

# Standardizing the e-learning environment: A single LMS or bunch of e-learning tools?

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# Today's agenda

- The world of LMS today
- Higher education and corporate training
- The teaching perspectives inventory
- The “other” tools
- The standardization document and beyond
- An example of implementation of e-learning standards
- Moodle in Croatia

# Reference center for evaluation of courseware

Referalni centar

Odabir alata za e-obrazovanje

Kako je uspostavljen Referalni centar za odabir alata za e-obrazovanje

Referalni centar za odabir alata za e-obrazovanje započeo je kao zajednički projekt Hrvatske istraživačke akademske mreže (CARNET) i Fakulteta elektrotehnike i računarstva (FER) početkom 2003. godine. Cilj je referalnog centra pružiti sve informacije o vodećim courseware alatima dostupnim na tržištu te na jednom mjestu objediniti pregled njihovih mogućnosti i pružiti savjete prilikom odabira.

Referalni centar želi pružiti punu podršku korisnicima prilikom odabira i korištenja pojedinog alata. Kako bi se željeni cilj što bolje ostvario, služit ćemo se s nekoliko metoda komunikacije s korisnicima: web stranice, forum, e-mail te putem osobnog kontakta.

Kontakt: [referalni@carnet.hr](mailto:referalni@carnet.hr), tel:0800 227 638

**Novost: Spajanje Blackboarda i WebCT-a**

12. listopada 2005. najavljeno je spajanje dvije vodeće svjetske kompanije iz područja alata za e-obrazovanje Blackboarda i WebCT-a, pod brandom Blackboard Inc.

Više o tome možete pročitati na:  
[http://investor.blackboard.com/phoenix.zhtml?c=177018&p=irol-newsArticle&iD=767025&highlight=Informacija za korisnike WebCT-a ko zbiranjima u narednom periodu biti dostupna na](http://investor.blackboard.com/phoenix.zhtml?c=177018&p=irol-newsArticle&iD=767025&highlight=Informacija%20za%20korisnike%20WebCT-a%20ko%20zbiranjima%20u%20narednom%20periodu%20biti%20dostupna%20na%20www.blackboard.com)

<http://www.carnet.hr/referalni/obrazovni/oca>

Product List

<input type="checkbox"/> LRN	<input type="checkbox"/> ANGEL 6.1	<input type="checkbox"/> ANGEL 6.2	<input type="checkbox"/> ANGEL 6.3	<input type="checkbox"/> ATutor 1.4.2
<input type="checkbox"/> ATutor 1.4.3	<input type="checkbox"/> ATutor 1.5	<input type="checkbox"/> Avilar WebMentor 4.0	<input type="checkbox"/> Bazaar 7	<input type="checkbox"/> BlackBoard 5.6
<input type="checkbox"/> BlackBoard 6	<input type="checkbox"/> Blackboard 6.2 Enterprise	<input type="checkbox"/> Blackboard Academic Suite	<input type="checkbox"/> Bodington	<input type="checkbox"/> BSCW 4.0.6
<input type="checkbox"/> CentraOne 6.0	<input type="checkbox"/> Claroline 1.2.0	<input type="checkbox"/> Claroline 1.4	<input type="checkbox"/> ClassWeb 2.0	<input type="checkbox"/> Colloquia 1.3.2
<input type="checkbox"/> COSE 2.051	<input type="checkbox"/> Desire2Learn 7.2	<input type="checkbox"/> Desire2Learn 7.3	<input type="checkbox"/> Desire2Learn 7.4	<input type="checkbox"/> eCollege AU+
<input type="checkbox"/> Educator	<input type="checkbox"/> Eledge 3.1	<input type="checkbox"/> FirstClass 7.0	<input type="checkbox"/> Fle3	<input type="checkbox"/> ILIAS
<input type="checkbox"/> Internet Course Assistant 2.0	<input type="checkbox"/> IntraLearn SME 3.1.2	<input type="checkbox"/> Janison Toolbox 5.81	<input type="checkbox"/> Janison Toolbox 6.2	<input type="checkbox"/> Jenzabar Internet Campus Solution 1.03
<input type="checkbox"/> Jones e-education V2004	<input type="checkbox"/> KEWL 1.2	<input type="checkbox"/> KnowEdge eLearning Suite	<input type="checkbox"/> Learnwise	<input type="checkbox"/> LON-CAPA 1.2
<input type="checkbox"/> LON-CAPA 1.3	<input type="checkbox"/> LON-CAPA 2.1	<input type="checkbox"/> Manhattan Virtual Classroom 2.1	<input type="checkbox"/> MimerDesk 1.5.3.1	<input type="checkbox"/> MimerDesk 2.0.1
<input type="checkbox"/> Moodle 1.4	<input type="checkbox"/> Moodle 1.5.2	<input type="checkbox"/> Sakai 2.0	<input type="checkbox"/> Teknical Virtual Campus	<input type="checkbox"/> TeleTop
<input type="checkbox"/> The Learning Manager 3.2	<input type="checkbox"/> The Learning Manager Enterprise Edition	<input type="checkbox"/> Unicorn Academus	<input type="checkbox"/> Virtual-U 2.5	<input type="checkbox"/> WebCT Campus Edition 3.8
<input type="checkbox"/> WebCT Campus Edition 4.0	<input type="checkbox"/> WebCT Campus Edition 4.1	<input type="checkbox"/> WebCT Campus Edition 5.0	<input type="checkbox"/> WebCT Vista 2.1	<input type="checkbox"/> WebCT Vista 3.0
<input type="checkbox"/> WebCT Vista 4				

