ONCOLOGY DATA BASE

Objectives stated for the project:

Documentation

- Write a summary of your system's intent and a list of your system's features
- Prepare the mid-semester presentation
- Prepare the final presentation -
- Write a design document of your system, explaining why you did what Diagrams
- Draw an E-R diagram of your database (at least 5 entities and 1 many to many relationships)
- Draw an UML diagram of your system(at least 4 packages and 1 interface)

Structure

- Develop a database manager that uses JDBC
- Develop a database manager that uses JPA (for the login subsystem)
- Develop an XML manager using JAXB (for the XML subsystem)
- Components must interact via objects or primary keys
- Create a menu-based UI separated from your database manager or create a GUI separated from your database manager

JDBC

- Create all database tables
- Insert new data into at least 2 tables
- Show all elements of at least 2 tables
- Search by 1 column other than the primary key (of your choice) in at least 1 table
- Update data in at least 1 table
- Delete data from at least 1 table
- Insert data into at least 1 table with 1 or more foreign keys

JPA

- Annotate at least 2 entity classes that share an association with JPA (for the login subsystem)
- Make at least 1 create operation using JPA
- Make at least 1 read (that involves search) operation using JPA
- Make at least 1 update operation using JPA
- Make at least 1 delete operation using JPA
- Properly encrypt your users' passwords
- Use inheritance with JPA

XML

- Create a DTD schema
- Use XSLT to produce a HTML
- Marshall and unmarshall at least 2 entities using JAXB

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Finishing touches

- Make sure your system fulfills the purpose stated in the intent document and squash all bugs
- Put your project (and documentation) in GitHub and send the link to your professor
- Write a user's manual

Organization

2021-02-26-Group6-ProgressReport:

This week we expected to be able to do...

The E-R diagram and start with the tables

Optional: Reasons why

We've already chosen the topic and start thinking about the entities.

This week we did...

Finish the E-R diagram, download the project from github and start with the tables

Optional: Reasons why

On Monday's class we learn how to make the tables with sql and we already knew how to do the ER diagram

Next weeks we will do...

Finish the table

Optional: Reasons why

We will have more time to do so

2021-03-05-Group 6-Porgress report:

This week we expected to be able to do...

Start working with java

Optional: Reasons why

We saw how to write from SQL to java

This week we did...

Create the pojos and start with DBManager

Optional: Reasons why

We already have the tables, ER diagram and SQL code for tables creation and learnt how to

write that in java

Next weeks we will do...

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Continue with the java code for DBManager methods

Optional: Reasons why

More time to work in class and more information

2021-03-12-Group 6-Progress report:

This week we expected to be able to do...

Finish with the table creation and satrt programming the menu and all the methods in JAVA

Optional: Reasons why

We learn how to program some methods wiht SELCT and INSERT

This week we did...

Create the tables, some methods and start with the menu

Optional: Reasons why

We already know how to make the user interface and the code for some methods

Next weeks we will do...

Continue developing the methods and the menu

Optional: Reasons why

More time to work in class and more information

2021-03-19-Group 6-Progress report:

This week we expected to be able to do...

Continue developing the methods and the menu

Optional: Reasons why

More time to work in class and more information

This week we did...

Create some methods, learn how to delete from the data base and keep working on the user interface

Optional: Reasons why

We learn how to on Monday's class

Next weeks we will do...

Keep working on the methods and start preparing the midterm presentation

Optional: Reasons why

More time to work in class and more information and the day for the presentation closer.

2021-03-26-Group 6-Progress report:

This week we expected to be able to do...

Continue developing the methods and adding the SELECT

Optional: Reasons why

One practice class on Friday

This week we did...

Create some methods, learn how to select and update from the data base and keep working on the user interface

Optional: Reasons why

We learn how to on Monday's and Wednesday's classes

Next weeks we will do...

Prepare the midterm presentation and keep developing all the methods in JAVA

Optional: Reasons why

Easter holidays and some time to work on it at home

2021-04-09-Group 6-Progress report:

This week we expected to be able to do...

