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*open platform*  
~~uni-online~~

past, presence, and future



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# uni-open platform

background

- ⇒ Open Source platform for learning and teaching
- ⇒ Consists of open source components
- ⇒ Field-tested by several partners
- ⇒ Offers modules for
  - ⇒ administering courses and students,
  - ⇒ personal view and work, and
  - ⇒ offline working and reducing online costs
- ⇒ Commercial support available



- ⇒ First comprehensive concepts for the platform were developed more than five years ago
- ⇒ First developed as platform of the faculty of Electrical and Information Engineering
- ⇒ An extensive prototype has been implemented and tested in practice with about 2000 students

# uni-open platform - objectives

past

- ⇒ Development and evaluation of new paradigms for teaching over the internet
- ⇒ Realisation of all important features
  - ⇒ course material
  - ⇒ communication
  - ⇒ tutoring
- ⇒ Development of an integrated platform for
  - ⇒ students
  - ⇒ the teaching staff



## uni-open platform - students' demands

past

- ⇒ Persistent access to all individual relevant information (assignment-, laboratory- and seminar-dates, ...) and central facilities
- ⇒ Several communication options (between students, student-teacher, learning groups ...)
- ⇒ Individual workspace (for a quick overview of assignment results, ...)
- ⇒ Offline support for course units to save internet access costs

## uni-open platform - tutors' demands

past

- ⇒ Decentralised access and revision of content
- ⇒ Easy handling of student data, dates, courses, course material, ...
- ⇒ Support for assignments, laboratory dates and results
- ⇒ Flexible platform to implement new trends (ECommerce) and new fields of application in online learning

- ⇒ To fulfill the different requirements of a virtual university and to optimise online learning, several tools have been developed:
  - ⇒ Interfaces to the database for students and lecturers
  - ⇒ Online-Assistant
  - ⇒ Offline-Navigator

# uni-open platform - functionality

presence

- ⇒ Course tutors use the database for web-based administration of
  - ⇒ student data
  - ⇒ courses and course material
  - ⇒ assignments
  - ⇒ dates
  - ⇒ statistics
- ⇒ Nearly all our traditional courses are currently offered online



# uni-open platform - web interface

presence

The screenshot shows a Netscape browser window titled "ETONLINE-Datenbank (Version 2.0, 24.06.98) - Netscape". The address bar shows the URL "https://www-etdb/welcome.phtml?again=1". The main content area is divided into several sections:

- MENÜ:** A vertical list of links including Benutzer, Einstellungen, Kursbelegung, Kursbetreuung, Kurse, Kurskomponenten, Lehrgebiete, Statistiken, Studenten, Termine, Übungen, Übungsergebnisse, Fragen oder Anmerkungen?, ETDB verlassen.
- Terminbearbeitung:** A section titled "Termin bearbeiten, wählen Sie eine Funktion." with buttons for Einfügen, Löschen, Selektieren, Ändern, and Hilfe.
- Terminauswahl:** A section titled "Welche Termine möchten Sie selektieren?". It includes a "Terminart:" dropdown menu set to "Prüfungstermin", a date range selector "in der Zeit" from "1.1.1999" to "31.12.1999", and radio buttons for "vor", "gleich", and "nach" a date.
- Suchergebnisse:** A section titled "Folgende Termine wurden ermittelt:" containing a table with columns for "Vollanzeige", "Termin", "Beschreibung", and "Zuordnung".

Vollanzeige	Termin	Beschreibung	Zuordnung
<input type="checkbox"/>	01.02.1999-15.04.1999	Zeitraum für mündliche Prüfungen	Prüfungstermin

Buttons for "Suchen" and "Hilfe" are present below the search criteria, and "Vollanzeige" and "Hilfe" are below the results table.

### Online Assistant

- ➔ displays on web pages the newest appointments in relation to
  - ➔ events/activities, practical courses, examinations, seminars
- ➔ displays appointments in relation to courses:
  - ➔ deadline for exercises, dates for the mailing of course units
- ➔ Students get a view on
  - ➔ personal data
  - ➔ results from assignments
  - ➔ enrolled courses
  - ➔ mailing lists

### Offline Navigator

- ⇒ Java-based tool for automatic download of course material
  - ⇒ reduces online-time → minimizes internet access costs up to 75%
- ⇒ interaction with database
- ⇒ automatic download and structured storage of
  - ⇒ compressed course material
  - ⇒ web pages, software, ...
  - ⇒ the online pages
  - ⇒ on the student`s computer

## uni-open platform - CampusSource

presence

- ⇒ CampusSource is an initiative of the state Nordrhein-Westfalen (Northrhine-Westphalia)
- ⇒ Developing an infrastructure for the use of new media for teaching and learning at universities
- ⇒ Setting up a cooperation between universities to develop software technologies needed for education

## uni-open platform - CampusSource

presence

- ⇒ Department for Communication Systems is founding member of CampusSource
- ⇒ Uni-open platform is available for free
  - Sources
  - Documentation
  - Licensed via extended GNU License



- ⇒ ET-Online → Uni-Online → Uni-open platform
- ⇒ Partners
  - ⇒ Technical University of Dresden
  - ⇒ ViTA (Virtual Teleacademy)
  - ⇒ FH Gelsenkirchen (Gelsenkirchen College)
  - ⇒ MMK Hagen
  - ⇒ KOMMTEL Münster

## uni-open platform - internationalisation

future

- ⇒ Internationalisation: The complete platform (sources, documentation, web pages) will be translated into English.
- ⇒ Code Review

## uni-open platform - security

future

- ⇒ Access Control
- ⇒ uni-open platform uses the students' passwords available via the university computer center's LDAP server
  - Only one password for dial in at the university and for use of uni-open platform



## uni-open platform - security

future

- Firewall
  - uni-open platform server contains personal and therefore sensitive data.
  - Platform has to be available 24/7
- Firewall also consists of Open Source software

uni-open platform

contact

Sources, documentation, support:

➤ <http://uni-online.fernuni-hagen.de/>

„Living System“

➤ <http://et-online.fernuni-hagen.de/>

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