History Browser
(or)
Wiki World

Aras Bilgen
David Bingham

Aspects of Wiki

- knowledge building -

- Open: Readers can edit poor or incomplete entries.
- Incremental: Entries can cite other entries.
- Organic: Structure and content is open and evolving.
- Observable: Activity can be watched and reviewed.
- Trust: Confidence in people and process.

Current Examples

- Technically:
  - Yellow Arrow
  - Semapedia
  - eRuv
- Conceptually:
  - Anchor - Content relation
  - Overlays



Relevant, but non-primary:

Industrial Design

Privacy

Security

Engineering

Infrastructure

Implementation

Usability

Interface Design

The study will describe the design concept and relative functionality through descriptions and hypothetical scenarios. This study is primarily concerned with the abilities of this device to affect knowledge building and patterns of participation.

History Browser

- GPS coordinate-location awareness
- Data connectivity
- Input:
  - Navigate linear information
  - Input character information
- Output:
  - Character - based information

History Browser

- **Record:** Facilitate the creation of new entries.
- **Discover:** Find entries in physical landscape.
- **Annotate:** Debate, edit, and append.
- **Browse:** Review content spatially and temporally.

Feature Scenarios

Walk on the beach

Jane is walking along the beach when her History Browser buzzes for her attention. She looks at the display and it informs her of a Wiki-World entry originating 38 meters from her location.



Walk on the beach

She checks the entry:

"Fantastic spot to watch a sunset!!”
Date: 08/02/05
Time: 7:12pm
Author: Mimi-girl

It's currently mid-morning, so Jane doesn't bother following the History Browser’s directions to the location and she continues down the beach.



Foreign Travel

Tony is touring Rome and while visiting the Colosseum, he finds a very insightful Wiki-World entry added last year by another user, "Prof99Jones." Tony checks to see what other entries were made both before and after the Colosseum entry. "Prof99Jones" writes about a nearby cafe from that same day.



Foreign Travel

Tony then continues to an entry on some Aqueducts just outside of town that Tony wouldn't have otherwise known using his travel-agent's itinerary. Skipping across "Prof99Jones" other entries, Tony finds many other interesting locations and information around Rome.



Aspects of Physical Wiki

- Open: Readers can edit poor or incomplete entries and/or add personal insight.
- Incremental: With more citations, the historical account about the location will create a complete record.
- Organic: The community voluntarily explores and contributes to give the system rich and robust entries.
- Observable: Changes in the physical landscape can correlate with the history of entries.
- Trust: Credibility will be established for both the authors and individual entries.

Participation Patterns

Proximity alert

Anchor - Content Relation

- Turned off/on?
- Set distance?
- Alert response?
- Methodology: Data mining and analysis - use software features to gather this data and mine it for patterns

Knowledge Building

Building vs Construction

- Wikipedia vs Amazon?
- Encyclopedic vs Experiential?
- Methodology: Qualitative analysis of the created records and personal interviews.

Framework Analysis

Distributed Cognition

- Contextually based information
- Highly artifact oriented & influenced
- System functions as a whole

Study Limitations

- Direct observation is challenging
- Enormity of data logs
- Numerous tangent uses.

Why?

- New ways of contextual content consumption and creation.
- Ubicomp research: Ways to look at the educational values of situated artifacts.
- Information appliance case study.