[http://edutools.info/item\\_list.jsp?pj=8](http://edutools.info/item_list.jsp?pj=8)

# Some of the LMS tools on the market

- aTutor
- BSCW
- Bazaar
- BlackBoard
- Claroline
- dotLRN
- eCollege
- eLearner
- Eledge
- FirstClass
- Ilias
- IntraLearn
- Kewl
- Lotus Learning Space + Lotus SameTime
- Manhattan
- Moodle
- WebCT



LearningSpace

Sametime



# Three options

- › Develop your own tool
- › Buy a commercial tool
- › Adopt and customize an Open Source tool

PROs / CONs

# IT parameters

- Standard compliant
- Relayable
- Durable
- Scalable
- Multiplatform
- Large user base
- Partner network

# Higher education and corporate training

## ➤ Corporate training

- › “Education industry”
- › Managerial model of governance
- › Capabilities from across company to assist customers in harnessing the power of learning
- › Content development strategy that is aligned with the organization’s competencies, business processes, and business strategy
- › Acquirement of additional learning capabilities to support customers’ learning challenges
- › Skills gap analysis
- › Sales force training (new products and services)
- › Software usage training
- › New industrial tools
- › HR: ROI
- › Billing system / Payment gateways / Invoices
- › Course design:
  - › Outsourced
  - › Generic and Custom courses
  - › Buy -> (Customize) -> Deploy model



# Higher education and corporate training

## ➤ Higher education

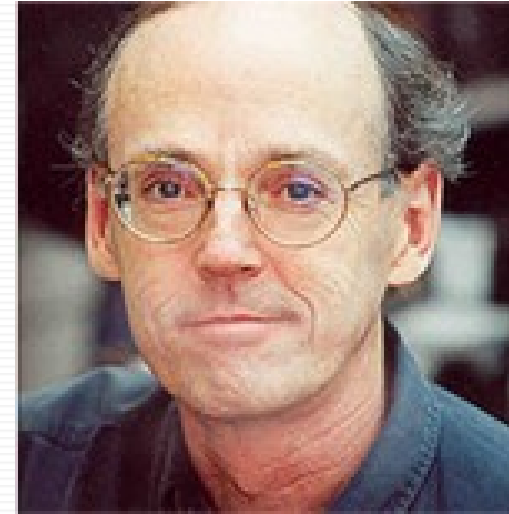
- › Curriculum centered
- › Cognitive domain – Bloom taxonomy
- › Collegial model of governance
- › Small purchasing power
- › In-house subject matter experts
- › In-house instructional / course designers
- › Little or no outsourcing experience





# The teaching perspectives inventory

- **Transmission** - Effective teaching requires a substantial commitment to the content or subject matter.
- **Apprenticeship** - Effective teaching is a process of socializing students into new behavioral norms and ways of working.
- **Developmental** - Effective teaching must be planned and conducted "from the learner's point of view".
- **Nurturing** - Effective teaching assumes that long-term, hard, persistent effort to achieve comes from the heart, not the head.
- **Social Reform** - Effective teaching seeks to change society in substantive ways.



