FFR120 Project Proposal

Group 19
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Chalmers union building is frequently used by students as a studying area, lunch area and night life building. The building has many exits that are spread out and not immediately noticeable. At the event of an emergency, an alarm will alert people to seek an exit.

We aim to construct an agent based model of how an evacuation of the Chalmers union building could look. Our goal is to investigate how different parameters could affect evacuation times. Parameters to include could be:

- Agents attempt to leave from the same exit they entered from.
- Agents attempt to exit with the social group they entered with.
- Varying cognitive ability between agents, possibly based on intoxication level.
- Some agents are limited to certain exits due to, for example, disability.
- Agents move at different speeds due to, for example, age.
- Every agent is assigned an exit when they enter.
- Varying amount of people inside the building.

The project aims to identify factors that may impact evacuation efficiency and safety.