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1  --DDL Used to great table--
2  CREATE TABLE CommunicationType (
3      cmType          VARCHAR(42),
4      PRIMARY KEY (cmType)
5  );
6
7  CREATE TABLE Customer (
8      cID              INT NOT NULL,
9      cFirstName       VARCHAR(42),
10     cLastName        VARCHAR(100),
11     cDateOfBirth     DATE,
12     cPhoneNumber     VARCHAR(15),
13     cEmail           VARCHAR(47),
14     PRIMARY KEY (cID),
15     INDEX (cFirstName),
16     INDEX (cLastName),
17     INDEX (cEmail)
18 );
19
20 CREATE TABLE ReferralBenefitHistory (
21     cID              INT NOT NULL,
22     rBenefit        VARCHAR (50) NOT NULL,
23     rDate           DATE NOT NULL,
24     rFlag           VARCHAR (50),
25     PRIMARY KEY (cID, rBenefit, rDate),
26     FOREIGN KEY (cID) REFERENCES Customer (cID)
27 );
28 CREATE TABLE Prospective (
29     cID              INT NOT NULL,
30     pReferralName    VARCHAR(100),
31     pDeadFlag        TINYINT,
32     PRIMARY KEY (cID),
33     FOREIGN KEY (cID) REFERENCES Customer (cID)
34 );
35
36 CREATE TABLE PromotionContact (
37     cID              INT NOT NULL,
38     pcDate          DATE NOT NULL,
39     pcTime          TIME,
40     cmType          VARCHAR(42),
41     PRIMARY KEY (cID, pcDate),
42     FOREIGN KEY (cID) REFERENCES Prospective (cID),
43     FOREIGN KEY (cmType) REFERENCES CommunicationType (cmType)
44 );
45
46 CREATE TABLE Current (
47     cID              INT NOT NULL,
48     cJoinedDate     DATE,
49     PRIMARY KEY (cID),
50     FOREIGN KEY (cID) REFERENCES Customer (cID)
51 );
52
53 CREATE TABLE ZIPLocation (
54     zZIPCode         VARCHAR(10) NOT NULL,
55     zCity            VARCHAR(100) NOT NULL,
56     zState           VARCHAR(42) NOT NULL,
57     PRIMARY KEY (zZIPCode)
58 );
59
60 CREATE TABLE Address (
61     cID              INT NOT NULL,
62     aType            VARCHAR(42),
63     zZIPCode         VARCHAR(10),
64     aAddress         VARCHAR(100),
65     PRIMARY KEY (cID, aType),
66     FOREIGN KEY (cID) REFERENCES Current (cID),

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67     FOREIGN KEY (zZIPCode) REFERENCES ZIPLocation(zZIPCode)
68 );
69
70 CREATE TABLE Steady (
71     cID          INT NOT NULL,
72     sLoyaltyPoints INT,
73     PRIMARY KEY (cID),
74     FOREIGN KEY (cID) REFERENCES Current (cID)
75 );
76
77 CREATE TABLE Premier (
78     cID          INT NOT NULL,
79     pAnnualFee   DECIMAL(10,2) UNSIGNED,
80     PRIMARY KEY (cID),
81     FOREIGN KEY (cID) REFERENCES Current (cID)
82 );
83
84 CREATE TABLE PriceIncrease (
85     cID          INT NOT NULL,
86     piPercentIncrease DOUBLE,
87     piReason      VARCHAR(1701),
88     PRIMARY KEY (cID),
89     FOREIGN KEY (cID) REFERENCES Premier (cID)
90 );
91
92 CREATE TABLE VehicleFamily (
93     vfID          INT NOT NULL,
94     vfMake        VARCHAR(42),
95     vfModel       VARCHAR(42),
96     vfYear        YEAR,
97     PRIMARY KEY (vfID),
98     INDEX (vfMake),
99     INDEX (vfModel)
100 );
101 CREATE TABLE MaintainPackage (
102     mpID INT NOT NULL,
103     mpName VARCHAR(128) NOT NULL,
104     mpDescription VARCHAR(1337),
105     PRIMARY KEY (mpID)
106 );
107 CREATE TABLE Vehicle (
108     vVIN          CHAR(17) NOT NULL,
109     vMileage       MEDIUMINT UNSIGNED NOT NULL,
110     cID           INT NOT NULL,
111     vExpectedMileageThisYear MEDIUMINT UNSIGNED,
112     vRoutineServices INT(100) NOT NULL,
113     vfID          INT NOT NULL,
114     PRIMARY KEY (vVIN),
115     FOREIGN KEY (cID) REFERENCES Current (cID),
116     FOREIGN KEY (vfID) REFERENCES VehicleFamily (vfID),
117     FOREIGN KEY (vRoutineServices) REFERENCES MaintainPackage (mpID)
118 );
119
120 CREATE TABLE Employee (
121     eID          INT NOT NULL,
122     eName        VARCHAR(420),
123     eSalary      DECIMAL(10,2) UNSIGNED,
124     eHiredDate   DATE,
125     PRIMARY KEY (eID)
126 );
127
128 CREATE TABLE Technician (
129     eID INT NOT NULL,
130     PRIMARY KEY (eID),
131     FOREIGN KEY (eID) REFERENCES Employee (eID)
132 );

