Introduction to Python & Programming

Hacker Night 1

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Essec - BBA - B2

13/11/2019 16:30 - 22:45

Subject

Organizing and Querying Courses Data

Objectives

- Create a program that will organize data and allow queries
- Implement **required actions**
- Be creative and create **creative actions**

Required Actions

User should be able to:

- view all courses
- tag/untag a course as 'important'
- view all 'important' courses
- export all courses content into a single text file
- query courses by category -> text file
- query courses by subject -> text file
- query courses by date (or date range)
- change subject and category metadata for a course

Creative Actions

Creative actions example ideas:

- add your own BBA courses to the project
- add custom metadata and queries
- stats queries : show all kinds of information from basic stats (counts, average, etc.) based on metadata or content

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YOU DECIDE

You have a superb novel idea? **Just do it**

Data

- 1 descriptive file : metadata.json
- 71 courses materials in "materials/data"
  - all `.txt` files

Data logic

- Structural information in a single file
- Content information in multiple files
- Can easily plug new content

Format

- Small random groups (max 3 students)
- Internet allowed (no chatting between groups!)

Evaluation

- Project presentation (last hour)
- Diversity of notions used
- Clarity of explanation and presentation
- Code clarity and good practices

Project delivery by email

Advises

- Use local **python install** + **visual studio code**
- Use `pprint.pprint()` to better print a dictionary

```
import pprint
myDict = {'greeting': 'hello B2'}
pprint.pprint(myDict)
```

- A problem with your machine set up? Ask for help!
  - ...but for the code you are on your own.

Good luck!