Simulation Platform for the Analysis of Crowd Turmoil in Urban Environments with Training and Predictive Capabilities
Type: FP7 Collaborative Project / Open topic for SME / Security
Coordinator: Next Limit (Spain)
Goal: Training system for crowd control and Police operations
Budget: 1.9 M€
Partners: 6
Advisory Board / Ethical Board
Timeline: 24 months (Feb2014 – Feb2016).
Expected results: demonstrator
SAFECITI is more than a videogame. It is based on serious gaming technology.

SAFECITI is more than a training platform. It has predictive capabilities (AI).

The display (visualization) is important, but more important are the lower layers
SAFECITI project aims the creation of a simulation platform for police intelligent analysts to simulate and predict the behaviour of crowds (up to ten thousand people) in urban environments in order to train and help to develop safety plans and tactics operations. The system is based in “Serious Game” technology and is designed as a platform for training purposes providing advanced training capabilities through the implementation of artificial intelligence algorithms.
SPECIFIC OBJECTIVES

- Create a practical training tool for police analysts using a serious game model. Spanish National Police to become a real user.
- Improve the ability of the analysts to prevent and mitigate risks in a crowd protest, reducing injuries and damages.
- Provide a simulation platform to recreate complex crowd behaviour.
- Provide automatic predictive capabilities to assess the analysts.
- Develop a scalable system for further developments.
TECHNOLOGIES INVOLVED

Crowd simulation engine / behaviors / reactions
WP4

Urban generation
WP5

3D graphics and system logic
WP7

Predicitive engine
WP6
HOW DOES IT WORK?

SERIOUS GAMES PLATFORM & SIMULATION

OPERATOR MODULE  ANALYST MODULE

DATA BASE FOR SIMULATION STORAGE

Simulation

Predictive models

SAFECITI configuration

PREDICTIVE ENGINE
PROJECT STATUS

- Kick-off
- Specifications M5
- Integration test M12
- First prototype M15
- Second prototype M18
- Third prototype M21
- End of the project M24
PROJECT STATUS

Network layer
Complex crowd behavior
Basic Police actions
Complete 3D models

Second prototype M18

Third prototype M21

Quality improvements
Performance optimization

End of the project M24

Full workflow
Refined behavior model
All Police actions
Text / Speech comms. layer
Predictive Model

A PERMANENT SHOW ROOM WILL SET UP
FIRST PROTOTYPE
THANK YOU!!!!

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