# The “other” tools

## ➤ Tags – folksonomy:

› How to tag: <http://www.technorati.com/help/tags.html>

› Eqibelt tag: `<a href="http://technorati.com/tag/eqibelt" rel="tag"> </a>`

› <http://www.technorati.com/tag/eqibelt>

## ➤ Wikis

## ➤ BLOGs

## ➤ Podcasts

## ➤ Videocasts

## ➤ Flickr

## ➤ Geocaching (in education)

## ➤ ... and many more social software coming!!!

## ➤ Should we support this also?



# The standardization document and beyond

- IMS Global Consortium:
  - › IMS Content Packaging
  - › IMS Enterprise Information Model
- ARIADNE (Alliance of Remote Instructional Authoring and Distribution Networks for Europe)
- IEEE/LTSC: LOM (Learning Object Metadata) specification
- Simple Query Interface (SQI)
- ADL (Advanced Distributed Learning Initiative): SCORM (Sharable Content Object Reference Model) model
- W3C:
  - › HTML, CSS, SMIL, XML
- OASIS: Open Document Format for Office Applications
- X/PDF: ISO 15930-1:2001

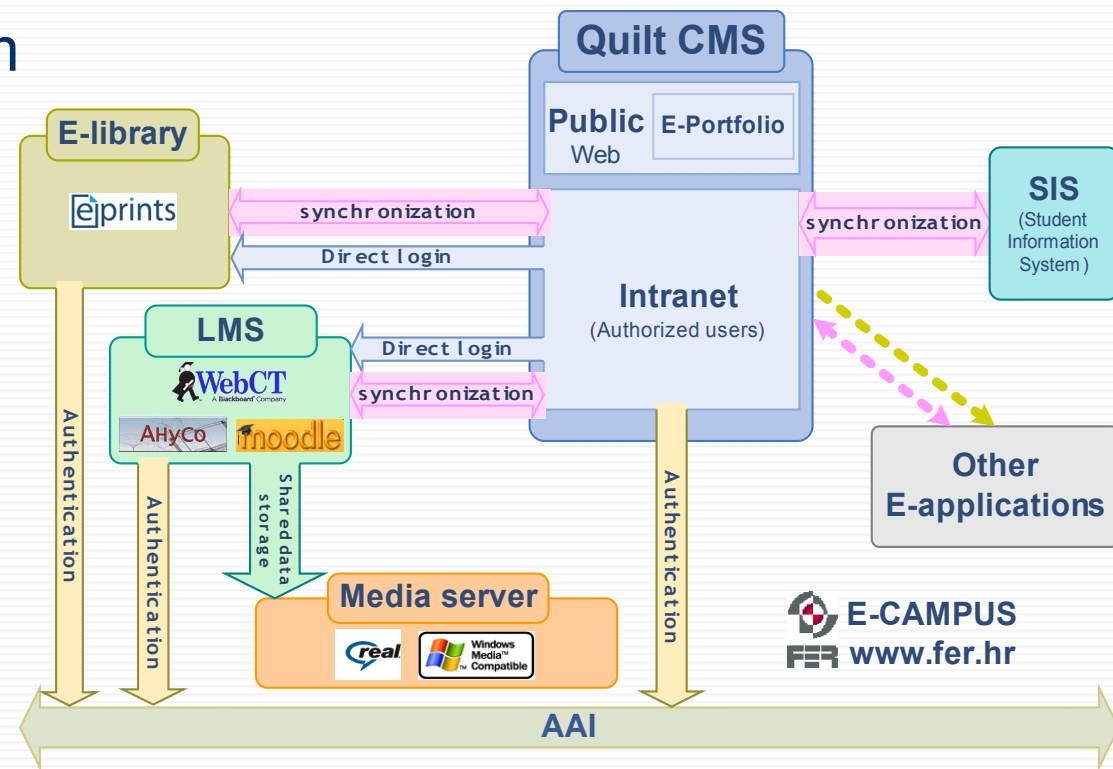
## An example of implementation of e-learning standards

