

Evakuierungssimulation Praxis-Projekt

January 2022

1 Introduction

The aim of this project is to create, simulate and analyze different evacuation scenarios of the first floor of building HC (see Figure 1).

The processing of the tasks can be done in groups of up to two students.

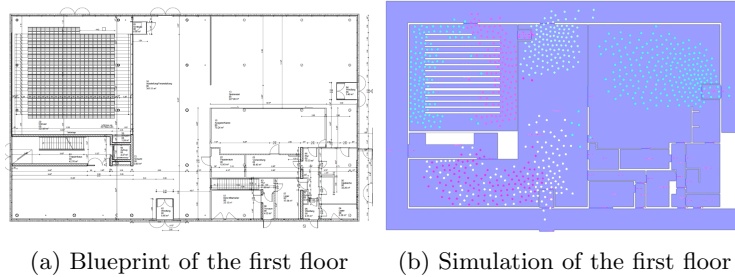


Figure 1: Plan of HC - first floor.

The following dates are planned for the processing of the project:

- 12.01.2022 - Discussion of scenarios and configuration of simulations
- 26.01.2022 - Presentation of results by groups

2 Problem definition

The dean observes that there are more and more events and exhibitions in the foyer parallel to the lectures. He commissions an engineering firm to investigate whether it is necessary to limit the number of visitors during exhibitions in order to ensure safe evacuation. In addition, there was a fire in the cafeteria during the semester break. Therefore, additional research will be conducted to determine how a fire would affect the scenario described above.

1. Define relevant scenarios that need to be investigated in order to process the assignment.
2. Transfer the scenarios into simulations with *JuPedSim*.
3. Analyze the simulation results and, based on them, make a recommendation for holding events in the foyer while lectures are in progress.

Note: to solve the task, use the geometry file for *JuPedSim* as well as the template inifile. [JuPedSim_files.zip](#).

The documentation of the [inifile](#) as well as the documentation of the [models](#) might be helpful.