Continue developing the methods, add the update one, prepare the midterm presentation and present it.

Optional: Reasons why

We had easter holidays and this week was the presentations one.

This week we did...

Create some methods, including the update, solve some mistakes and do our presentation.

Optional: Reasons why

We work on it on easter and had a tutoring lesson to solve the errors.

Next weeks we will do...

Organize our code and database and keep developing the methods in java.

Optional: Reasons why

Time to work in class and at home.

2021-04-16-Group 6-Progress report:

This week we expected to be able to do...

Continue developing the methods and organize our project.

Optional: Reasons why

We had only one practice class.

This week we did...

Create some methods and solve some errors in our code.

Optional: Reasons why

We work on it during Friday's class and we were able to fix the problems.

Next weeks we will do...

Organize our code and database and keep developing the methods in java.

Optional: Reasons why

Time to work in class and at home.

2021-04-23-Group 6-Progress report:

This week we expected to be able to do...

Reorganize all the database and finish programming our methods.

Optional: Reasons why

We had time to work in class and we also spent time at home.

This week we did...

Finish all the methods and start working with java effects.

Optional: Reasons why

We work on it during class.

Next weeks we will do...

Work with the ui and solve all the possibles mistakes with the code.

Optional: Reasons why

Time to work in class and at home.

2021-04-30-Group 6-Progress report:

This week we expected to be able to do...

Test the menu and finish with all of our methods.

Optional: Reasons why

We had time to work in class and we also spent time at home.

This week we did...

Finish all the methods, check that the menu is working and download the java effects.

Optional: Reasons why

We work on it during class and at home.

Next weeks we will do...

Work with the ui and solve all the possibles mistakes with the menu.

Optional: Reasons why

Time to work in class and at home.

2021-05-07-Group 6-Progress report:

This week we expected to be able to do...

Start working on XML part and with Java FX

Optional: Reasons why

We had time to work in class and we also spent time at home.

This week we did...

Finish all the methods, check that the menu is working, programm the marshall methods and start working on java fx

Optional: Reasons why

We work on it during class and at home.

Next weeks we will do...

Work with the ui and prepare the final presentation.

Optional: Reasons why

Time to work in class and presentations date in two weeks.

2021-05-14-Group 6-Progress report:

This week we expected to be able to do...

XML, java fx and test all of our methods

Optional: Reasons why

We had time to work in class and we also spent time at home.

This week we did...

Finish all the methods, check that the menu is working, programm the marshall methods and start working on java fx

Optional: Reasons why

We work on it during class and at home.

Next weeks we will do...

Work with the ui and prepare the video.

Optional: Reasons why

Time to work in class and also at home

2021-05-21-Group 6-Progress report:

This week we expected to be able to do...

XML, java fx, xslt and check everything works.

Optional: Reasons why

We had time to work in class and we also spent time at home.

This week we did...

Work in java fx and xslt and check that the menu is working.

Optional: Reasons why

We work on it during class and at home.

Next weeks we will do...

Work with the ui and prepare the video.

Optional: Reasons why

Time to work in class and also at home.

2021-05-28-Group 6-Progress report:

This week we expected to be able to do...

Keep working with java fx and check all the methods.

Optional: Reasons why

Time to work at home and due date soon.

This week we did...

Work in java fx and xslt, check everything works.

Optional: Reasons why

We work at home.

Next weeks we will do...

Work with the ui and prepare the video.

Optional: Reasons why

Time to work at home

Schemas

As we can see in our UML diagram we have 6 different classes related between each other by the parent class “Patient”.

“Patient” is related with a one-to-many relationship with “FamilyHistory” and with “MedicalExamination”. In addition it is also related by an n-to-n relationship with “Symptoms”, with “Cancer” and with “Treatment”.

