



AMBIENT LEARNING

ambient, multimodal, context-sensitive
lifelong learning

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Steinbeis-Transfer-Center MIT, Germany

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Ambient Learning – What it is

AMBIENT LEARNING....

- u a pragmatic and easy to use training system
- u designed to deliver highly individualized information
- u by integrating several content sources
- u providing them via multimodal interfaces
- u by using broadband technologies



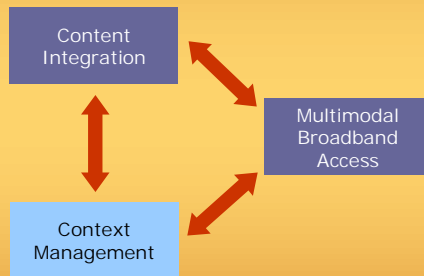
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Main Features of Ambient Learning

- u Allows access to existing knowledge catalogues and eLearning resources



- u Access to information with several mobile devices using broadband technology

- u Highly individualized content, based on the context of the user

Präsentation

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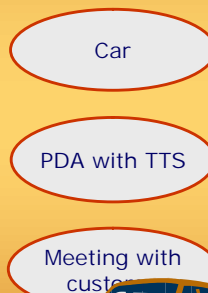


Context Information

Context Information

- Interests
- Skills
- Place
- Time
- Available Devices
- Type of network
- Business Dates

Catalogue of requirements



Content

- News
- Product Information
- Customer Information
- Addresses



Präsentation

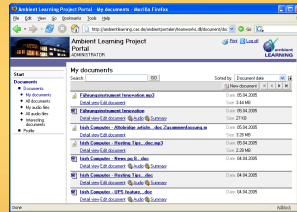
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Multimodal access:

Different end devices are supported

- PC browser
- MDA III



- PDA features more compact layout

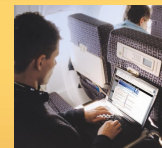
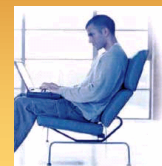
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Scenarios

- u Working at home on-line
 - l Internet connection
 - l full-featured PC
- u Reading content on the way, in a train
 - l no connection to the server
 - l Acrobat PDF reader on laptop
- u Learning in a car
 - l can't pay attention to a screen
 - l PDA / mp3-player



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Customize the personal home page



Ambient Learning Project Portal
Max Muster

Welcome Max Muster

Saturday, 2. July 2005

Blackboard
Posting
Text Posting

Latest documents

| Document | Date |
|---|------------|
| Times is hailed as king of the jungle.doc | 01.07.2005 |
| Stimulating the market.doc | 01.07.2005 |
| Sharptext reets in retailers.doc | 01.07.2005 |
| Rise of the Telco Channels.doc | 01.07.2005 |
| Product News.doc | 01.07.2005 |

My new messages
No entries available.

Interesting documents

| Document | Date |
|---|------------|
| Unlocking VC.doc | 01.07.2005 |
| News briefs.xlsx.doc | 01.07.2005 |
| Irish Computer - Hosting Tips | 07.04.2005 |
| Irish Computer - Web Tech.doc | 04.04.2005 |

Favourites
No favourites exist.

LED dictionary
Search term: Search

Print/Save/Share ppt

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Interesting documents folder



Ambient Learning Project Portal - Interesting documents - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://ambientlearning.cas.de/ambientportalen/teamworks.dll/document

Ambient Learning Project Portal
ADMINISTRATOR

Interesting documents

Search: GO

Sorted by: Document date

New document

| | |
|--|------------------|
| Führungsinstrument Innovation | Date: 05.04.2005 |
| Detail view Edit document | Size: 27 KB |
| Irish Computer - Computer People.doc | Date: 04.04.2005 |
| Detail view Edit document | |
| Irish Computer - Human Resources article...doc | Date: 04.04.2005 |
| Detail view Edit document | |

Entries: 1 - 3 of 3

Print/Save/Share ppt

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st w **Customize the personal profile**

- IT & Telecommunication
 - IT Security
 - IT Architecture
 - Software
 - Embedded systems
 - Database Administration
 - IT Product Management
 - IT Consulting
 - Database Development
 - Application Administration
 - E-Business/E-Commerce
 - IT Project Management
 - DTP / Graphics
 - Knowledge management
 - Hardware Development/Engineering
 - Database Applications
 - Helpdesk, Technical Support
 - IT News
 - IT-Quality Assurance
 - Software Engineering
 - Maintenance
 - Application Analysis
 - Information technology
 - IT Awards
 - Telecommunication

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st w **Users interests**

- adjusted in profile
- selecting topics in a hierarchy

Interesting documents folder

- same topics describe document context
- folder includes docus with matching context

Document properties

My profile

Select:

- Recht
 - Richter/Justizbeamte
 - Anwaltschaft
 - Notariat
- Medien & Information
 - Journalismus & Redaktion
 - Film, Fernsehen, Radio, Multimedia
 - ...