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133
134 CREATE TABLE Mechanic (
135     eID INT NOT NULL,
136     PRIMARY KEY (eID),
137     FOREIGN KEY (eID) REFERENCES Employee (eID)
138 );
139
140 CREATE TABLE TrainingSkill (
141     tsTrainerID INT NOT NULL,
142     tsTraineeID INT NOT NULL,
143     tsStartDate DATE,
144     tsEndDate DATE,
145     tsSkillTrained VARCHAR(42),
146     PRIMARY KEY (tsTrainerID, tsTraineeID, tsStartDate, tsEndDate),
147     FOREIGN KEY (tsTrainerID) REFERENCES Mechanic (eID),
148     FOREIGN KEY (tsTraineeID) REFERENCES Mechanic (eID),
149     FOREIGN KEY (tsSkillTrained) REFERENCES Skillset (ssName)
150 );
151
152 CREATE TABLE MasteryLevel (
153     mlLevel INT UNSIGNED NOT NULL,
154     PRIMARY KEY (mlLevel),
155     CONSTRAINT CHK_mlLevel CHECK (mlLevel>=1 AND mlLevel<=10)
156 );
157
158 CREATE TABLE Skillset (
159     ssName VARCHAR(42),
160     ssDescription VARCHAR(1701),
161     PRIMARY KEY (ssName)
162 );
163
164 CREATE TABLE SkillsetLine (
165     eID INT NOT NULL,
166     ssName VARCHAR(42),
167     slMasteryLevel INT UNSIGNED NOT NULL,
168     PRIMARY KEY (eID, ssName),
169     FOREIGN KEY (slMasteryLevel) REFERENCES MasteryLevel (mlLevel),
170     FOREIGN KEY (eID) REFERENCES Mechanic (eID),
171     FOREIGN KEY (ssName) REFERENCES Skillset (ssName)
172 );
173
174 CREATE TABLE AppointmentStatus (
175     aStatus VARCHAR(42),
176     PRIMARY KEY (aStatus)
177 );
178
179 CREATE TABLE Appointment (
180     vVIN CHAR(17) NOT NULL,
181     aDate DATE,
182     aTime TIME,
183     aExpectedTime TIME,
184     aStatus VARCHAR(42),
185     PRIMARY KEY (vVIN, aDate),
186     FOREIGN KEY (aStatus) REFERENCES AppointmentStatus (aStatus),
187     FOREIGN KEY (vVIN) REFERENCES Vehicle(vVIN)
188 );
189
190 CREATE TABLE MaintainOrder (
191     moID INT NOT NULL,
192     vVIN CHAR(17),
193     moWrittenBy INT NOT NULL,
194     PRIMARY KEY (moID),
195     FOREIGN KEY (vVIN) REFERENCES Vehicle (vVIN),
196     FOREIGN KEY (moWrittenBy) REFERENCES Technician(eID),
197 );
198

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199 CREATE TABLE MaintainItem(
200     miID INT NOT NULL,
201     miSkill VARCHAR (50) NOT NULL,
202     miName VARCHAR (50),
203     miBuyInPrice DECIMAL (10,2) UNSIGNED,
204     miCost DECIMAL(10,2) UNSIGNED,
205     mpID INT NOT NULL,
206     PRIMARY KEY (miID),
207     FOREIGN KEY (mpID) REFERENCES MaintainPackage (mpID),
208     FOREIGN KEY (miSkill) REFERENCES Skillset (ssName)
209 );
210
211 CREATE TABLE ItemWork(
212     miID INT NOT NULL,
213     moID INT NOT NULL,
214     iwDate DATE,
215     PRIMARY KEY (miID, moID),
216     FOREIGN KEY (miID) REFERENCES MaintainItem(miID),
217     FOREIGN KEY (moID) REFERENCES MaintainOrder (moID)
218 );
219
220 CREATE TABLE JobQueueLine(
221     miID INT NOT NULL,
222     eID INT NOT NULL,
223     jqlDateOfWork DATE,
224     PRIMARY KEY (miID, eID, jqlDateOfWork),
225     FOREIGN KEY (miID) REFERENCES MaintainItem (miID),
226     FOREIGN KEY (eID) REFERENCES Mechanic (eID)
227 );
228
229 CREATE TABLE MaintainPackageLine (
230     moID INT NOT NULL,
231     mpID INT NOT NULL,
232     PRIMARY KEY (moID, mpID),
233     FOREIGN KEY (moID) REFERENCES MaintainOrder (moID),
234     FOREIGN KEY (mpID) REFERENCES MaintainPackage (mpID)
235 );
236
237

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