# Why E-Campus?

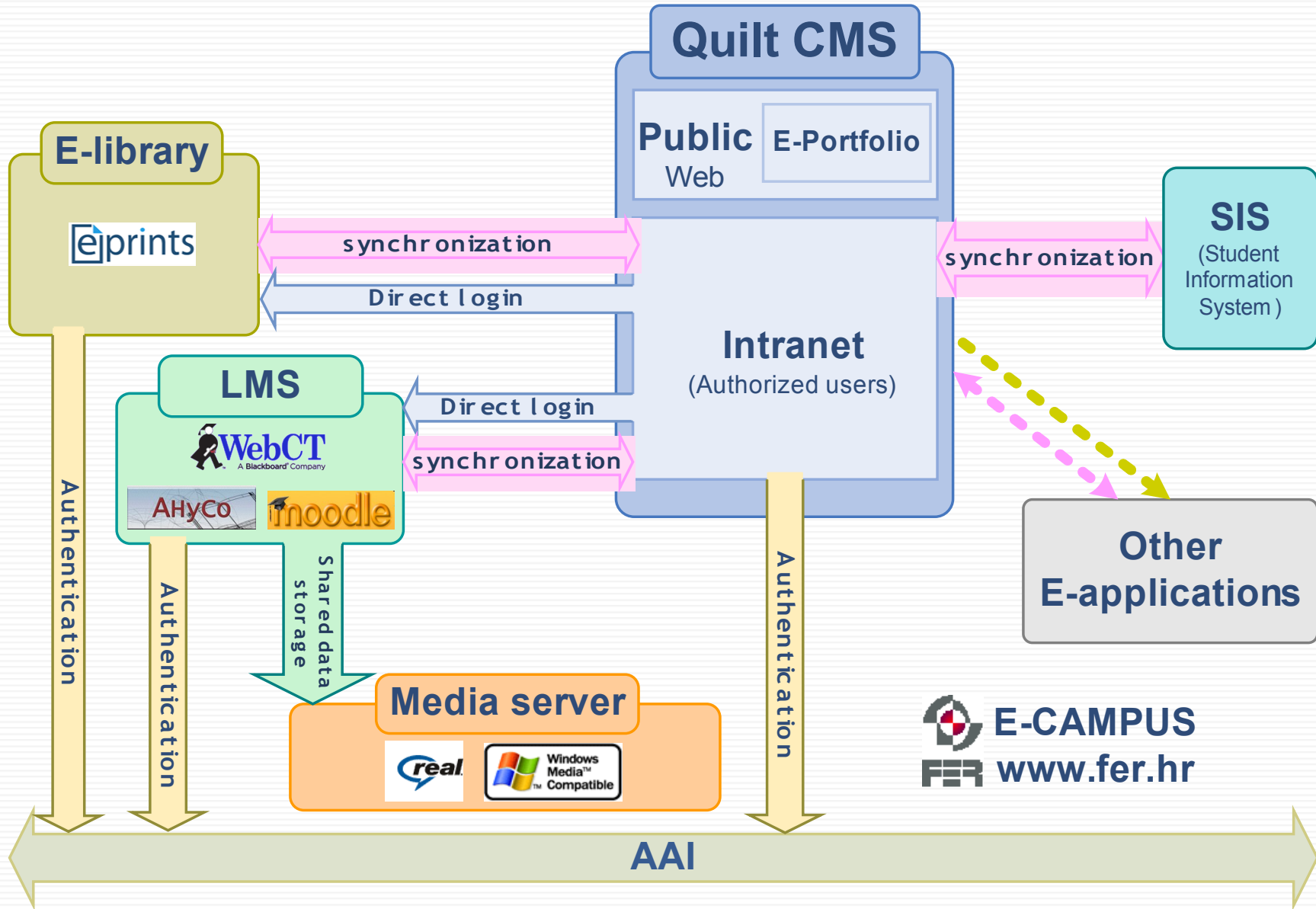
- Reasons behind the E-Campus
  - › Cost effectiveness
  - › Sustainability
  - › Optimal integration of ICT tools
  - › Technical infrastructure for modern pedagogy and teaching
  - › Commitment to relevant E-learning standards
- Primary goal
  - › Efficient and well-integrated system for delivery and administration of online education

