

Current and Future Research Activities

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Our Department

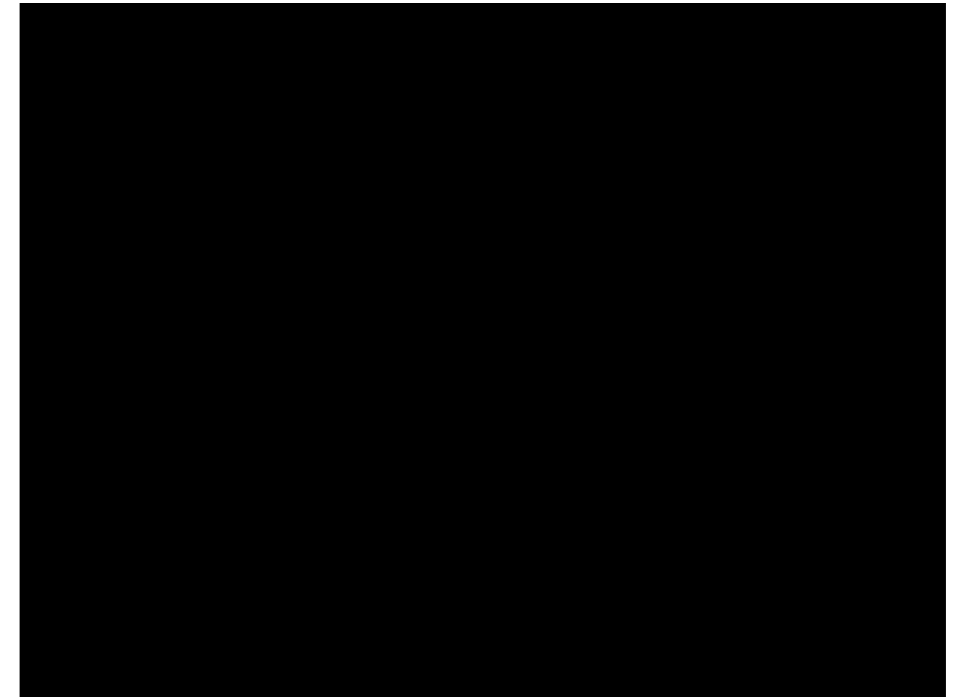
- Department of Computer Science and Applied Cognitive Science (Unique mix of computer science & psychology)
- 14 chairs: HCI, CSCW, cognitive & social psychology, robotics, computer graphics, system engineering,...
- Degree programs:
 - Applied Cognitive and Media Science (B.Sc. / M.Sc.)
 - Applied Computer Science (B.Sc. / M.Sc.)

Areas of Research

(with a focus on entertainment computing...)

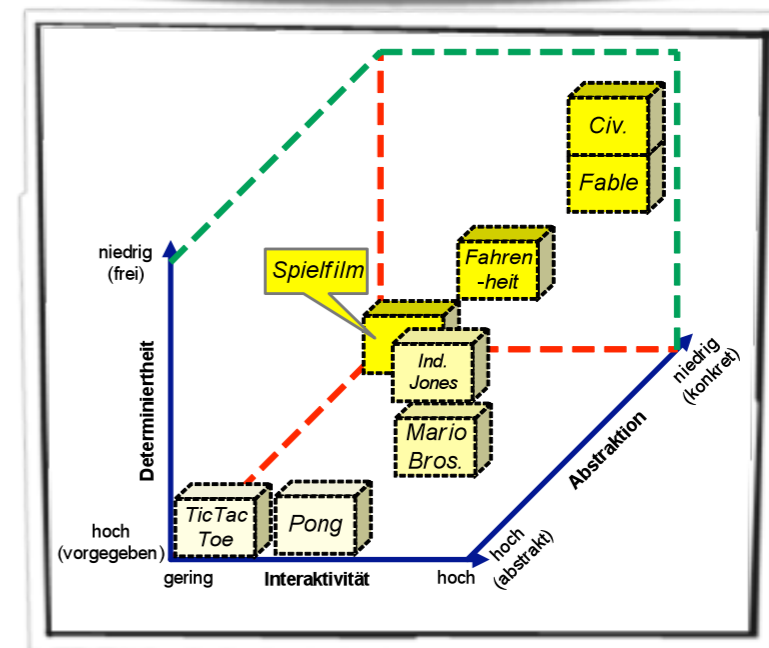
Innovative User Interfaces

- Augmented-Reality Games with tangible user interfaces
- Head- and finger-tracking with the Wii Remote technology
- Development of game prototypes based on the different tracking-methods
- 3D projection in combination with Wii gesture-controls
- Multi-Touch interaction for games



