



## Steering Game & Steering Tool



Steering game is an educational logical game, where the player has to guide an agent through a virtual 3D city using a technique called steering behaviors. Steering behaviors are force-based mechanisms, using which is the steered agent able to solve simple tasks (such as avoiding obstacles, going to a certain place, etc.). These steering behaviors may be configured differently (e.g., how much is the agent “afraid” of hitting a wall) and, ultimately, combined. Finding the proper combination and configuration of steering behaviors is the way to success in this game: In Steering game, you have an agent, some money to spend on making steering behaviors available to him, and a set of tasks to solve using these steering behaviors.

### 1. Contact

e-mail: [marketa.popelova \[at\] matfyz.cz](mailto:marketa.popelova@matfyz.cz)

### 2. Installation

Load this file:

[http://diana.ms.mff.cuni.cz/pogamut\\_files/misc/SteeringGame/SteeringGame-install.exe](http://diana.ms.mff.cuni.cz/pogamut_files/misc/SteeringGame/SteeringGame-install.exe)

and install the SteeringGame. If you won't change anything, it will be installed into a directory:

`c:\Games\SteeringGame1.0`

### 3. Running Steering Game

You need to run 3 files in this order:

1. **Server**. You will find it in the directory with the installed SteeringGame:

`c:\Games\SteeringGame1.0\UnrealEngine2RuntimeDemo\System\startEmohawkServer.bat`

If the window about allowing communication of UCC appears, confirm Allow access.

2. **3D virtual environment (UE2Runtime)**. It will be in the same directory:

`c:\Games\SteeringGame1.0\UnrealEngine2RuntimeDemo\System\startUE2Runtime.bat`

Wait 10s and then confirm OK. When the environments is loaded, press Esc.

3. The **SteeringGame**. Run the file:

`c:\Games\SteeringGame1.0\SteeringGame.exe`

Loading could last some time (about 1 min).

### 4. How to move in the UE2Runtime

At first, click on Spectate. Afterwards navigate in the environment by using mouse and arrow keys. By the left mouse button, you can observe one of the agents and move with it. (If it doesn't work, try to press Alt key.)

To get out of this window, use key short-cut Alt+Tab.

To resize the window, press Esc and resize it. Afterwards click on Continue.

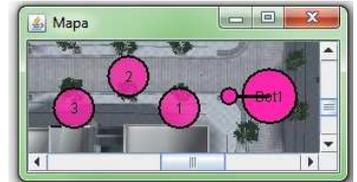
## 5. SteeringGame

SteeringGame has 3 modes: *game mode*, *testing mode* and *editing mode*.

A) *Testing mode*. Choose menu Game --> Testing mode. You can create your own scenes and observe all implemented steering behaviors. This mode had formerly its own application called SteeringTool.

Read the Help (you'll find it in the application menu) for more details about this mode.

B) *Game mode*. Unfortunately, the game missions (their descriptions) aren't in English yet. But the description isn't so important. All you need, you see on the map - the small circles with numbers are tasks of the agent. The agent has to reach there tasks-location in that order.



C) *Editing mode*. In this mode you can create your own game missions.

## 6. List of implemented Steering Behaviors