# What is E-Campus?

- Complete integration of all information, learning and collaboration resources
  - › Content management system
  - › Learning management systems
  - › Student information system
  - › E-Library
  - › E-Portfolio
  - › Media servers
  - › Other E-applications
- Technical catalyst for improving the quality of e-education

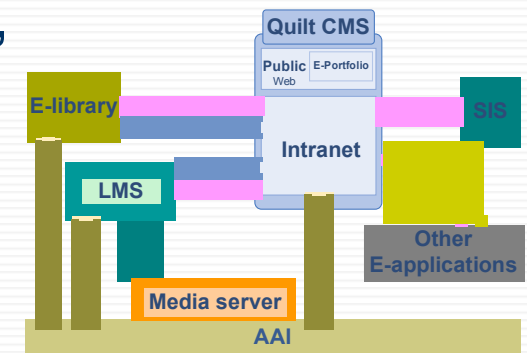


# E-campus @ FER



# Public and Private Information Space - CMS

- Our own “Quilt” Content management system
- Central part of the E-Campus
- Online editing
  - › Content
  - › News
  - › File and link repository
  - › Polls and advanced surveys
  - › FAQ
  - › Other communication-related modules: forum, chat, etc.





# Power of Quilt CMS - Information

## News

NEWS - SUGGEST/PUBLISH/EDIT

Change Preview

Title

Experience

Lead image

Lead


I kindly ask you to contribute with your experience, recommendations, suggestions...How? Simply - write it down and share with the other team members :-).

Oood luck!

Content

Detailed news content

Show news content instead of lead




## Content

INSTRUCTIONS

Title:

Instructions

Content:



**How to create an XML document from MS Word?**

1. create a document based on WebPublish template
2. save it as an RTF document
3. compress it using ZIP compression
4. In "Upload RTF" section of the module "XML knjige" (on this page) enter the document title and upload the ZIP file

The document will be put in queue for conversion (in the "Current tasks" list). More detailed document conversion status can be retrieved by placing the mouse pointer over the Status field of the document

After a successful conversion, the document will appear in the "Current books" list, where original RTF and created XML can be downloaded. XML is bundled together with images, XSL transformation file and a CSS stylesheered into a ZIP archive.

## Forum

Komentarij

▼ Eksperimentalni rad sustava pametnih kartica za studente prve nastavne godine Danko Bundalo (20.05.2006. u 10:25)

[ Odgovori ]

▼ Re: Eksperimentalni rad sustava pametnih kartica za studente prve nastavne godine PILIF (20.05.2006. u 10:34)

Di ce se podizat na stud. sluzbi??

[ Odgovori ]

▼ Re: Re: Eksperimentalni rad sustava pametnih kartica za studente prve nastavne godine ds40823 (20.05.2006. u 12:52)

Valjda na stuslu...bas me zanima kak ce to izgledati s tim smart karticama. Mislim da je ideja odlicna (malo fancy). Bas me zanima i koliko ce vremena trebati da kartica zamijeni indekse i ikvice u potpunosti. Sto ce onda biti s indeksima? Vracam ih natrag ili nesto drugo??? Sve u svemu super ideja. Mozda cemo jednog dana imati sustav koji ce traziti otisak prsta ili scan oka...to bi bilo ludo, ko u SF filmovima. 😊

[ Odgovori ]

▼ Re: Re: Re: Eksperimentalni rad sustava pametnih kartica za studente prve nastavne godine touche (20.05.2006. u 15:30)

da to bi bilo super. mozda cemo morat vadit krv na ulazu u fakultet za DNA test tako da bi stvarno znali tko ulazi. A ne da netko posudjuje svoje oko ili smart karticu uljecima s drugih fakulteta. I jos da dovedemo i rodbinu pa da se njih analizira. =)

[ Odgovori ]

