



# **Mobile Game-Based Learning Creating, Administering and Deploying Mobile Learning Games**

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## Overall Goal of mg-bl

- Design exciting learning games for mobile phones
- which are fun to be used by young people
- for a playful development of decision-making skills for use in critical situations

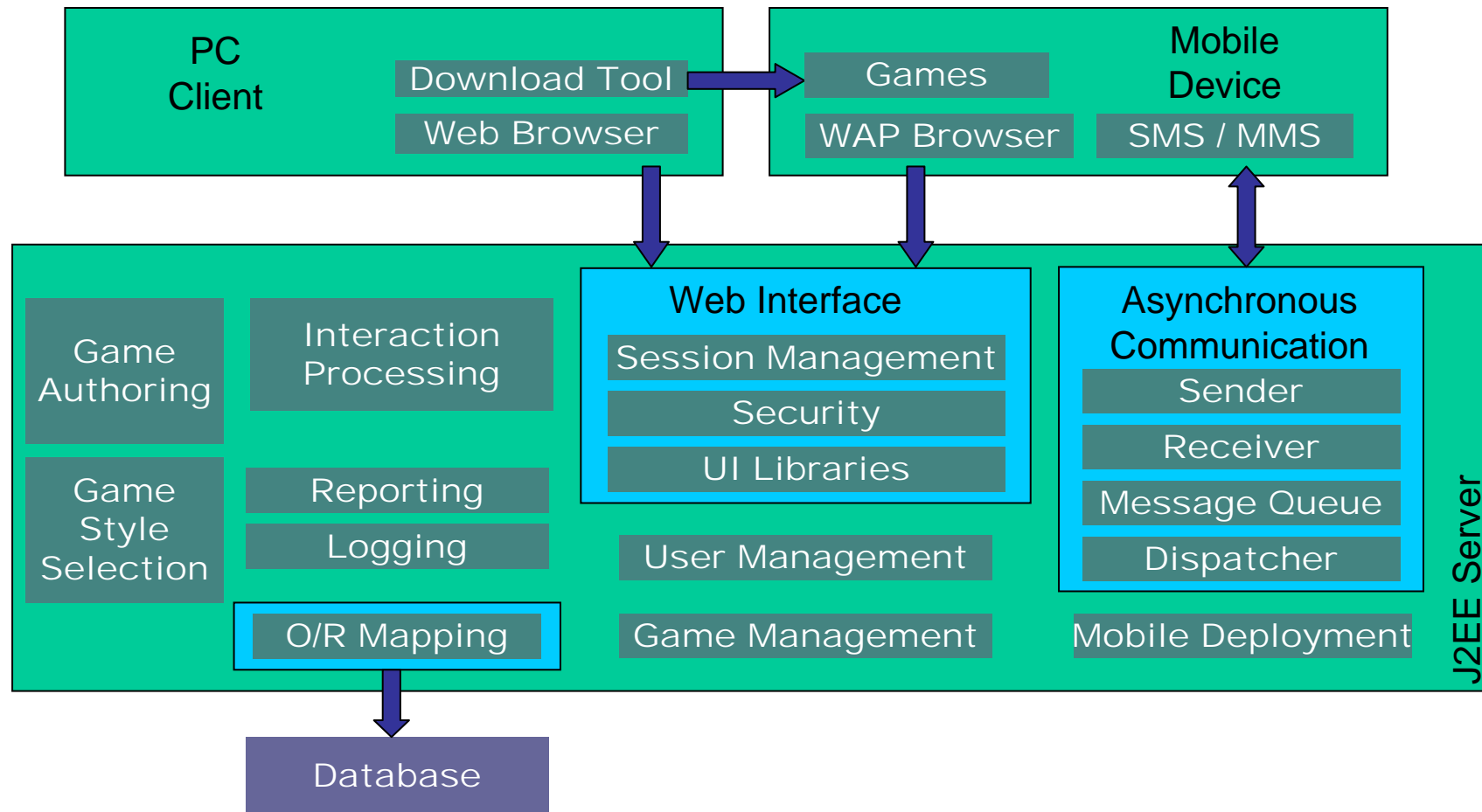
## International, Interdisciplinary Cooperation: The Consortium