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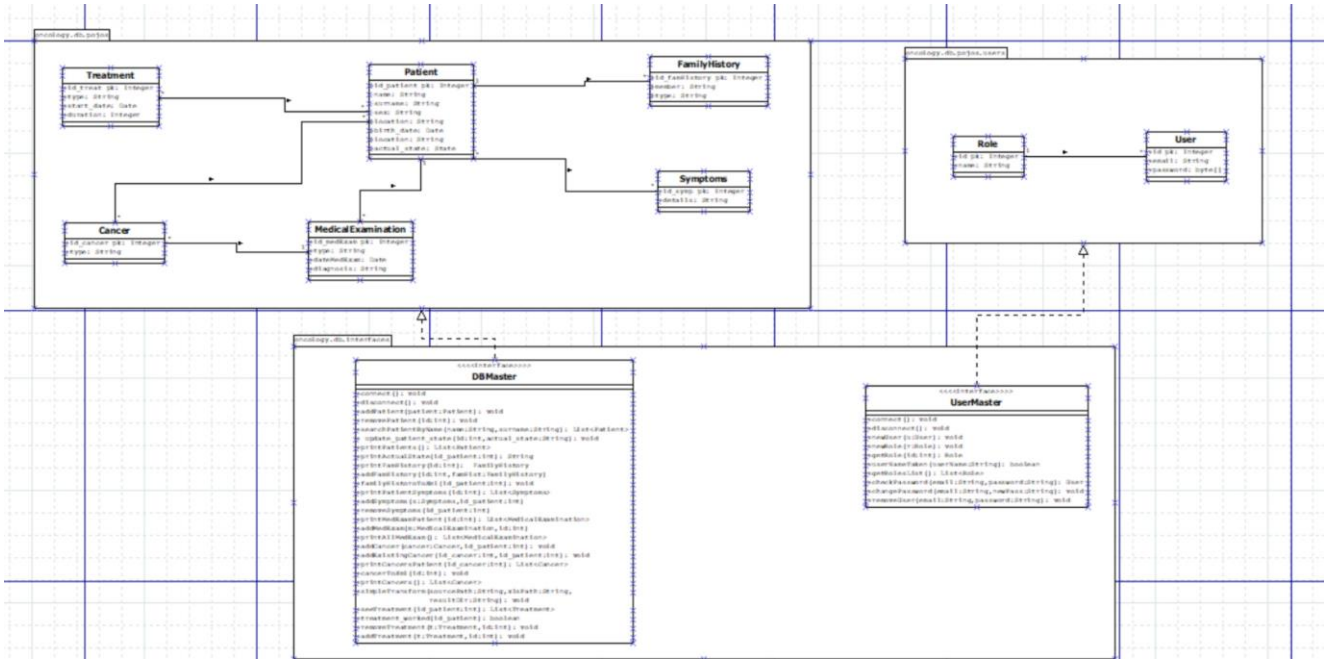

These are the different tables generated for our project. The Patient´s table is related with the Family History´s table by a foreign key in Family History´s table. Cancer´s table has a foreign key which relates these table with the Medical Examination´s one. Medical Examination´s table has a foreign key in order to relate these table with the Patient´s table. Then for every n-to-n relationship that we have in the UML diagram we can see a different table conformed each by 2 foreign keys (one from each entity) and both of them conform a primary key.

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PATIENT

id_patient	name	surname	sex	date_birth	location	actual_state	idNumber
1	Natalia	Pérez	Female	02/12/2001	Home	Complex care	2034J
2	Sofía	Carrasco	Female	01/11/2001	Hospital	Acute Rehabilitation	9654R
3	Natalia	Guzmán	Female	02/02/2001	Home	Acute Rehabilitation	2456H
4	Lolita	García	Female	13/02/1998	Home	Complex care	5324F

CANCER

id_cancer	type	id_medExam
1	Liver	2
2	Lung	2
3	Breast	4
4	Stomach	2

n-n

id_patient	id_treat
1	4
2	1
3	1
4	3

n-n

id_cancer	id_patient
4	3
1	1
1	2
3	4

TREATMENT

id_treat	type	start_day	duration
1	Chemotherapy	10/11/2015	6
2	Radiotherapy	22/03/2007	3
3	Inmunotherapy	15/09/2001	4
4	Stem cell transplant	08/11/2001	1

