTER TABLE Absence ADD CONSTRAINT causes FOREIGN KEY (ChildID) REFERENCES Child (ChildID)

ON UPDATE CASCADE ON DELETE CASCADE;

--

**-- Constraints for table Attendance**

--

ALTER TABLE Attendance ADD CONSTRAINT LocatedIn FOREIGN KEY (RoomName) REFERENCES Room (RoomName)

ON UPDATE CASCADE ON DELETE CASCADE;

ALTER TABLE Attendance ADD CONSTRAINT Attends FOREIGN KEY (ChildID) REFERENCES Child (ChildID)

ON UPDATE CASCADE ON DELETE CASCADE;

ALTER TABLE Attendance ADD CONSTRAINT Generates FOREIGN KEY (FeeID) REFERENCES MonthlyFee (FeeID)

ON UPDATE CASCADE ON DELETE SET NULL;

--

**-- Constraints for table PaymentHistory**

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ALTER TABLE PaymentHistory ADD CONSTRAINT Requests FOREIGN KEY (InvoiceID) REFERENCES MonthlyInvoice (InvoiceID)

ON UPDATE CASCADE ON DELETE CASCADE;

ALTER TABLE PaymentHistory ADD CONSTRAINT PaymentBy FOREIGN KEY (ParentID) REFERENCES Parent (ParentID)

ON UPDATE CASCADE ON DELETE RESTRICT;

Form and Report Designs

**bmission**

You should submit a report that documents the following:

·        relational schema for your database

·        designs of relevant forms and reports

·        SQL statements used to set up your database

·        ID + password information to access to the database itself.

Appropriately constructed relational schema                                                              20%  
Useable and useful forms and reports                                                                           40%  
Appropriate SQL commands that enable the database to function                      40%