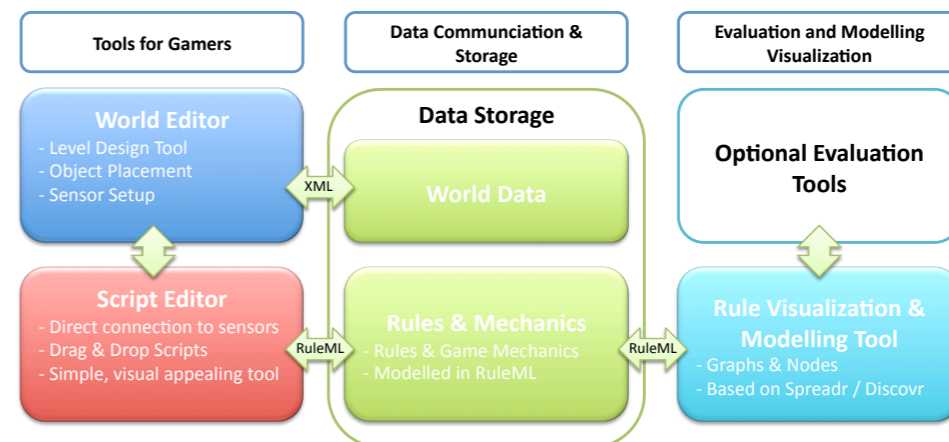
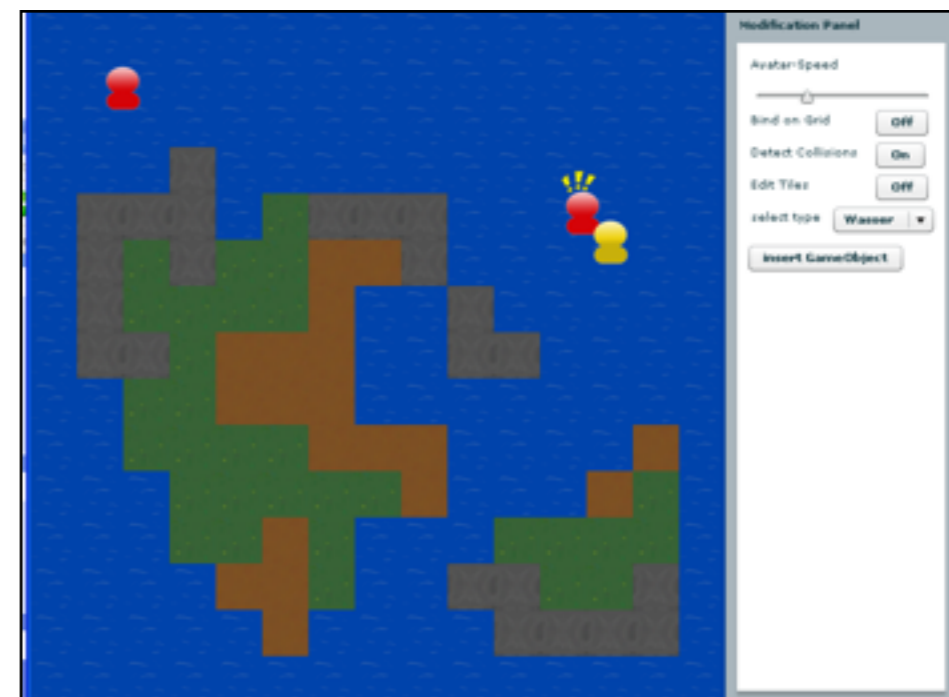
Interactive Digital Storytelling

- Game „Grimmix“ based upon different storytelling technologies and methods
- Probabilistic bayesian networks and rule-based prolog control the story development
- Player has a lot of choices and his actions influence his future interactions with all characters

