



RAGE

Realising an Applied Gaming Eco-System

Motivation Assessment Asset

T2.3C

created by TUGraz

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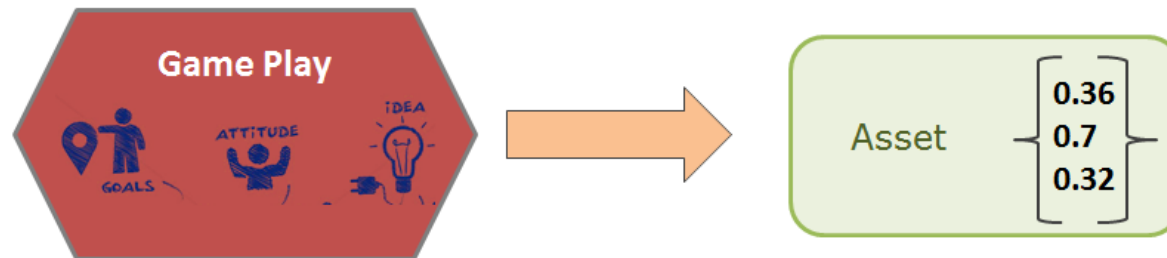


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Idea and Pedagogical Value

- Tool for assessing the player's motivation while playing a game
 - By analysing interaction within the game confidence, attention and satisfaction as three components of motivation are measured and provided to other assets for further processing
- Pedagogical value
 - Motivation is important for achievement and the learning outcome
 - Monitoring the motivational state can be used to detect problems and provide respective interventions



Asset Concept

- Measuring of the following motivation aspects
 - Satisfaction
 - Attention
 - Confidence
- Measurement is performed using behavioural indicators that are related to the motivation aspects
 - e.g. click rate, achievement success, or inactivity are used as interactions that are interpreted in terms of the motivation aspects
- An authoring tool of the asset allows to define the behavioural indicators and relates them to the motivation aspects

Infrastructure / Context

- Implemented as Client side asset
- Reads Motivation Model from local file
- Motivation Model creation via supplied software
- Motivation state is tracked and sent to the server

Needed/Optional Bridges	Needed/Optional Assets
ILog - optional	TrackerAsset - needed
IDataStorage – needed	-
IWebServiceRequest - needed	-

Integration – Setup

- Specify the loading location via the settings:

```
MotivationAssessmentAsset masa = MotivationAssessmentAsset.Instance;  
MotivationAssessmentAssetSettings masas = new MotivationAssessmentAssetSettings();  
masas.XMLLoadingId = "id1";  
masa.Settings = masas;
```

- Set up the underlying Assets:
 - TrackerAsset

Integration – Usage

- An update looks like the following:

```
masa.addMotivationHint(MotivationHintEnum.Help);
```

Whereas the following information is needed:

HINT - string	Meaning
success	A task was successfully.
new level	A new level was reached.
help	The help was called.
fail	An attempt to solve the task was unsuccessfully made.
new problem	A new problem was presented to the player.

- The motivational state can be accessed

```
Dictionary<string, double> motState = masa.getMotivationState();
```

Added Value

Why should a game developer use the Motivation Assessment Assets?

This asset allows an **easy handling of motivation within a game**

- Bringing in a psychological model of motivation into game design
- Motivational aspects and their behavioural indicators within the game can easily be defined
- Motivational assessment rules can be adapted without changing the game

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-MotivationBasedAssets.mp4>