COMS E6176

Context

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Context

Merriam-Webster Online Dictionary

2 entries found for context
To select an entry, click on it

context (context) 1
Pronunciation: -kənˈtekst
Function noun

etymology Middle English, weaving together of words, from Latin contextus connection of words; coherence, from contextus to weave together, from cow- + tense to weave -- more at TENEMENT
1: the part of a discourse that surrounds a word or passage and can throw light on its meaning
2: the interrelated conditions in which something exists or occurs: ENVIRONMENT, SETTING
- contextless (ə-kənˈtekstə-lis) adjective
- contextual (ə-kənˈtekstə-kl) adjective
- contextually adverb

2 context (noun)
1: an act, event, or thing that is a part of a larger whole and can be related to it or be related to it in some way
2: a situation in which something happens or is done
3: a specific environment or setting in which something occurs or is done

Thesaurus

contextless, contextual
What can we do with context?


- Sense
- Adapt
- Resource discovery
- Augment (i.e., add to it)

What can we do with context?


- Proximate selection
  - Make it easier to access things that are closer
- Automatic contextual reconfiguration
  - Modify state of surrounding resources (e.g., move whiteboard contents with group)
- Contextual information and commands
  - Actions are interpreted in context (e.g., "migrate button" to move app to nearby display)
- Context-triggered actions
  - Actions occur when event is recognized (e.g., reminder pops up when user is at desired location/time)
Space

- Position
  - Latitude, Longitude, Altitude
  - Local coordinates
  - Room/location name
- Orientation
- Motion

Time

- Exact local time (time zone)
- Morning, noon, evening, night. . .
People

- User
- Nearby people

Objects/Resources

- Computer equipment
- Other
Tasks

- User/group goals
  - Write paper
  - Watch movie
  - Play game

Situation

- Vacation, meeting, emergency, . . .
Environment

- Light
- Sound
- Smell
- Vibration
- Temperature
- Humidity
- Weather

Data

- Local data broadcasts
  - Radio
  - IR
Applications

- PARC Tab location-based file browser
  - Filter files based on location
- PARC Tab location-based paging
- RXRC Forget-me-not
  - Diary
- RXRC Communicator
  - Suggests best way to communicate with user, based on their location

Applications

- PARC Tab
  - Pointing
  - Drawing
  - Voting
  - Remote Control
Applications

- Situated information
- Situated reminders
- Context-based retrieval of information
- Context-based determination of behavior

Issues

- Environmental infrastructure
  - None: face recognition
  - Existing infrastructure: GPS (artificial), magnetometer/gravitometer (natural)
- Local infrastructure
- Industry/government/global infrastructure
Issues

- Distinction between
  - Context source
  - Means for detecting context item

- Example:
  - *User identity* can be determined by
    - Badge
    - Voice recognition
    - Face recognition
    - ID card

Issues

- History
Issues

- Noise
- Data fusion

Issues

- Privacy
  - Who can access context
  - Who can create context