MSc Project description
A simulation plan and control system for exercise managers

Motivation:

Today's crisis response exercises are characterized by

- unclear learning objectives
- no plan for (longitudinal) assessment of skill building
- lack of use of learning and skill-building principles

The BIA-project "Mixed Reality for Structured Exercises" is therefore developing:

- Tool support for structured planning, execution and analysis of simulation-based crisis training
- Implementations of planned training sessions in mixed reality simulations

The tool support should enable exercise managers and trainers, who do not know very much (if anything at all), about simulation technology to plan exercises that train desired essential skills.

What you will do:

1. You will create a web-based simulation planning and control interface, where planners can compose simulation scenarios for crisis response training and monitor outcomes during simulation.

2. You will investigate ways to do this in the best manner, by testing whether exercise managers (from emergency services and DSB) achieve better awareness of how different plays in a simulated exercise will unfold and of what effects they will have on skill building.

What you will gain:

You will gain timely experience with state-of-the-art front-end technology, AI planning and gaming technology. You will gain research experience and will have the opportunity to produce highly relevant results that the simulation community can use immediately.

You should have a high level of general programming skills, with an emphasis on front-end-relevant languages, such as JavaScript and JSON.

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A scalable masters project: do any one or several of the following:

- Work on the javascript user interface for the MixStrex system

- Work on the api between javascript and answer set programming

- Design and execute usability studies

- Work on knowledge representation and logic programming

- Work with unity (autogenerating layouts for instance)

E-mail us!

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