



RAGE

Realising an Applied Gaming Eco-System

Player Profiling Asset

T3.4E

Created by TUGraz

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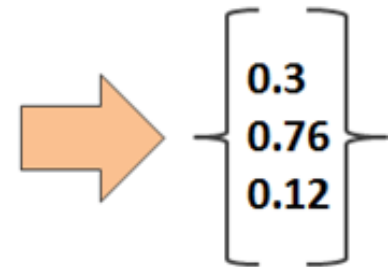
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Idea and Pedagogical Value

- Players have different personal characteristics
- This may result in different needs and preferences towards a game
- This asset identifies these characteristics and helps to adapt the game accordingly

	Disagree	Partly D.	Unsure	Partly A.	Agree
Are you interested ...	x				
Are you confident ...				x	
Are you capable ...					x
Are you motivated ...			x		



Asset Concept

- For identifying personal characteristics a questionnaire is used at the beginning of the game
- The asset supplies predefined personality questionnaires and allows creating new ones
- Player's responses to a questionnaire are used by the asset to calculate personal characteristics in terms of values
- These values are delivered to the game as basis for adaptation

Infrastructure / Context

- Implemented as Client-side Asset
- Reads underlying data from local file
- Data file is created via supplied authoring tool
- An HTML-questionnaire file is created, which sends the questionnaire results back to the game

Needed/Optional Bridges	Needed/Optional Assets
ILog - optional	Game Storage - needed
IDataStorage – needed	-
ISerializer - needed	-
IWebServiceRequest - needed	-

Integration – Setup

- Set the ID of the data source/html output file:

```
PlayerProfilingAsset ppa= PlayerProfilingAsset.Instance;  
PlayerProfilingAssetSettings ppas= new PlayerProfilingAssetSettings();  
ppas.QuestionnaireDataXMLFileId = "inputXML.xml";  
ppas.HTMLQuestionnaireFileId = "outputHTML.html";  
ppa.Settings = ppas;
```

- Set up the following Asset:
 - Game Storage (StorageType: *net*)

Integration – Usage 1/2

There are two possibilities to use the Asset. The first one uses the web browser to render the questionnaire, the second one leaves the rendering to the game developer.

- Web-Browser rendering:
 - Create the html-file:

```
string fileId = ppa.getQuestionnaireFileId();
```

- Access the results for each category:

```
Dictionary<string,Double> result= ppa.getResults();
```

Integration – Usage 2/2

- Game developer rendering:
 - Access data source xml:

```
string xml = ppa.getQuestionnaireXML();
```

- Submitting the result data for each question:

```
Dictionary<string,Integer> results = new Dictionary<string,Integer>();  
.....  
ppa.setQuestionnaireAnswers(results);
```

- Requesting the results for each category:

```
Dictionary<string,Double> result= ppa.getResults();
```

Why should a game developer use the Player Profiling Asset?

This asset allows **adapting a game to personal characteristics**

- Established psychological personality questionnaires can easily be used to build a player profile
- Alternatively, custom personality questionnaires can be created
- The calculation of the user profile from the questionnaire results can be adjusted

Contact and More Information

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- More information on these assets:
 - <http://css-kti.tugraz.at/projects/rage/assets/>
- Video Demo
 - <http://css-kti.tugraz.at/projects/rage/assets/videos/Demonstration-PlayerProfilingAsset.mp4>