Lecture X - Programming Projects

Programming with Python

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Quick Recap of the last Lecture

General

Congratulations

⬚ You've learned your first steps to program with Python! ⬚

Structure

- Over the upcoming weeks you will work on a project
- You will present it in the last week of this course
- You can work in groups of up to 3 people
- You can choose from a wide range of project ideas
- Or you can **propose your own idea!**

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> 💡 Tip
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> You have enough time to discuss different ideas in your group today. From my experience, it is a good idea to choose a project that you are **really interested in**.

Presentation

- Each group has **15 minutes** with 5 additional minutes for questions
- Introduce your idea and the development cycle
- Provide code examples and/or visualizations
- Comment on challenges and what you've learned

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> 💡 Tip
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> Your project does not have to be perfect! To pass, you simply have to show that you tried your best. Try, fail potentially and learn - that's the best way to improve your coding skills.

Project Ideas

Idea 1: Data Analysis and Visualization

Idea 2: Web Scraping and Data Collection

Idea 3: Machine Learning Model Development

Idea 4: Web Application Development

Idea 5: AI Chatbot Development

Idea 6: Computer Vision and Image Processing

Idea 7: Simulation

Idea 8: Game Development

Help over the upcoming weeks

Ask Questions

Use of AI

How to continue?

How to continue after the presentations?

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Learning Ressources

- Try to continue programming
- Version Control with Git
- Jupyther Notebooks
- Quarto for Publishing
- Further interesting topics here