Bitte wählen

Verfügbare Kategorien:

- Recht
- Recht/Richter/Justizbeamte
- Medien & Information
- Medien & Information/Journalismus & Re
- Medien & Information/Film, Fernsehen, R

Ausgewählte Kategorien:

- Recht/Anwaltschaft
- Recht/Notariat

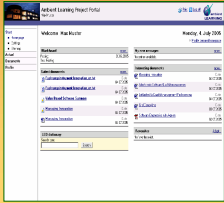
Apply Cancel

PräseBard090a.ppt

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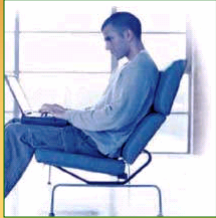
st w

Learning ONLINE



Ambient Learning Portal

Context:
 Location: in the office
 Device: PC accessing Ambient Learning
 Current Interest: functionalities of new products

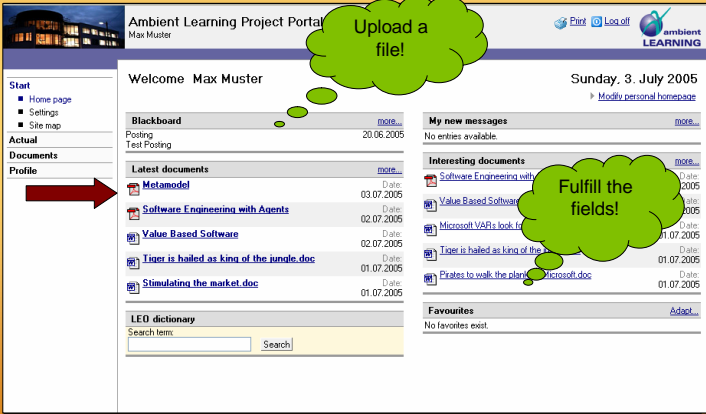


Use on-line features, e.g. translation

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st w

Upload documents



Upload a file!

Fulfill the fields!



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Translate from German into English



Ambient Learning Project Portal
Max Muster

Start
Actual
Documents
My documents
All documents
My max
All audiotext
Interesting documents
Profile

All documents

Search: [GO] Sorted by: Document date

Mark all Delete marked records Zip selected Archive documents New document

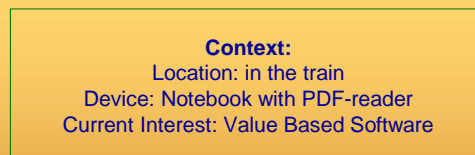
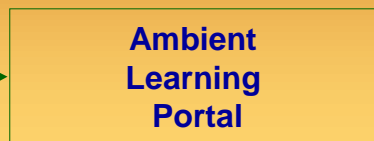
| | | |
|--------------------------|--|------------------|
| <input type="checkbox"/> | Grid Computing.en.txt | Date: 03.07.2005 |
| | <small>Detail view Edit document english Audio Generate PDF</small> | Size: 3 KB |
| <input type="checkbox"/> | Grid Computing | Date: 03.07.2005 |
| | <small>Detail view Edit document german Audio Generate PDF Translation</small> | Size: 33 KB |
| <input type="checkbox"/> | Metamodel | Date: 03.07.2005 |
| | <small>Detail view Edit document english Audio</small> | Size: 170 KB |
| <input type="checkbox"/> | Software Engineering with Agents | Date: 02.07.2005 |
| | <small>Detail view Edit document english Audio</small> | Size: 73 KB |
| <input type="checkbox"/> | Value Based Software | Date: 02.07.2005 |
| | <small>Detail view Edit document english Audio Summary Generate PDF</small> | Size: 70 KB |
| <input type="checkbox"/> | Tiger is hailed as king of the jungle.doc | Date: 01.07.2005 |
| | <small>Detail view Edit document english Audio Summary Generate PDF</small> | |
| <input type="checkbox"/> | Stimulating the market.doc | Date: 01.07.2005 |
| | <small>Detail view Edit document english Audio Summary Generate PDF</small> | |
| <input type="checkbox"/> | Sharpest teeth in retailers.doc | Date: 01.07.2005 |
| | <small>Detail view Edit document english Audio Summary Generate PDF</small> | |

