mLearning: Ontology platform
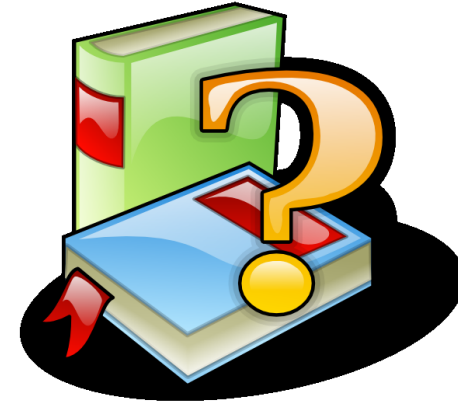
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The idea

- Platform for mobile learning

- Rapid access to knowledge bases

- Complete and accurate information

Comparison with others

Handbook

- quality of selected information
- information retrieval is difficult
- amount of information is limited
- relevance can not be verified
- information can not be updated

Mobile Internet (phones, smartphones, etc. using the native browser)

- unlimited information
- poor structuring of information
- there is no guarantee of reliability and relevance

eLearning vs mLearning: the future?

- Learning on-the-go

- Large amount of smartphone devices with large displays and good input capabilities

- High-speed air connections (3G…)

- Better protection against piracy

- Problems: need to create new content for mobile usage, sync with existing eLearning systems
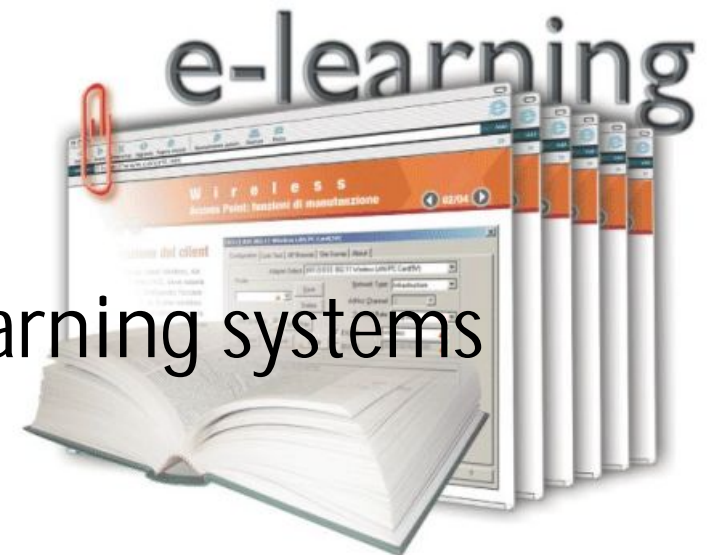
Use cases

- When one have 5-20 minutes and don't want to waste time
- mLearning for
  - Students
  - Travellers
  - Foreign languages
  - At home and supermarkets
  - Medicine
  - Your variant?

The proposed solution "Ontology"

Goal:
- help the user solve problems

Concept :
- selected and structured information (use case)
- adaptation of the material to the mobile phones
- use of multimedia features phones
- social network of experts in the subject area

First use case: mLearning for students

- Access to lectures on the topic
- Test your knowledge and understanding right after lecture (in the bus\train etc.)
- Access to lecturer notes on the topic
- Estimate your grade before the exam
- Handbook in your pocket

Client requirements

- Structured information

  – Rapid and unambiguous perception

- Interface adapted to mobile devices

  – easy data entry

  – display information

Platform features

- Personal testing
- Personal lessons
- Personal tutor
- Multimedia features on the device from the server
- Personal information geo-targeting

Implementation

- WEB-browser like cross-platform client

- Different UI approaches on different mobile devices

- Subscriptions and "push" data

- Ability to download packages for offline usage
  (in the case of connection absence)

Server-side security

- Content and privacy is everything

- Double-proxy

- Crypted data channel

Project stage

- Server backend is implemented
- J2ME client is implemented and released
- Working on content for the 1st use case
- Planned work on Smartphone (Qt-based) client

Thank you!