- evolaris Privatstiftung (AUT)
- Verein Schul- und Ausbildungsberatung (AUT)
- RSA Forschungsgesellschaft mbH (AUT)
- Anglia Ruskin University Higher Education Corporation (UK)
- Pomorski Fakultet u Rijeci (Faculty of Maritime Studies) (HR)
- Filozofski Fakultet u Rijeci (FFRI) (HR)
- Università Degli Studi Di Trieste (IT)
- ASTER S. Cons. p.a. (IT)
- Univerza v Mariboru (SI)
- Andragoski zavod Maribor – Ljudska univerza (SI)
- Austria, Croatia, Italy, Slovenia, UK
- Software developers
- Learning experts
- Education consultants
- Pedagogues
- Psychologists
- AI researchers
- Computer scientists

## More than a Collection of Independent Programs and Games: The General Development Goals

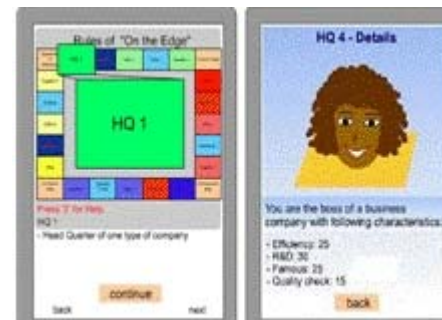
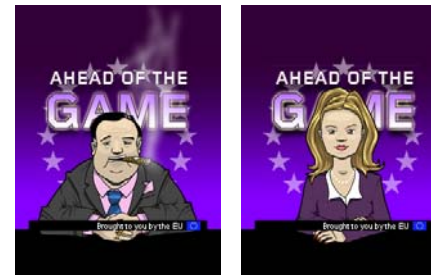
- Provide effective tools for interactive game base learning
- Make widely configurable, easy to author and to set-up mobile learning games
- Support different learning activities, such as *understand, apply, analyse, ...* (Bloom & Krathwohl, 1956).
- Support different learning content, such as *facts, judgement, theories, reasoning, ...* (Prensky, 2001)
- Support different learning goals – cognitive, affective, ... (Bloom & Krathwohl, 1956)

## Architecture of the mg-bl System



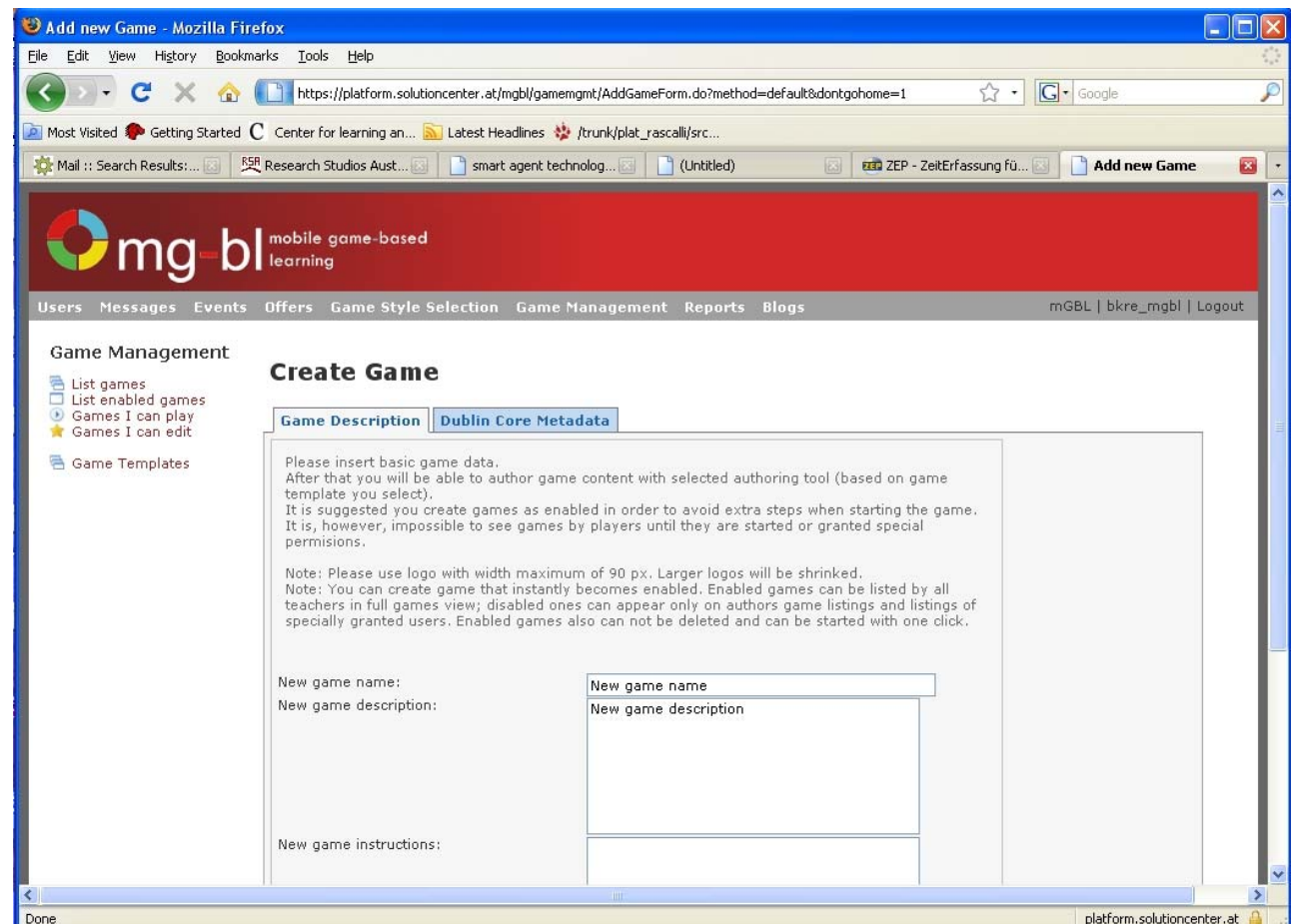
## Client- and Server-Side Software: Game Templates

