### 2012-12-27, “Patient navigation game”, technical instructions.

## Initial Remark

The application is not in its final state as a stand-alone exhibit in an exposition. So far it has been used in a supervised mode, with technical staff always present at the booth. However it is planned to be released as a stand-alone exhibit for Imaginary during the next weeks.

## Contact

In case of any technical problems contact:

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## Technical Layout

The “patient navigation game” is a Windows-Application and consists of two components:

1. Main application / DispatcherCockpit
2. HospitalVisualization in a separate window

- The Application is built for .NET 3.5. Thus at least the runtime of .NET 3.5 has to be available.

- The HospitalVisualization is a Flash movie. A current (not too old, 11.x) version of the Flash player must be installed.

- Application and flash movie communicate via sockets (a port on the local machine). For this the application starts an http-Server on that port that receives frequent requests from the Flash movie. This way the flash movie gets commands that control the moving entities.

- DispatcherCockpit and HospitalVisualization should be presented on different screens: a large one for the visualization and a regular one for the DispatcherCockpit. The application has a menu item to toggle full screen mode for the Visualization window. This way the HospitalVisualization can be used as an eye-catcher in the exhibition.

## Prerequisites

1. The application must have the privileges to start a server listening on the selected port. This must be granted via URLACL.

* start a cmd.exe window with Administrator privileges
* the following command grants the rights to start a http server listening on port 33456 on localhost and offering the service “otgame”:  
    
  netsh http add urlacl url=http://127.0.0.1:33456/otgame/ user=everyone

1. The config-file of the application “Test01.exe.config” must be customized:

* URL of the service (same as above):   
  <add key="serviceURL" value="http://127.0.0.1:33456/otgame/"/>
* Path to the data file (relative path to the directory of Test01.exe):  
  <add key="pathData" value="..\..\data\2373\_OptimiererLog\_20101102-2358\_20101103-2359\Testdaten.cpp.11"/>
* Path to the flash movie file (has to be absolute):  
  <add key="pathMovie" value="C:\Users\Schröder\Documents\2 - prog\OptiTransSpiel\flash\otgame.swf"/>

1. The settings-file of the flash movie “settings.xml” must be customized:

* URL of the service (same as above):   
  <add keyS="serviceURL" valueS="http://127.0.0.1:33456/otgame/"/>

1. It could happen that the Flash player must be explicitly allowed to run the movie from the local hard drive:  
      
   In the “Global Security Settings” of Flash Player set the movie file “otgame.swf” (with its full absolute path) as a trustworthy file.

## Running the Application

1. After setting up everything as described before, start “Test01.exe” by double-click.
2. Three Windows appear: Main window, Flash window and Console output window.
3. Move Flash window to the second screen.
4. After this, select  
   Administration -> Ganzer Bildschirm.  
   The Flash window should be now in full screen mode on the second screen.
5. Select  
   Administration -> Initialisieren.  
   In the Main Window the timeline will adapt to the scenario in the data file and the GanttChart will show 5 staff members for patient transportation.
6. Now you can start the game in automatic dispatching mode (left run button) or in manual dispatching mode (right run button).  
   automatic mode: the dispatching is handled by the optimization engine; nothing has to be done by the user.  
   manual mode: the user has to assign requests for transportation to the staff members. This is the interactive mode of the game.
7. To restart the game in the same or the other mode: hit the reset button, wait for few seconds, then proceed as in 6.
8. To end the game: simply close the Main Window.