



mGBL Platform

Presentation of Platform to create/administrate mobile learning games

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The mGBL Platform.

mGBL Platform

- The Platform provides a **Game Authoring Tool**.
- A **web interface** for **game administration** is available – The teachers enter the learning content and further data -> based on the data input the games will be created.
- Teachers can build **three different kind of games**:
 - **Game 1** „Ahead of the Game“ (=quiz game and simulation game)
 - **Game 2** „Mogabal “ (=2D adventure game)
 - **Game 3** „Pervasive games“ (=kind of SMS quiz)
- Supported **technology**:
 - Sending/Receiving SMS
 - Receiving MMS
 - Providing Games (Java Games in case of Game 1+2) to be downloaded by pupils
 - Sending/Receiving E-Mails

Game 1 „Ahead of the Game“ Description.

The Game comprises a quiz and a simulation component. Both are based on different types of question-answer cards. The games are played off-line on the mobile client.

•Basic Game Flow:

Quiz: Question-answer cards are presented to the player. Depending on the correctness of the answer and the elapsed time, the player accumulates credit points. When the player has answered a question, the systems immediately tells her whether the answer was right or wrong, and why.

Simulation: The player is presented with a crisis situation. Depending on her answers the crisis increases or can be solved.

•Possibilities:

- **Quiz:** train and rehearse learning content
- **Simulation:** apply what has been learned in the quiz to a critical situation

•Building a game:

The teachers have an administration web tool where they can edit different types of question-answer cards specifying background picture, question and answer texts, explanations why a particular answer is right or wrong, credit points, and hints which can be used by the player in the game.

Game 1 „Ahead of the Game“ Description.

▪ Example Configuration of the mGBL Platform:

- **Editing:** The teacher edits the predefined fields of the question-answer cards. There are two separate editing interfaces for quiz and simulation.
- **Creation of game templates:** After the teacher has finished editing, and approved the game, the respective game (quiz or simulation) is created at the MGBL server.
- **The game is ready:** Players can download the game component from the MGBL platform, install it on their mobile phones and play the game.

Game 2 „Mogabal“ Description.

A high customizable template that allows teachers to design their favourite game.

▪ **Basic Game Flow:**

A **2D Adventure Game** where you can freely move around and interact with objects you see around. When you fall on a board cell, or when you touch an object on the map, events are triggered.

▪ **Possibilities:**

- **Events** may be a simple quiz (or decision), the opening of some multimedia content or a complex series of linked decisions (decision tree).
- **Characteristics** are the features of your avatar in game, but in “Mogabal” characteristics are customizable.

▪ **Building a game:**

The teachers have an administration web tool. There they can enter the events into the input fields, add multimedia resources and configure the graphics appearance of the game.

Game 2 „Mogabal“ Description.

- **Example Configuration** of the mGBL Platform:
 - **Teacher selects types of events:** quiz, decision tree, multimedia, etc.. and edit contents with the „Mogabal“ authoring tool.
 - **The teacher configures the game maps:** after designing the 2D maps with the „Mogabal“ graphic tool, he can add objects and link them to the events.
 - **The next step is adding multimedia content:** teacher can add some multimedia contents (images, sounds, etc..) related to the events.
 - **The game is ready:** students can download the game from MGBL platform and install it on their cellular phones and play the game.

Game 3 „Pervasive Games“ Description.

Teachers can create e.g. a **SMS/MMS based paper chase game**

▪ **Basic Game Flow:**

An SMS with a question is sent from the platform to the pupils. The pupils send the answer back to the platform. The platform recognizes if the answer is false or right and in case of a right answer it e.g. automatically sends the next question (depends on the configuration).

▪ **Possibilities:**

- **Eg. Building Teams:** Opportunity to build different teams (Pupils have to send an SMS to the platform in which team they are, this will be recorded by the platform)
- **Eg. MMS:** Pupils can send MMS for answering specific kinds of questions. All MMS will be collected and are accessible on a website. (Possible practical example e.g. for the course „anatomy“ for medicine students: the instruction is to send a picture of a certain part of a bone to the platform)

▪ **Building a game:**

The teachers have an administration web site. There they can enter the questions/instructions into the input fields and configure the options e.g. start of the game, end of the game (e.g. if the pupils answer too late the answer is not valid), the chronological order of the questions, time of sending out, what happens if answer is wrong, etc.)

Game 3 „Pervasive Games“ Description.

- **Example Configuration** of the mGBL Platform:
 - **Teacher puts in question:** *What effect has the price increase on the customer demand? Customer demand A)increases B)decreases C)is unvarying*
 - **The teacher selects which answer is wrong and which right.**
 - If the answer text is B, the user is informed that s/he selected the right answer.
 - If answer A or C is sent, the system should send a message that the answer was wrong (Teacher has to define the text e.g. „*The answer was wrong*“)
 - The next steps in the user interaction process will be chosen automatically by the mGBL Platform based on the answer and the predefined game mechanics.