## Sistema de Informação e Base de Dados

**Assignment 1 - Database Modeling** 

Year 2019/2020

Group 60

Person (VAT/NIF, Name, Birthdate, Postal Address)

**IC1**: It's needed to specify in the postal address the Street name, city and zip code.

**Employee** (<u>VAT/NIF</u>, Salary, IBAN)

VAT/NIF: FK (person)

IC2: IBAN is unique

Client (VAT/NIF, Gender, Age)

VAT/NIF: FK (person)

**Doctor** (VAT/NIF, IBAN, Description, E-mail, Specialization)

VAT/NIF: FK (person)

IBAN: FK (employee)

**IC3**: There are a lot of specialization, such as dento-maxillofacial radiology, oral medicine, paediatric dentistry, etc.

**Permanent** (<u>VAT/NIF</u>, <u>IBAN</u>, years)

VAT/NIF: FK (person)

IBAN: FK (employee)

Trainees (VAT/NIF, IBAN)

VAT/NIF: FK (person)

IBAN: FK (employee)

Trained\_by (VAT/NIF, IBAN)

VAT/NIF: FK (person)

IBAN: FK (employee)

**Evaluation** (VAT/NIF, IBAN, Grade, Description, Date)

VAT/NIF: FK (person)

IBAN: FK (employee)

**Graded** (<u>VAT/NIF</u>, <u>IBAN</u>)

VAT/NIF: FK (person)

IBAN: FK (employee)

Recepcionist (VAT/NIF, IBAN)

VAT/NIF: FK (person)

IBAN: FK (employee)

**Appointment** (<u>Date</u>, Description)

**IC4:** It's needed to specify in the date the hour and the day.

Treated\_by (Date, Description, VAT/NIF, IBAN)

VAT/NIF: FK (person)

IBAN: FK (employee)

Date: FK (Appointment)

Intended\_for (Date, VAT/NIF, IBAN)

VAT/NIF:FK (person)

IBAN: FK (employee)

Date: FK (Appointment)

**Consultations** (<u>Date</u>, Information\_on\_the\_nurse, SOAP)

Date: FK (Appointment)

**IC4**: SOAP notes are formed by:

• Subjective Observation: Textual Summary of client observations.

• Objective Observation: Textual summary of the relevant history.

• Assessment: Textual summary for the situation of the client.

• <u>Plan</u>: Textual summary of substantive actions and activities.

Miss appointment (Date)

Date: FK (Appointment)

**Procedures** (Name, Type, Description)

**IC5:** Description sumarizes the actual procedure and/or its outcome.

Applies (Name, Date)

Date: FK (Appointment)

Name: FK (Procedures)

Radiography Exams (Name, Path)

Name: FK (Procedures)

**Dental Charting** (Name, Gap, Teeth)

Name: FK (Procedures)

<u>IC6:</u> Teeth are <u>identified</u> according to the Palmer Notation Numbering System, specially through a mouth quadrant and a teeth numer, and they are also associated to a name.

Nurse (VAT/NIF, IBAN)

VAT/NIF: FK (person)

IBAN: FK (employee)

Diagnosis (Description, Code)

**IC7:** The diagnosis codes should be standardized.

**IC8:** Each diagnostic code can relate to multiple other codes, which in turn can be further related to yet other codes. The database should be flexible.

Result\_in (Code, Date)

Date: FK (Appointment)

Code: FK (Diagnosis)

Prescription (Name, Code, Laboratory, Small Description, Dosage)

Code: FK (Diagnosis)

**IC9:** Small description has to include the Schedule of doses, that meanwhile includes the time between doses and duration treatment)

Medicated (Code, name, laboratory)

Code: FK (Diagnosis)

Name, Laboratory: FK (Prescription)