▼ Re: Re: Re: Re: Eksperimentalni rad sustava pametnih kartica za studente prve nastavne godine bb119120194 (20.05.2006. u 20:32)

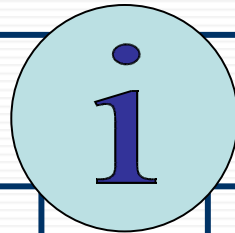
Ove je najbolja ideja za nastavu do sada. Neznam kako ce to jos raditi, ali mislim da bi bilo super, kada bi se iz smartcard jos koristio i otisak prsta za prijavljivanje na predavanje, jer ovako bi moglo biti puno onih kojima ce drugi "provlačiti" kartice. I neznam zašto se puno studenata bunji protiv toga. Govore kako je to zadiranje u privatnost. Ali to ce najviše pomoći nama.

[ Odgovori ]

▼ Eksperimentalni rad sustava pametnih kartica za studente prve nastavne godine Loxo (21.05.2006. u 12:53)

Poštovane kolegice i kolege..... polako nam odlazi ona čar studiranja!!

Nema više kombiniranja ispita i predavanja, nema vise slobode. U jednu ruku to je i dobro. Neki si ne znaju organizirati vrijeme pa ih bolonja pritiče. No ipak ljudi su slobodna bića i bolje bi bilo sa se uče u životu nositi se sa bogatstvom slobode!



## E-Learning

Sign on

What do you like to do:

- held course
- view students' scores
- work with students
- communicate with students
- ...

## Repository

REPOSITORY

▼ Documentation (3)

- User's manual - English language [1,65 MiB]  
A detailed guide for creating XML books in MS Word, based on the RasipBook template  
Published: Ivana Bosnić ( 30.05.2006. at 11:32 ).
- User's manual - Croatian language [1,36 MiB]  
A detailed guide for creating XML books in MS Word, based on the RasipBook template  
Published: Ivana Bosnić ( 26.05.2006. at 11:01 ).
- User's manual - English language (XML version) [780,9 KiB]  
An example of conversion from MS Word to XML format  
Published: Ivana Bosnić ( 30.05.2006. at 11:35 ).

▼ Templates (1)

- MS Word Document template [495 KiB]  
A template for creating XML books from MS Word application  
Published: Ivana Bosnić ( 26.05.2006. at 10:58 ).

[ Add: Folder File Link ]

# Power of Quilt CMS - Administration

## Permissions

Permissions Propagating the permissions

View of permissions for group of users on page: **Information in English**

Group	READ	WRITE	AUTHOR	ADMIN	
djelatnici	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Remove
studenti	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Remove
svi	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Remove

Save Delete

Group: admin\_abp READ Add permission

---

View of permissions for users on page: **Information in English**

User	READ	WRITE	AUTHOR	ADMIN	
dkalpic (Damir Kalpić)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remove
mkos (Mladen Kos)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remove

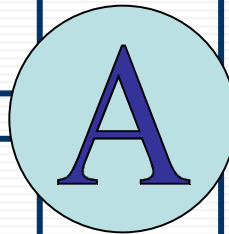
Save Delete

Login:  READ Add permission

## Navigation

Promjena redosjeda ispisa podataka

- ▶ Naslovnica
- ▶ FER-u
- ▶ Ustroj ustanove
  - ▶ Uprava
  - ▶ Zavodi
  - ▶ Službe
- ▶ Znanstveni i stručni rad
  - ▶ Projekti
  - ▶ Konferencije
  - ▶ Predavanja
  - ▶ Nove knjige i skripta
  - ▶ Časopisi
- ▶ Prediplomski studij
  - ▶ Upis 2005/2006
  - ▶ Upisi na više godine
  - ▶ Studij FER-1
  - ▶ Studij FER-2
  - ▶ Obrane radova
- ▶ Poslijediplomski studij
- ▶ Članovi i učestvovanje
- ▶ Život na FER-u



## User administration

User administration: Display all users

Code	Login	First name	Last name I	Type	Act.
0036420432	iz42432	Marija	Žagar	S	A
MŽ007	mzagar	Mario		D	A
MŽ008	mzagar1	Martin		D	A
0036374880	mz37488	Martin		S	I

