MEEC - ADInt

Laboratory 10

In this laboratory students will learn how perform authentication using the Oauth protocol into third party authentication services (for instance google or FENIX).

1 Oauth2

https://oauth.net/2/

OAuth 2.0 is the industry-standard protocol for authorization. OAuth 2.0 focuses on client developer simplicity while providing specific authorization flows for web applications, desktop applications, mobile phones, and living room devices.

Read the following tutorials understand the various components of the interaction and the exchanged messages:

- http://tutorials.jenkov.com/oauth2/overview.html
- https://www.tutorialspoint.com/oauth2.0/index.htm

In order tto use ISTid and password to authenticate users it is necessary to regier the application in FENIX:

- https://fenixedu.org/dev/tutorials/use-fenixedu-api-in-your-application/

After registering the application it is possible to use a python library to allow a Flask application to authenticate users in FENIX and retrieve information abut them:

- https://requests-oauthlib.readthedocs.io/en/latest/examples/real_world_example.html

This example is about GitHub, but it is possible to change some URLs to access FENIX.

Another library that can be used is flask-oauthlib that already integrates with flask in the definition of the necessary endpoints

- https://docs.authlib.org/en/latest/client/flask.html

2 Exercise

Modify the example on the flask authlib documentation to perform login with FENIX:

- (https://docs.authlib.org/en/latest/client/flask.html

3 Exercise

Implement a simple application in Flask thah allows users to login using FENIX. Affter login the application prints the list of users (name and user id) that already logged in with the date/time of the last login and logout.