- Ahead of the Game (RSA Forschungsgesellschaft mbH)
  - quiz
  - simulation
  - based on question-answer cards
  
- Mogabal (University of Trieste)
  - interactive map
  - highly customizable
  - player avatar
  
- Pervasive Game (Evolaris)
  - server-side games
  - highly collaborative
  - SMS-, MMS-based



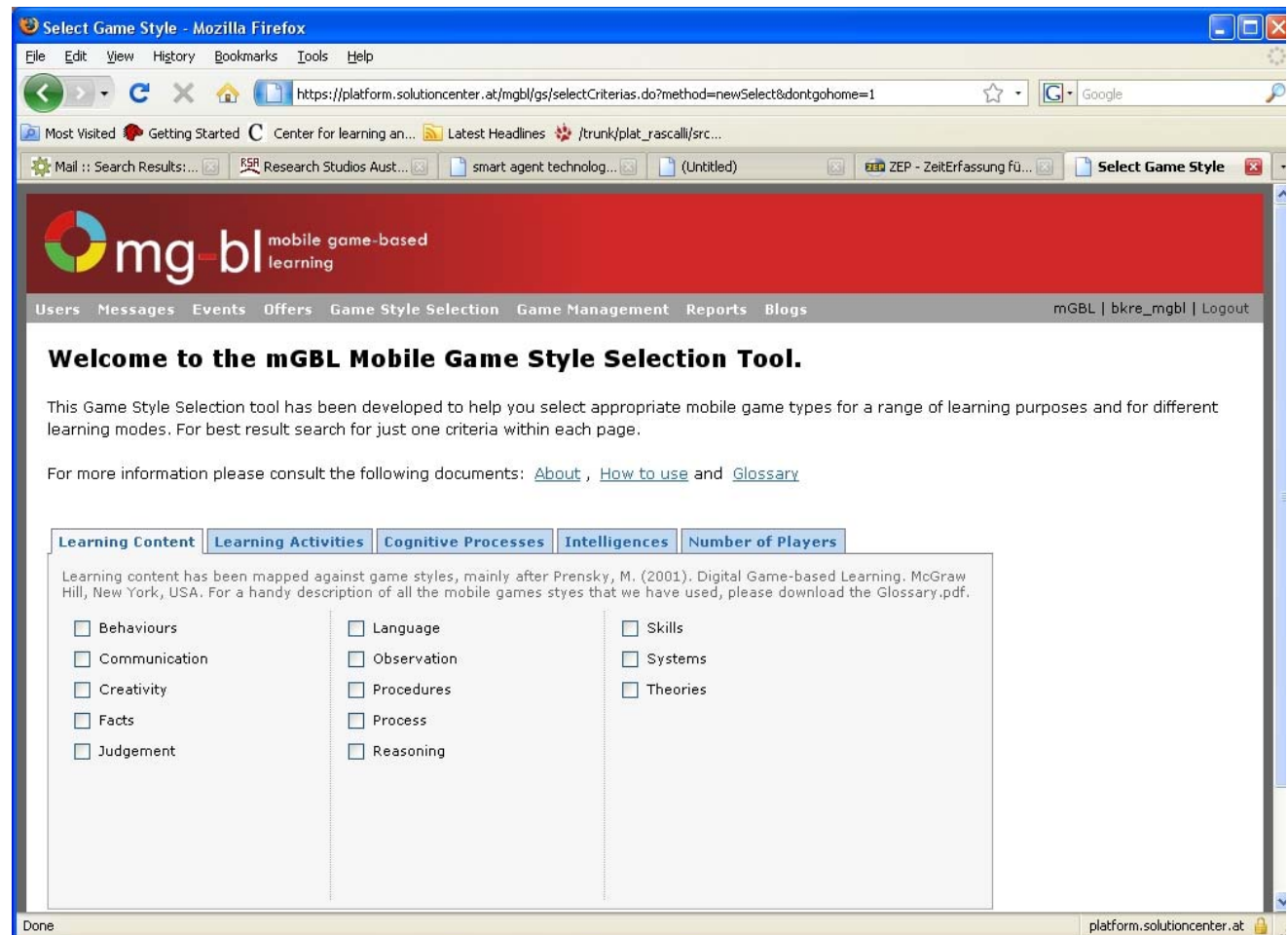
## Client- and Server-Side Software: Server Components I