- Edit
- Permissions
- Archive
- Login as

## Administration

Page: Published Permissions Settings Modules New page Navigation Administration Public view Logout (Vlatka Paunović)

**FER** Fakultet elektrotehnike i računarstva

Welcome, Vlatka Paunović! [Logout](#)

English Hrvatski CMS test page

**FER INFORMATION IN ENGLISH**

University of Zagreb Faculty of Electrical Engineering and Computing  
 Unska 3, 10000 Zagreb, CROATIA  
 tel. +385 1 6129999  
 fax. +385 1 6170007  
 e-mail: fer@fer.hr

**Dean's Office**  
 tel: +385 1 6129642  
 Dean: prof. dr.sc. Mladen Kos  
 Vice-deans: prof. dr. sc. Vedran Momar, prof. dr. sc. Tomislav Tomiša, prof. dr. sc. Željko Štih  
 Dean's Secretary: Marija Rumac

GENERAL OUTLINE

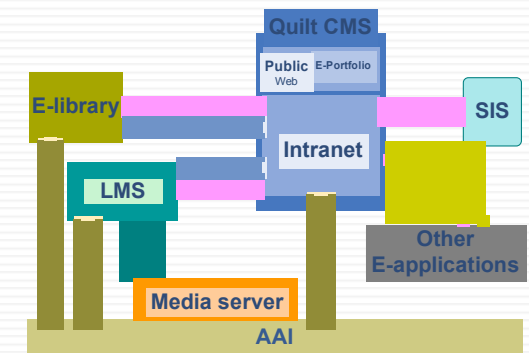
SEARCH: res: 25 Search

REPOSITORY: General folder (7)  
 Progress Report 2004 & 2005 [1,74 MiB] Published: kzimmer (14.11.2005. at 14:55)  
 Postgraduate study at FER 2004 [1,45 MiB] Published: kzimmer (02.10.2004. at 22:46)  
 Postgraduate Study [876 KiB] Published: Damir Kalpić (18.09.2002. at 13:10)  
 List of courses [19,7 KiB] Published: kzimmer (15.11.2005. at 16:47)

# Student Information System (SIS)

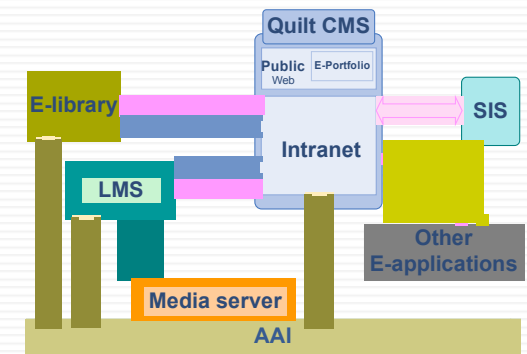
- “ISVU” - Information System of Higher Education Institutions – provided by SRCE
- Provides E-Campus with:
  - › Course information
  - › List of teaching staff
  - › List of students
  - › Enrolment details
- Established format:
  - › XML data

<> jezik
<> akGodina
<> visokoUciste
<> sifVU
<> nazOrgJed
<> nazivSveucilista
<> adresa
<> telefon
<> oznDrzava
<> postOzn
<> nazMjesto
<> ulicaBr
<> emailOrgJed
<> urlOrgJed
<> studenti
<> student [*]
<> jmbag
<> osoba
<> ime
<> prezime
<> spol
<> datumRodjenja
<> upisanaGodina
<> nasGodUpisana
<> upisaniSmjerovi
<> smjer [*]
<> sifSmjer
<> upisaniPredmeti
<> sifPred [*]

