SD\_Etherington\_H\_DB\_Ass03\_.docx

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Database Concepts: Data Modelling

Payment

PaymentID{ pk}

PayDate {pk}

Amount

Customers

CustId {pk}

Address

ReferenceNo {fk}

Email

1 purchases 0.3

1

live in

1\*

Licences

LicenceNo {pk}

Pin

ReferenceNoC

ReferenceNoL

Fee {fk}

Status

Property

PropId {pk}

Address

1\* required

for

1\* Send by

Office

Email {pk}

Address

Website

TelNo

1

Assumption: one office per address.

Database Concepts: Relational Schema

1NF:

Customers (CustId, ReferenceNo, AccountNo, Email)

CustomerDetails (CustId, Address)

Assumption:Address is repeated

Payment (PaymentId)

PaymentDetails(PaymentId, Paydate, Amount)

Licenses (LicenceNo, Pin, ReferenceNoC, ReferenceNoL,)

LicensesDetails (LicenceNo, Fee, pStatus, Status)

Property (PropId)

PropertyDetails (PropId, Address)

Office (Email, Website, TelNo)

OfficeDetails (Email, Address)

2NF:

Customers (CustId, ReferenceNo AccountNo,)

CustomerDetails (CustId, Address, Email)

Payment (PaymentId)

PaymentDetails (PaymentId, Paydate, Amount)

Licenses (LicenceNo, ReferenceNoL)

LicensesDetails (LicenceNo, ReferenceNoC, Pin, Fee, pStatus, Status)

Property (PropId)

PropertyDetails (PropId, Address)

Office (Email)

OfficeDetails (Email, Website, TelNo, Address)

3NF:

Customers (CustId, Addrerss, Email)

ReferenceNo(AccountNo)

Assumption-ReferenceNo is tied to AccountNo

Payment (PaymentId, LicenceNo)

PaymentDetails (PaymentId)

Paydate, (Amount)

Licenses (LicenceNo, ReferenceNoL,)

LicensesDetails (LicenceNo, Pin, ReferenceNoC, Status)

Fee (pStatus)

Property (PropId)

PropertyDetails (PropId, Address)

Office (Email, Address, Website,)

OfficeDetails (Email, TelNo)

Database Concepts: Database Schema

**Schema:** TvLicence

**Relation:** Customers

CustId numeric (7)

Address char NOT NULL

ReferenceNo numeric (17)

AccountNo numeric (14)

Email char NOT NULL UNIQUE

Assumption-ReferenceNo numbers do not increase.

**Primary Key:** CustId

**Foreign Key:** ReferenceNoReferences AccountNo

**Relation:** Payment

PaymentID numeric (7) NOT NULL

PayDate char (8)

Assumption-Pay date includes spaces

Amount char (3) DEFAULT 0

**Primary Key:** PaymentId

**Relation:** Licences

LicenceNo numeric (13)

Pin numeric (5) NOT NULL UNIQUE

ReferenceNoC numeric (17) NOT NULL

ReferenceNoL numeric (17) NOT NULL

Status DEFAULT 1

Assumption Paid or due(0 or 1).

**Primary Key:** LicenceNo

**Foreign Key:** Fee References pStatus

**Relation:** Property

PropId char (9)

Address char (21) NOT NULL UNIQUE

**Primary Key:**  PropId

**Relation:** Office

Email char (25)

Assumption-Email sent from Cork

Website char (15)

Address char (4) NOT NULL UNIQUE

Assumption-Sent from Co. Cork.

TelNo char (11)

**Primary Key:** Email