- Game Authoring Tool (University of Maribor)



## Client- and Server-Side Software: Server Components II

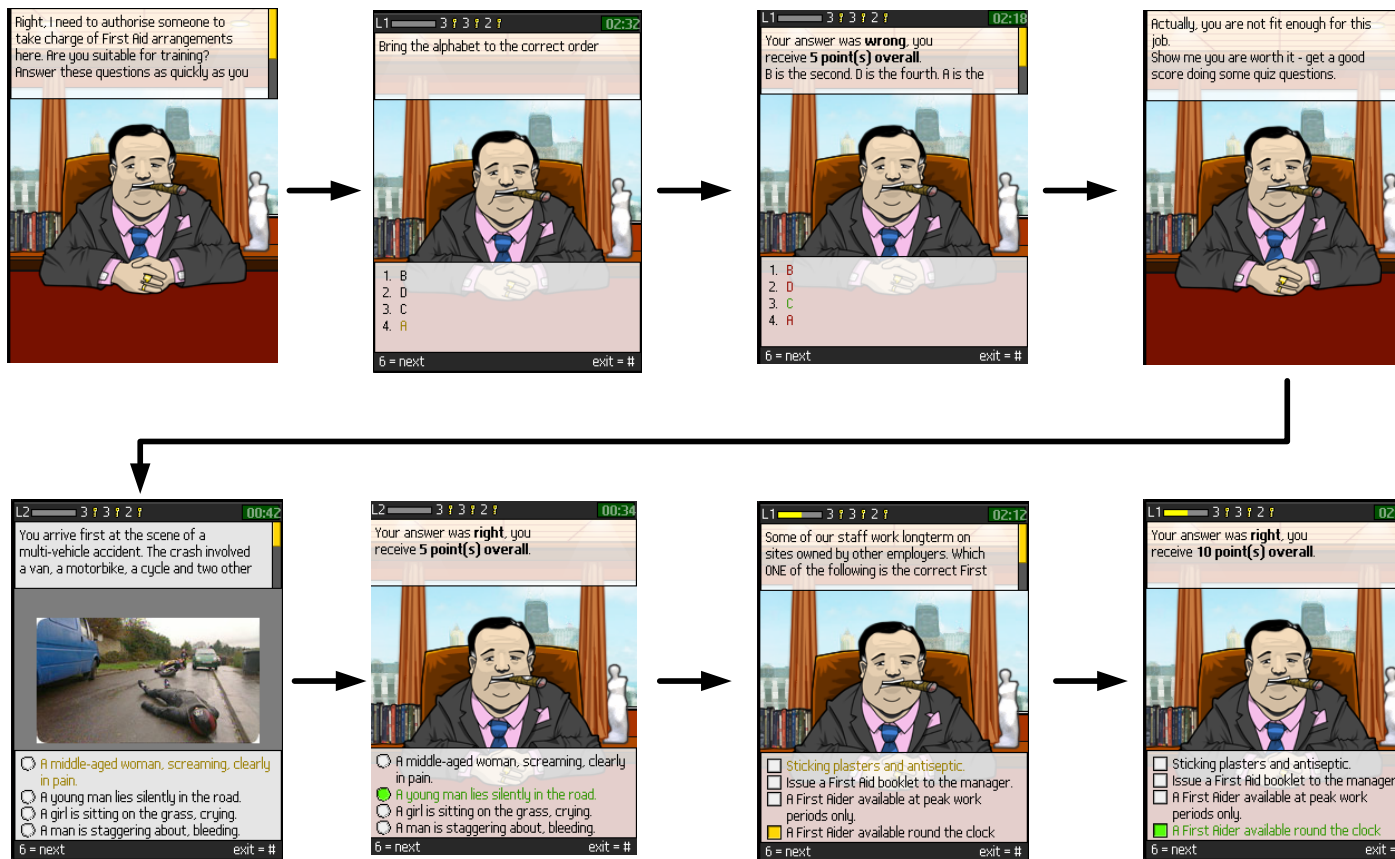
- Platform (Evolaris)