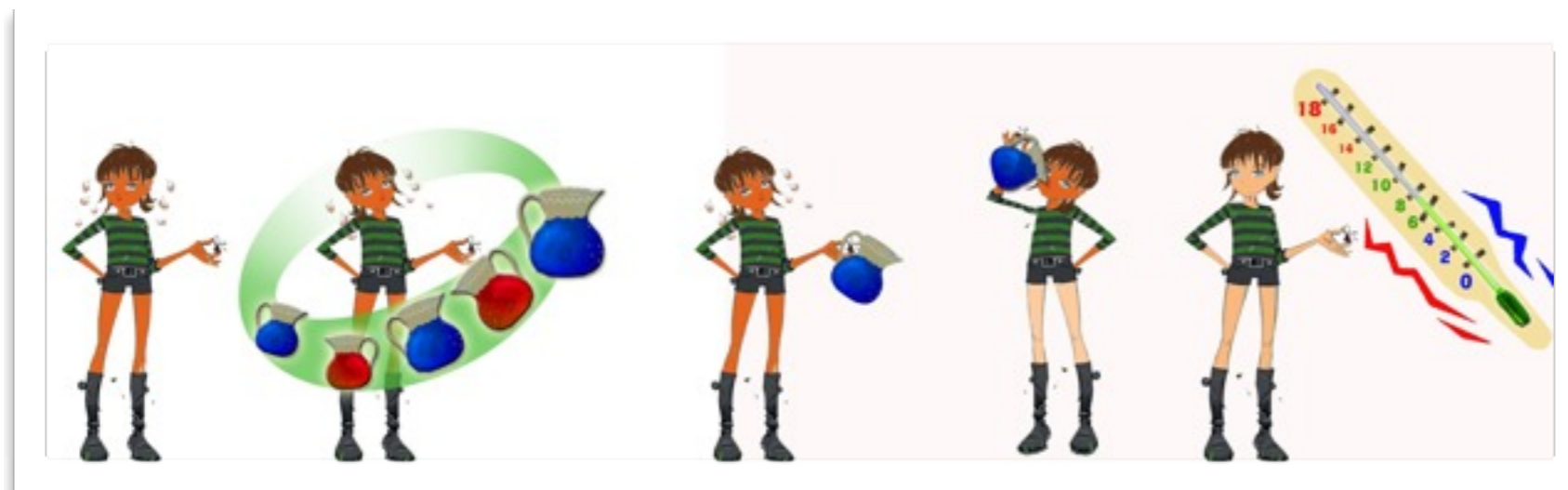


User-Generated Content & End-User Development

- User-Generated Content, User Innovation & Participation
- Models of gratification (incentives)
- User-generated game mechanics, support of game design beginners
- Game prototyping framework with semantic ruleset visualization



Serious & Health Games




- Development of a health game prototype for kids with diabetes
- Collaboration with health care professionals, psychologists, medical scientists
- Game aims at improving the self-management of kids

Context-Adaptive Web Applications

- Model-based development and generation of web applications (Project WISE)
- Context models for adaptive systems (Project CONTICI)
- Ontology-based adaption and recommender technologies
- Adaptive generation of user interfaces for web services

Discover - Home 12.10.09 14:06




Home Browse Products Browse Events Browse Venues Please login or register. User name: Password:

Get ready to discover our selection!

Welcome to Discover! Discover is a context-aware multi-recommender system that is currently being developed by the working group Interactive Systems at the University of Duisburg-Essen. It uses several recommendation-generating mechanisms and contextual information retrieved by various sensors to recommend exactly those products, events and locations to the user that fit best to his preferences and his usage context. The provided information is complemented by data retrieved from well-known web services like YouTube or Wikipedia.


Please feel free to browse this site and test this first prototype of Discover.





IP address
• 134.91.35.72


Date and time
• 12.10.2009 (14:01)

