Dauphine | PSL★
UNIVERSITÉ PARIS

... → COMPUTER SCIENCE, DECISION-MAKING, AND DATA → FURTHER EDUCATION

Algorithmic and advanced Programming in Python

Mid term evaluation instructions

Reminder of the objective of this course

- People often learn about data structures out of context
- But in this course you will learn foundational concepts by building a real application with python and Flask

- To learn the ins and outs of the essential data structure, experiencing in practice has proved to be a much more powerful way to learn data structures

- The mid term evaluation is precisely to start playing with the data structure

Instructions for registering

- Form a group of two people and register on
- https://docs.google.com/spreadsheets/d/16AY8vnm69kuHfFu3RM4u3ZJI6dCm13UI2UUCMrCkgzM/edit?usp=sharing

	A	B	C	D	E	F	G	H	I
	Mid term exam Algorithmic and advanced Programming in Python - November 10								
	Time slot	start	end	Student 1	Student 2				
	13h	0	9						
		10	19						
		20	29						
		30	39						
		40	49						
		50	59						
	14h	0	9						
		10	19						
	break	20	29	XXXXXX	XXXXX				
		30	39						
		40	49						
		50	59						

Instructions for preparing the mid term eval

- Download data on moodle on bitcoin
- Create a dynamic website using flask and fill the database with open high low closing data

- Create a plot in python to ensure data are properly loaded
- Give a date in a cell input and retrieve corresponding Open High low Close for that date using appropriate data structure to ensure fast loading

- Given two dates, load all closing prices for that date range and display the last nth element where n is small Choose the appropriate data structure to ensure fast execution

- Bonus: Given two dates, create a tree sort to rank all data and display the nth best

Instructions for the presentation

- Take 3 minutes to make a demo of the website on your laptop
- Explain your data structure decision in 2 mn **without any slide**!
- Leave 4 minutes for Question and answers
- Your instructor will warn you after 5 and 8 minutes
- Presentation stop after 9 minutes

- **Send us after the presentation within a day your final code.**

Some tips and advices

- Do not start at the last minute!

- If you have technical problems, liaise with the rest of the class and let us know who managed to help you!

- Work as a group and not individually!

- Test before the presentation that everything runs well on your computer to avoid blank presentation in the due day!

- And for exceptional projects, remember we reward you up to 20% of the final note.