Here are the details for your **Home Assignment**, which is due on **Friday, 29th November 2024**.

## **Group Size:**

• You may work in groups of **1-4 persons**.

#### **Scoring Criteria:**

- 0 Rejected
- 1 Poor: Incomplete implementation and a report reflecting it.
- 2 Fair
- **3 Good**: The work meets expectations, is satisfactory, and covers most key points effectively.
- 4 Very Good
- **5 Excellent**: Demonstrates novel or surprising findings in methodology or results.

This assignment will contribute 35% to your final course grade.

## **Assignment Overview:**

Your task is to submit your **implementation**, and a **report** of an intelligent system based on one of the problems provided on the course homepage. There is also an option for a custom assignment, where you can propose your own problem — remember to get your plan approved before starting. Describe in as much detail as possible the custom assignment you wish to create. Write it as a document (in PDF format) and send it by email to the following contacts: Kuopio Campus: Matti Itkonen (matti.itkonen@uef.fi) Joensuu Campus: Xi Xuan (xi.xuan@uef.fi)

# Implementation:

Use your preferred tools to implement the system. It is recommended to host it on a public server so that you can use it as a portfolio piece to showcase your skills.

#### **Report Sections:**

- 1. **Problem Description**: Demonstrate your understanding of the problem.
- 2. **Approach to Solution**: Describe the methodology used to solve the problem.
- 3. **Implementation**: Include the code or a reference to the implementation with readable and commented code.
- 4. **Discussion on Intelligence**: Explain why the system is intelligent. Provide evidence, such as learning curves, results showing differences between incomplete and sufficient learning, or prediction accuracy results.
- 5. **Quotations**: Explicitly specify any use of tools like **ChatGPT** or similar in code generation and reporting. Similarly, provide references to borrowed code and literature.

- 6. **Contributions**: Specify how each team member contributed to the implementation and reporting.
- 7. **(optional Reflections)**: Conclusions, further work, ideas or something else.