A platform for designing spaces with human behavioral data

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The widespread deployment of the Internet today has enabled us to collect and analyze large volumes of human behavioral data. With the background, we started pingpong project.

Project overview

1. Developing a platform to...
   - extract and analyze human actions in physical spaces
   - link those data to location information
   - using Twitter
2. Holding design WS at university libraries
   - to conduct research on the effectiveness of the platform
   - participants: undergraduate and graduate students

Contact

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pingpong project website: http://www.pingpong.ne.jp/

The pingpong platform:

Human behavioral data can be easily obtained.

When a user launches the application, a list of building names on a university campus appears on the screen.

After selecting one of the buildings, a screen with a floor map of the building appears in which each grid indicates 50 cm x 50 cm square meters of the actual space.

A user can post a short description about the particular place by placing a finger on to the screen, which prompts the appearance of an input box.

The input text is then posted on Twitter with the location information and a hash-tag specified for the workshop (in this case #ppklc).

All the posted tweets with the hash-tag (#ppklc) are crawled from the Web and posted texts (tweets) are visualized on a Web browser. The visualization is provided in the form of a map in which the verb is extracted from each post and mapped using its location information (pingpong map).

Design Workshops:

The pingpong map helps in putting the feedback for designing physical spaces.

Case 1: Future University Hakodate

In the workshops, after collecting tweets for the spaces, the student participants deepened their understanding of the field by analyzing gathered tweets, identified problems and their causes, generate new ideas to solve the problems, and prototyped the idea in the final phase.

Day 1: Observation
Day 2: Analysis
Day 3: Idea generation
Day 4: Prototyping

The participants classified tweets by whether it was about an activity that actually happened (depicted in red) or not actually happen but instead user’s wishes or desires (depicted in green).

Case 2: Tama Art University

The participants classified tweets by whether it was about an activity that actually happened (depicted in red) or not actually happen but instead user’s wishes or desires (depicted in green).

Case 3: University of Tsukuba

The participants classified tweets by whether it was about an activity that actually happened (depicted in red) or not actually happen but instead user’s wishes or desires (depicted in green).