
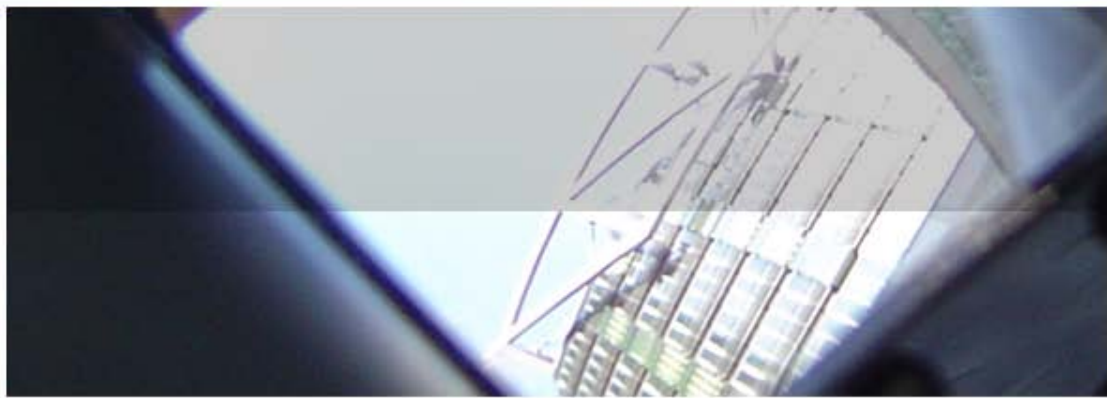


Environmental Awareness
IPCity Summer School Workshop

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The IPCity logo is located on the left side of the green banner. It features a stylized, wavy graphic element on the left, followed by the text "IPCity" in a bold, white, sans-serif font.

CityWall

- A large, public multi-touch screen with a Media TimeLine on a shop front window
- MR interface to current and past events of the city
- Embodied and collocated exploration of others views of events
- **How does this platform support presence in city events?**
- **Video**



MapLens

- Video of MapLens 2.0



The Field Trial, The Tasks, The Game

- The players solved a variety of kinds of tasks (12 in all), some of which were **sequential problem chains**
 - The trial began at the Natural History Museum where players completed four indoor tasks, two of which included follow-on components outside the museum
 - The tasks were designed with emphasis on the mix of digital, and augmented with real and tangible and they were promoting:
 - internal and external group activities and awareness;
 - negotiation of tasks and artifacts;
 - ‘noticing’ and awareness of the environment;
 - higher level task management;
 - awareness of physicality, proximity, embodiment and physical configurations around artifacts
 - The players followed clues and completed the given tasks within a 90 minute period
- Three different prizes included:
 - speed and accuracy
 - best photograph
 - the best environmental task



Map Lens Field Trials: MapLens (ML) and DigiMap (DM) control group

Three trials held in down town Helsinki, August, 2008

- Prior the trials, game logic, timing, task difficulty, and interaction were piloted
- Each trial was of an incrementally larger size
- In the first two trials only MapLens was evaluated and in the third trial five teams tested DigiMap and the other five teams tested MapLens
- A total of 37 people were enlisted with ages ranging from 7 years to 50 years, 20 females and 17 males

The trials were run as location-based treasure hunt-type games

- In order to replicate a real-life scenario, real elements and tasks imitated the kinds of circumstances that might usually be found around the use of this kind of technology
 - The game required the users operate the systems and complete their tasks in a situated environment (with constant interruptions, shifts in focus, conflicting distractions and divergent goals)



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Kitbags contained 7 items that needed to be managed: sunlight photographs, map, phone, water testing kits, voucher for internet use, clue booklet and pen.



Participants familiarized themselves with the game and with the technology before leaving the briefing room



Walking while using and bodily configurations. Left: Girls walk in front while one tries to read off MapLens (M). Center: MapLens (M) team negotiate where next. Right: One DigiMap (D) user reads the system while the other navigates



MapLens team photographed by researcher

Findings: Collaborative use

- DigiMap was used more individually than MapLens, one person controlling the device giving instructions to the others where to go and what to do next
- The MapLens users typically gathered around the map and the lens “like bees around the hive”, a phenomenon analysed as place-making. Negotiation, collaboration and establishment of common ground were supported.



Workshop: Designing a game for environmental awareness

- The focus of the workshop will be in designing a new game to be used with the MapLens technology
- Students will learn how to use the authoring tools and how to design a game for evaluation purposes
- Focus in environmental awareness
- Game area: Stadtpark in Vienna centre