Geographic coordinates

Closest city

Duisburg

Current weather

Cloudy

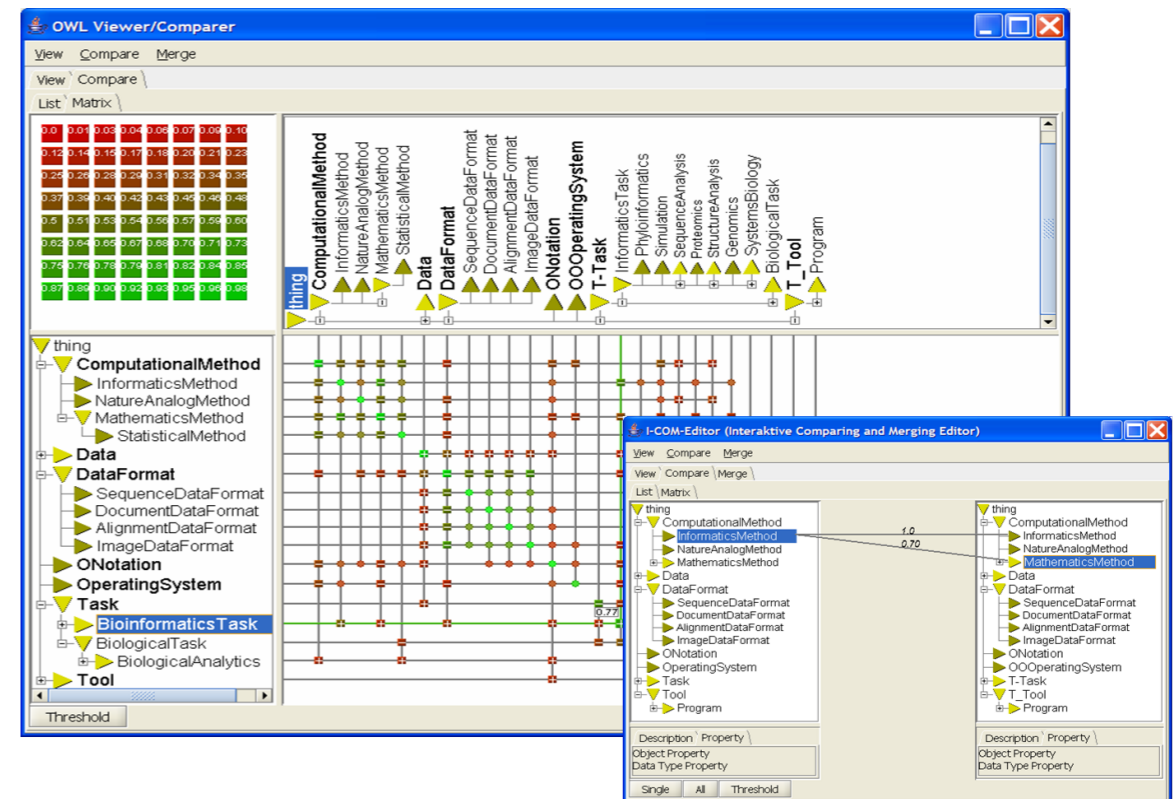
Upcoming/recent holiday


Current season


<http://tomcat.interactivesystems.info/discover/index.html> Seite 1 von 2

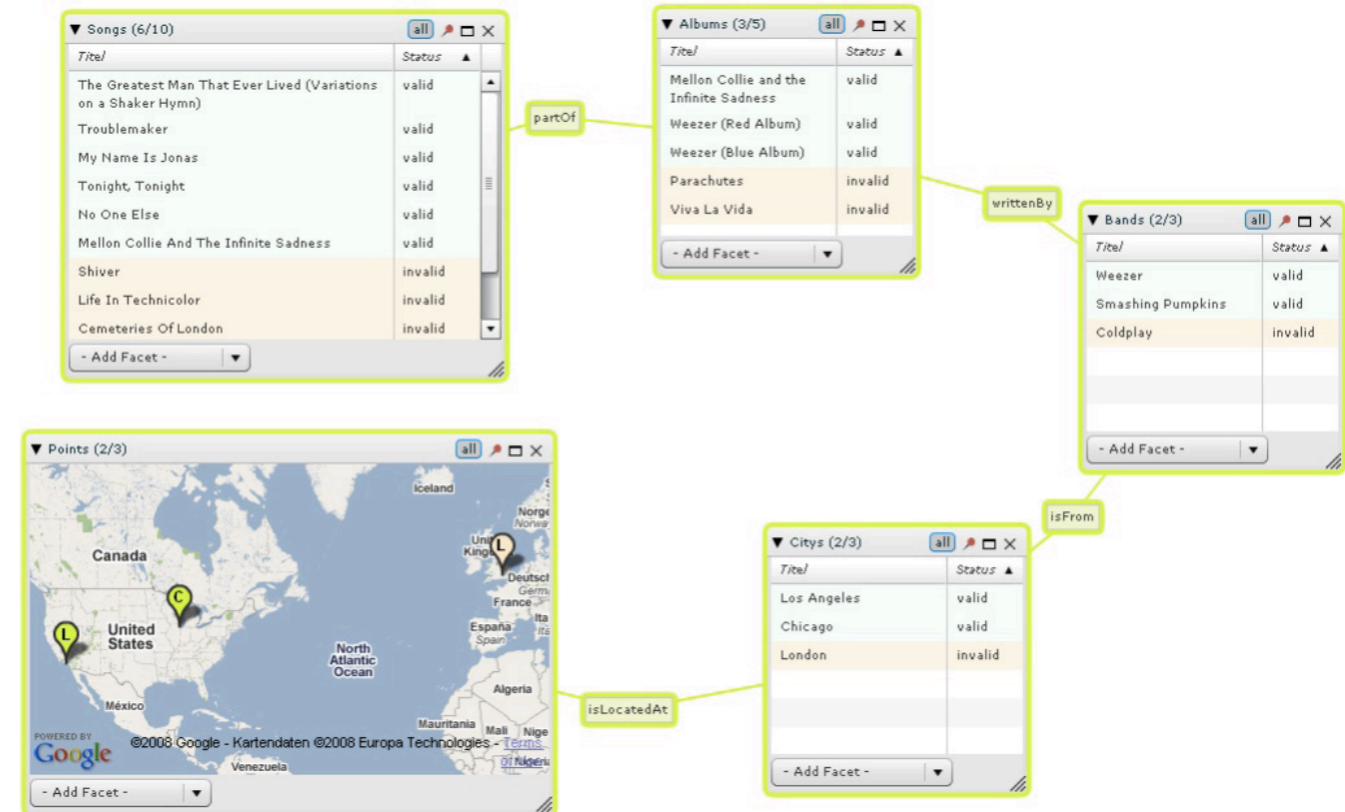
Knowledge and Ontology Engineering

- Collaborative generation of ontologies (Project ONTOVERSE)
- Development of interactive visual methods and technologies for the analysis and the merging of ontologies (Project ONTOVERSE)
- Ontologies for requirements engineering in evolutionary systems (Project SOFTWIKI)



