Assignment 1 - Submit initial project idea and team members

k12104186 Leon Mandler

k12102748 Sandro Assek

Q1. What is the domain of your system?

Gaming 🎮

Q2. Who would be the users of your system?

Minecraft Gamers M

Q3. What is the main goal of your system?

Improve the gameplay experience and immersion of Minecraft, by making the Villager NPCs more lively and fun to interact with. In the base game, players can trade with villagers, to obtain items or currency. This works with a simple HUD and static prices. We plan to develop a mod for the game that lets the player talk to a villager and barter and negotiate with them to get better prices. The mod will also change the existing HUD, to incorporate a chat window in the villager HUD that is linked with a LLM, to make the interaction possible.

Information about Minecraft villagers

Information about villager trading

Q4. How would your system achieve its goal?

- An extensive starting prompt for the LLM, that tells it how to act.
- User text input that gets sent to the LLM to get a response.
- Software to LLM interaction by using commands which let the LLM change the prices and interact with the game.
- Using the Fabric API and other Fabric libraries to change Minecrafts behavior and mod the game.
- Running a LLM locally, or using an API, to generate answers.

Q5. Which type of AI/ML strategy would be required/useful and why?

- Natural Language processing to parse user inputs
- Binary Classification: cheaper or higher prices for tradable items