# Assignment 5
# Evacuation visualization

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## 1 Practical Information

The goal of this assignment is to generate an application that will animate the simulation results of a Bmod model.

### 1.1 Task Overview

**Task 1** *Implement a code generator.*

**Task 2** *Simulate a non-trivial building floor model.*

**Task 3** *Write a report.*

### 1.2 Deadline, Logistics, and Plagiarism

Complete this assignment in **groups of 2**.

One, and only one, person in the group must submit the solution on blackboard before the deadline announced on the course web page: `http://msdl.cs.mcgill.ca/people/hv/teaching/MSBDesign/`.

Discussion on the following topics with your classmates *is encouraged*:

- Interpretation of the assignment requirements;
- Technical difficulties with the tools;

Discussion on the main concepts of the domain that may lead to similar solutions is *discouraged*. Creating a domain model is a highly creative process, and therefore it is unlikely that two groups will have a similar solution.

Contact Cláudio Gomes (claudio.gomes@uantwerp.be) if you have questions and/or need some help.

## 2 Requirements

### 2.1 Task 1

Using the metaDepth generation language, implement a code generator that takes a Bmod model, and produces a python application.

The Bmod model is exported to metaDepth from AToMPM following the same procedure as the Petri net model export in the previous assignment.

The resulting python application takes as input the output of the simulator that you coded in the first assignment. It will then animate the evacuation, including signalization of the dangerous conditions.

Use the provided script animate.py as a starting point.

## 2.2 Task 2

Simulate the models that you created in the first assignment, and record the animation results.

## 2.3 Task 3

The same requirements as Task 5 in assignment 1 apply. Additionally, describe the approach to realize the animation.

Upload the animations that you run and provide a link to those in the report.