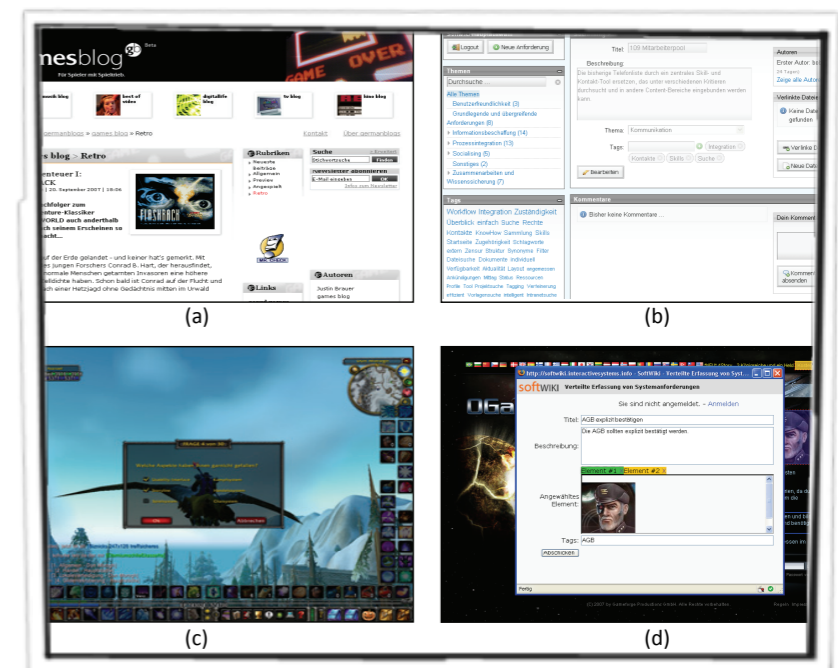
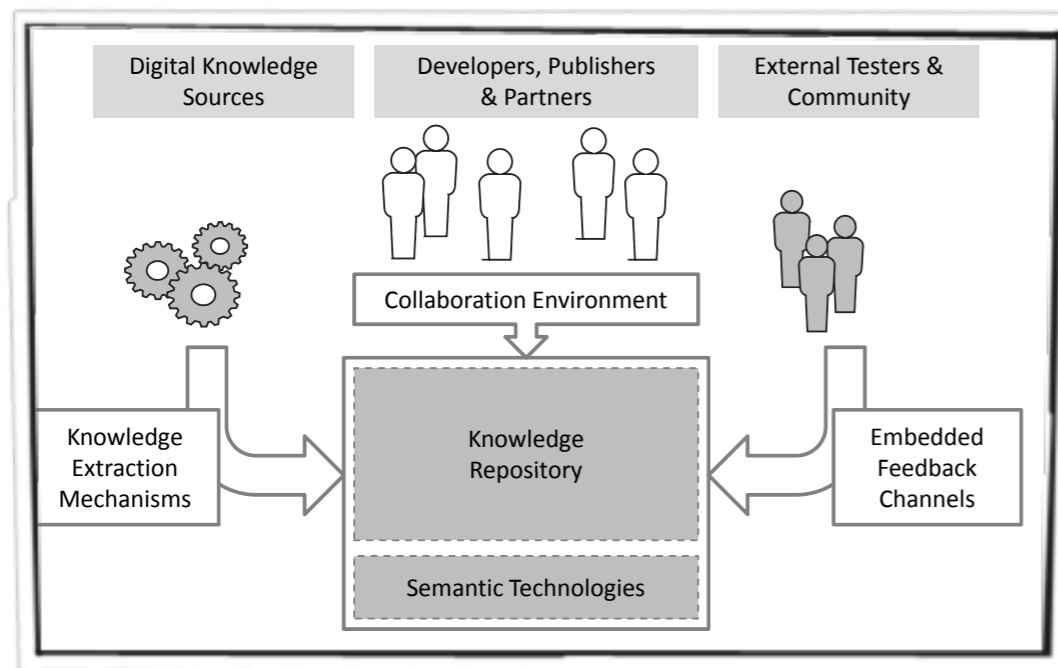
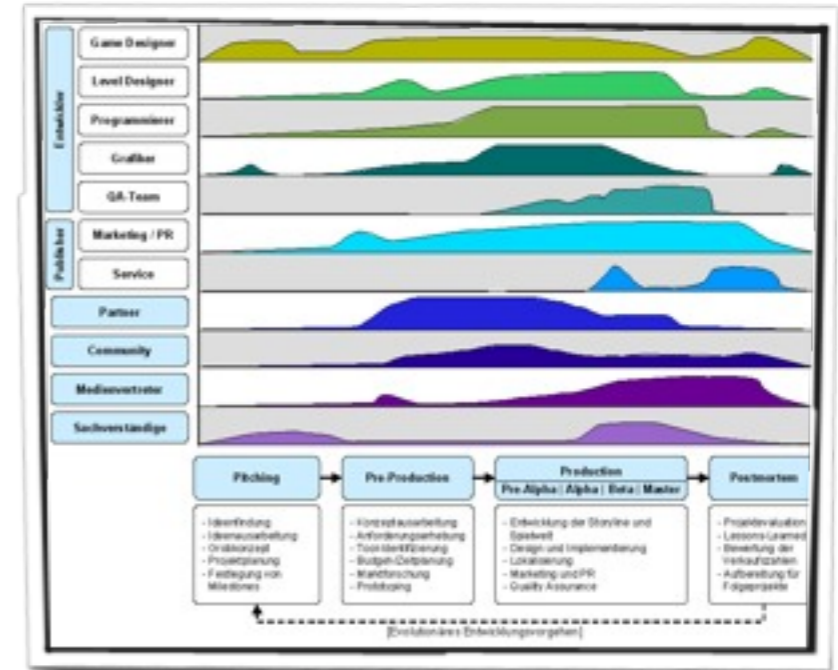
Smart Interactive Visualizations

- Intuitive exploration and editing of huge information structures (e.g. ontologies)
- Visualization of graphs and tree structures
- Tools for content engineering



Knowledge Management

- Supporting agile development processes in the game development and other creative industries
- Minimal-invasive methods for knowledge management support
- Requirements engineering: Tools and methods



Further Activities

- Game Technology Competence Center NRW, Winner of the contest of the Land of North-Rhine Westfalia, EU Ziel-2 (Create.NRW)
- Game Development Initiative Ruhr (GDI.Ruhr): Cooperation with the Wirtschaftsförderung Mülheim, Games Factory Ruhr & Games Commission Ruhr
- Cooperation with Psychology chairs at UDE and LMU Munich in the area of Health Games
- Cooperation with Fraunhofer IMS, partners from France & Austria in the area of Health Games for elderly people (Ambient Assisted Living, AAL Europe)



Contact Info

For any further questions please feel free to contact us!

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