# LECTURE 1

## General

Two cases, each case has a milestone tutorial. Final presentations are 15% each, consultancy reports are 25% each, functioning as team member is 20%. Teams consist of 4-7 people.

After the first case, there will be feedback from your group members. At the end of the course this will be re-evaluated. Final grade is then assigned by the tutor.

There will be individual feedback interviews (4x during tutorials ca 5min)

When dealing with a client, it’s important to understand the case well and to ask questions

**Design Thinking** – Empathize -> Define -> Ideate -> Prototype -> Test

## Case 1

AHA Supermarkets, biggest supermarket.

Since self-checkout system was introduced, fraud & theft has been increasing, since 2022 14%. We want insight into consumer behavior. What steps should we take to address the fraud problem and what is the impact of this fraud (financial, monetary)? Should we maybe consider an AI-based system? Should we scrap self-checkout?

**First Milestone**

Focus on customer behavior. Do exploratory data analysis and identify customer types.

**Dataset**

Dataset of unlabeled transaction data (ca 100 000 entries). Customer’s scanning sequence is product price, category and time delay since last scan.

During pilot runs, you can select small number of transactions for spot check and receive real labels. By doing this you can get a bit of information on the data and train your model on.

## Tips

AI can be a useful tool, but don’t over rely on it. Discuss within the team how do you ensure that it does not introduce errors / crap.

Add a comment to the code, explaining that it is AI and how it was generated.

Don’t use AI to write the report, at all.

If there was any text generated by AI, submit both original text and modified text.

Report should be accessible to different audiences, meaning to both AHA executives and AHA data scientists. Start with a takeaway message, which you break down into smaller insights and finally smaller insights break down into even more detail (Pyramid Principle). Lead with a one page executive summary.

Presentation should be structured as situation, complication, question and answer.

## Next Tutorial

Think already about how you’d like to approach the case. Are there any questions you’d like to ask the client / the tutor?