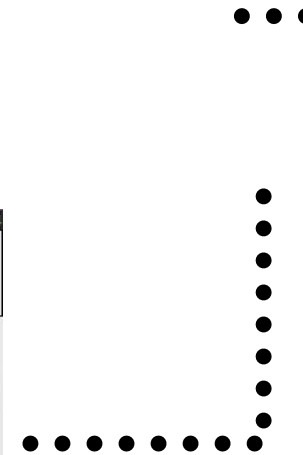
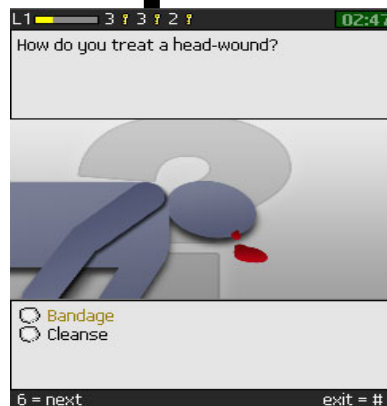
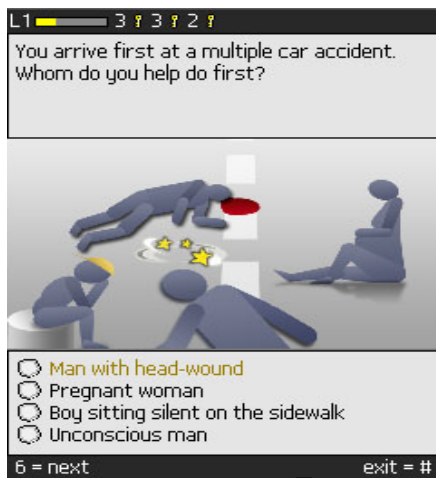
The screenshot shows a web browser window titled "Select Game Style - Mozilla Firefox". The address bar contains the URL: <https://platform.solutioncenter.at/mgbl/gs/selectCriteria.do?method=newSelect&dontgohome=1>. The page header features the "mg-bl mobile game-based learning" logo and a navigation menu with items: Users, Messages, Events, Offers, Game Style Selection, Game Management, Reports, Blogs. The main content area is titled "Welcome to the mGBL Mobile Game Style Selection Tool." and includes a brief description of the tool's purpose. Below this, there are links for "About", "How to use", and "Glossary". A section titled "Learning Content" is active, showing a list of criteria with checkboxes: Behaviours, Communication, Creativity, Facts, Judgement, Language, Observation, Procedures, Process, Reasoning, Skills, Systems, and Theories. The status bar at the bottom indicates "Done" and the URL "platform.solutioncenter.at".



# Game Example: Ahead of the Game – Quiz



## Game Example: Ahead of the Game – Simulation



## Summary

- Software Development within the mGBL Project
  - Client- and Server-side Software
  - More than a Collection of Independent Programs
  - International Collaboration
- mGBL Platform
  - Server-based
  - Administration
  - User Management
  - Game Style Selection
  - Game Authoring
  - Mobile Communication
  - Interaction Modeling

# Thank you for your attention!

Platform access

<https://platform.solutioncenter.at/platform/secure/goHome.do>

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Mark Warnes (Anglia Ruskin),

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Hans-Joerg Peyha (evolaris)