MEDICAL EXAMINATIONS

id_medExam	type	date	diagnosis	patient_id
1	PET	03/11/2015	Cancer	1
2	MRI	08/09/2001	No cancer	2
3	CT	06/03/2007	Cancer	2
4	Biopsy	01/11/2001	Cancer	6

SYMPTOMPS

id_Symps	detail
1	High fever
2	Breathing difficulties
3	Abdomen pain

n-n

id_patient	id_symp
1	3
2	3
3	1
4	2

FAMILY HISTORY

id_famHistory	type	member	id_patient
1	Breast	Mother	2
2	Intestine	Grandfather	3
3	Lungs	Father	1
4	Pancreas	Grandmother	4

This is the entity relationship diagram. We have 6 different entities represented as squares , the attributes are represented in circles and each black line represents the type of relation that exists among the entities

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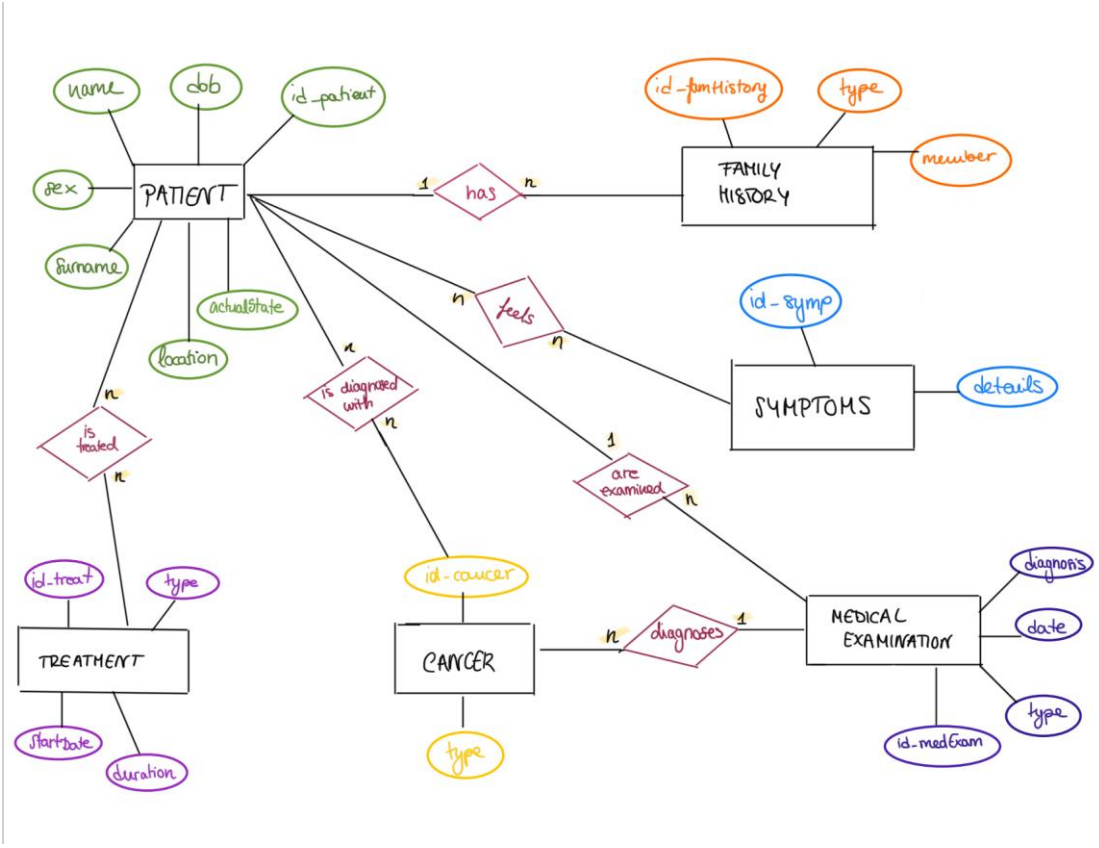

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