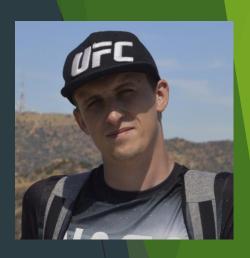
Programming with Python

Konstantins Tarasjuks

About me

- Got first computer in 1995 with Norton Commander (Used every windows version from Win 1995 - Win 11)
- Breaking that poor computer time to time due the learning process
- ► Finished some programming courses
- Finished University of Derby, Bsc (Honors) Information Technology, UK
- ▶ 10+ years experience in IT
- Started from Customer Support -> was Head of QA
- Currently Software Developer in Test



Content

- Course Summary
- What is IT?
- Profession Overview

Course Summary

- 1. More PRACTICAL course rather than Theoretical
- 2. Python usage benefits how to install what can be done
- 3. GIT
- 4. Python Variables and methods
- 5. String Indexing, Slicing, Print format strings
- 6. Classes and interaction between them, modules, packages
- 7. Flow Control
- 8. Loops and Arrays
- 9. Lists, Dictionaries, Tuples
- 10. Decorators
- 11. Scrapy, BS
- 12. Python Turtle
- 13. Fun projects todo

School Programming main idea

- Programming 1 10-11 form -
- 1. Analyses specification
- 2. Plan what to program
- 3. Working with provided data and display it
- 4. How to test your code
- 5. How to implement code in project
- 6. And BLA BLA BLA

In short term - read specs and write code (good to have unit tests) - using programming language you have learned (using additional libraries)

School Programming main idea

- Programming 2 12 form exam
- In short implement the solution for the project by using ANY programming language and any libraries that it has to offer
- Read and write code documentation

Grades

- Grading minimum 6-7
- Some tests for iesk/neiesk
- 3 options of homework:
- ▶ 1. BIG team project like telegram bot fully working, game, webpage or fully working microservices, mobile app it could be anything. Rules every 2 weeks presentation for each team on current project status and what has been done. Each time team presents another person have to present team results
- ▶ 2. Personal small projects about 5 projects like keyloggers, basic webpage, smaller mobile app, etc. Each month each will present his work
- 3. Classy Tests every month for the grade

Contact and materials

- Telegram group ask questions in the beginning materials
- Materials GIT Class exercises + Lecture pdfs
- For Private/Group projects we will use Trello

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What is IT?



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Profession overview

- IT support skills analytical, soft skills
- ▶ DB admin SQL and knowledge on Databases banking/finance sector
- DevOps Pipeline configuration deployment.
- SysAdmin Configuration of internal and external network
- QA testers test code manually
- Automation QA develop and maintain test automatically
- QA, Dev Leads lead the team of devs, QA
- Scrum Master/ Product Owner manage process of the project
- UX/UI design the product GUI
- ▶ IT managers and other managers manage the whole departments
- Penetration testers/Security officers aka Whitehat hackers test security
- BA and Technical writers document the product features and how they should work

Profession overview

- Software developers develop and maintain product
 - division for 2 types Front
 and back
- Full stack can work with both front end and back-end
- Game devs write game code
- Animators/designer manage animation for games



Certification for different professions

- AWS Certified Developer Associate
- AWS Certified Solutions Architect-Associate
- C and C++ Certifications
- Oracle Certified Associate Java Programmer OCAJP
- Certified Associate in Python Programming (PCAP)
- R Programming Certification
- CCA Spark and Hadoop Developer
- Oracle MySQL Database Administration Training and Certification (CMDBA)
- CompTIA Security+
- MongoDB Certified Developer Associate Exam
- ETC.

Certification for Python

- Entry (PCEP)
- Associate (PCAP)
- Professional (PCPP)
- Exam 98-381: Introduction to Programming Using Python

Why you need this?

- To check own knowledge and understanding of language
- To look fancy on Linkedin and CV
- ▶ To earn for organization more money as your certified professional
- Gain salary raise

