## 1. Rules

- Students will take the test individually.
- You can use the code developed in class (and anything that fits in a pendrive)
- The code created for this test will be uploaded to moodle as a single file obtained executing the command git archive --format zip --output ../testX.zip master (where X is character that identifies the Test)
- The zip file will include a text file (name it report.txt) describing the step realized in this test.

## **Enunciado**

A hospital wants to implement a drug management service. This service will be supported by the database corresponding to the following relational schema

```
\begin{array}{l} \operatorname{patient}(\operatorname{\underline{id}}\,,\,\operatorname{nameP})\\ \operatorname{doctor}(\operatorname{\underline{id}},\operatorname{nameD})\\ \operatorname{prescription}(\operatorname{\underline{id}},\operatorname{doctor}(\operatorname{id})\uparrow,\operatorname{patient}(\operatorname{id})\uparrow,)\\ \operatorname{where}\,\uparrow\,\operatorname{means}\,\operatorname{foreign}\,\operatorname{key}. \end{array}
```

Remember that Django adds by default an attribute named id that works as primary key.

#### Tasks to do

1. Create a project named project in Django. Then create an application named application. Data will be persisted in a postgres database called exam.

- 2. Create the data model (models.py) and configure the project so that the data can be seen using the admin interface (http://localhost:8000/admin/).
- 3. Write a script (called populate.py) that insert the following data into the data-set using the Django API.

```
doctor(1,'doctor1')
doctor(2,'doctor2')
doctor(3,'doctor3')
doctor(4,'doctor4')
patient(1,'patient1')
patient(2,'patient2')
prescription(1,1,1)
prescription(2,2,1)
prescription(4,2,2)
prescription(5,3,2)
```

- 4. Deploy the project in Heroku and populate the data base using the script populate.py, doublecheck that the admin interface is available and can be accessed with the username/password alunodb. Nota: write down in the file memoria.txt the admin interface URL. IMPORTANT: Whenever the project was been deployed in heroku (and always before the exam finalization) show it to your teacher.
- 5. Using the template prescription.html, crea a new web page with URL \$PRO-JECT\_URL/application/prescription/ that returns a list with the last 3 prescriptions. Note: Do not modify the file prescription.html. If the database is empty the web page should show an error message using the variable error. The last 3 prescriptions should be obtained using a query, that is, do not get a list with all prescriptions and then sort it in the view.
- 6. Create a test (which should be run with the command python manage.py aplication.test --keepdb) that:
  - deletes all doctors, patients and prescriptions
  - creates the doctor (1,'doctor1')
  - creates el patient (1, 'patient1')
  - creates la prescription (1,1,1)
  - creates la prescription (2,1,1)
  - creates la prescription (3,1,1)
  - creates la prescription (4,1,1)

- access to the view \$PROJECT\_URL/application/prescription/
- using assertions, check that the returned prescriptions are correct.

# 2. Grading Criteria

5 points if the following criteria are met: after executing the commands:

```
dropdb -U alumnodb -h localhost examen createdb -U alumnodb -h localhost examen python manage.py makemigrations application python manage.py migrate python manage.py createsuperuser python ./poblar.py

It is possible to access to the admin interface at URL http://localhost:8000/admin/ and the data shown is the one described in the previous section, subsection (3). The database used must be postgres.
```

7 points if the following criteria are met:

- The criteria listed in the previous paragraph are fully satisfied
- The application has been deployed in Heroku, it is possible to access to the admin interface using the username/password alumnodb and the data shown is the one described in the previous section, subsection (3).
- the code deployed in Heroku must be IDENTICAL to the one uploaded to moodle

8 points if the following criteria are met:

- The criteria listed in the previous paragraph are fully satisfied
- The page \$PROJECT\_URL/application/prescription/ works properly

10 points if the following criteria are met:

- The criteria listed in the previous paragraph are fully satisfied
- The page test satisfies all the requirements

## A. Templates

```
<html>
<head>
</head>
<body>
```