PrintScreen049a.ppt

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Learning OFFLINE



Turn documents into PDF files

PrintScreen049a.ppt

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Turn a doc file into a pdf file



Start

Actual

Documents

- My documents
- All documents
- My audio files
- All audio files
- Interesting documents

Profile

All documents

Search: GO

Sorted by: Document date

New document

Mark all Delete marked records Zip selected Archive documents

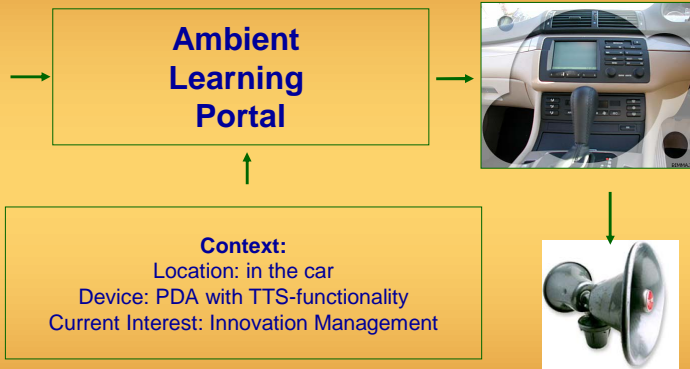
| | | |
|--------------------------|---|------------------|
| <input type="checkbox"/> | Value Based Software | Date: 04.07.2005 |
| | Detail view Edit document english | Size: 37 KB |
| <input type="checkbox"/> | Leitfaden für Qualitätsmanagement Fachpersonal | Date: 04.07.2005 |
| | Detail view Edit document german Audio Generate PDF Translation | Size: 244 KB |
| <input type="checkbox"/> | Arbeitskreis Software Qualitätsmanagement | Date: 04.07.2005 |
| | Detail view Edit document german Audio Generate PDF Translation | Size: 60 KB |
| <input type="checkbox"/> | Grid Computing.en.txt | Date: 03.07.2005 |
| | Detail view Edit document english Audio Generate PDF | Size: 3 KB |
| <input type="checkbox"/> | Grid Computing | Date: 03.07.2005 |
| | Detail view Edit document german Audio Generate PDF Translation | Size: 33 KB |
| <input type="checkbox"/> | Metamodel | Date: 03.07.2005 |
| | Detail view Edit document english Audio | Size: 170 KB |
| <input type="checkbox"/> | Software Engineering with Agents | Date: 02.07.2005 |
| | Detail view Edit document english Audio | Size: 73 KB |
| <input type="checkbox"/> | Value Based Software | Date: 02.07.2005 |
| | Detail view Edit document english Audio Summary PDF document | Size: 70 KB |

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Learning ON THE WAY



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Turn a document into an audio file:

Text-to-Speech-integration

Ambient Learning Project Portal
Max Muster

Start
Actual
Documents
My documents
All documents
My audio files
All audio files
Interesting documents
Profile

My audio files
Search: [] [GO] Sorted by: Document date
[New document] [] [] []
[] Mark all [] Delete marked records [] Zip selected Archive documents
[] **Manazina Innovation** Date: 04.07.2005
[] Detailed view [] Edit document [] english
Size: 2.11 MB
Entries: 1 - 1 from 1

PrintSave049a.ppt

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Führungsinstrument Innovation Date: 05.04.2005
Size: 27 KB
[Detail view] [Edit document] [Audio] [Summary]

Generating Audio...

Führungsinstrument Innovation.mp3 Date: 05.04.2005
Size: 3.44 MB
[Detail view] [Edit document]

Text-to-Speech engine integration

- documents can be transformed to audio
- MS Word, PDF and plain text are supported
- with Word summary generation is available
- engine: AT&T Natural Voices™

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The key factors for USP

u INTERACTIVITY

- | The AmbientLearning excels in getting potential users involved. It allows high information selling and provides multiple opportunities for collecting customer information and preferences.

u CONVENIENCE

- | The AmbientLearning context technology and the matching agent can be used to organize and automate key learning and educational processes for customers. Context management helps to organize the information-gathering process for customers, giving them support and allowing multimodal reminders that they can take away with them and consume when appropriate.

u ACCESSIBILITY

- | Both time and location limitations become irrelevant on the web. Use greater accessibility to extend your reach and availability to your customers.

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Thank you
for your Attention!

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