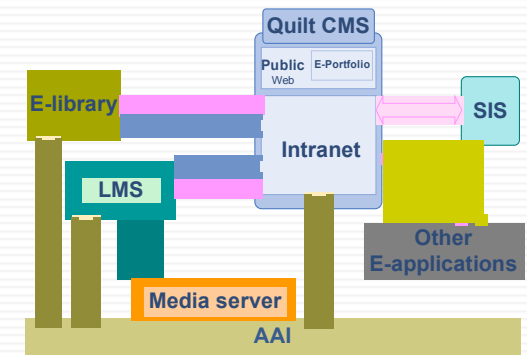
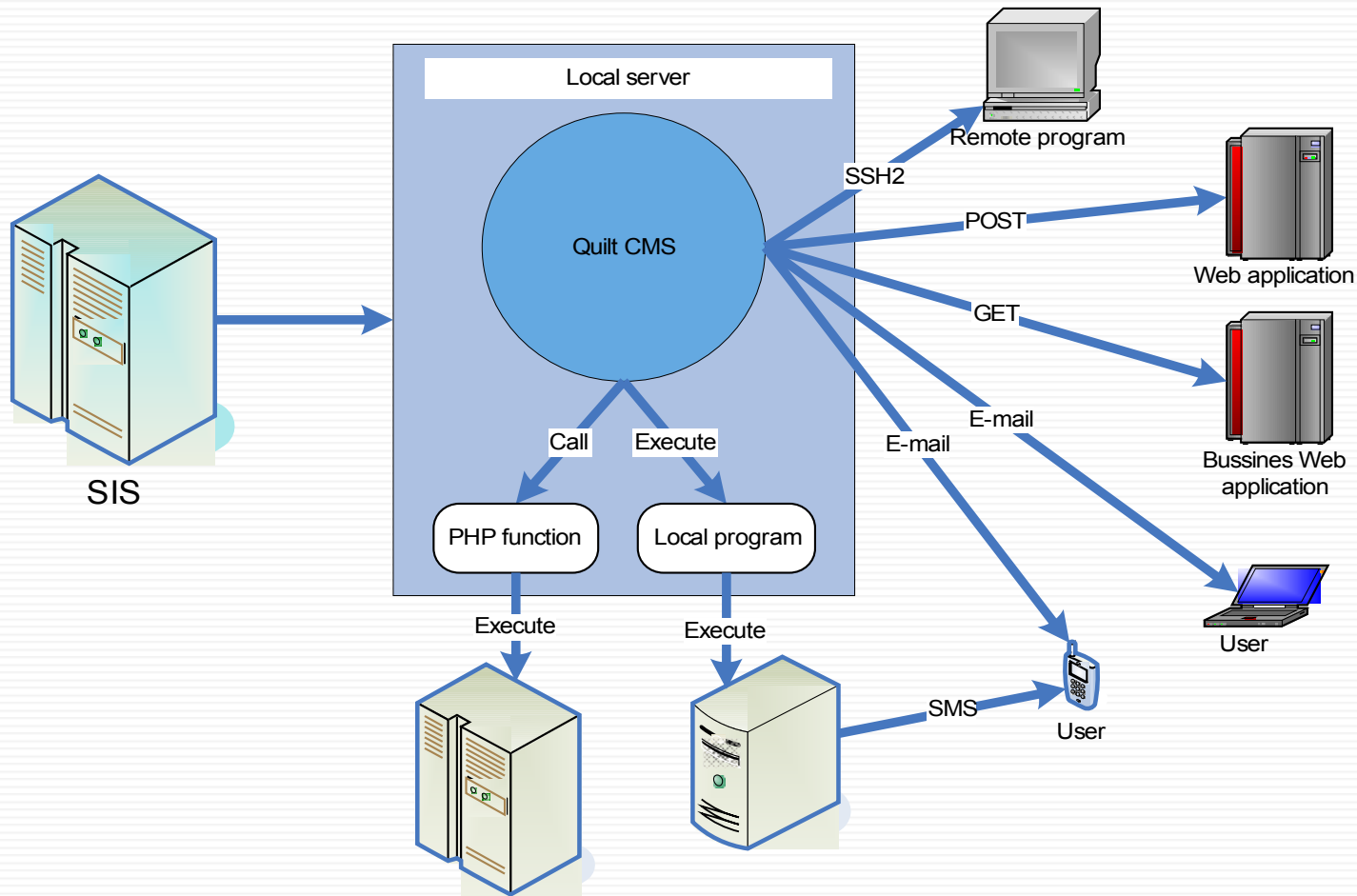


# Automated SIS Synchronization

- CMS compares new data and:
  - › Stores it into local database
  - › Tracks changes
  - › Notifies other systems

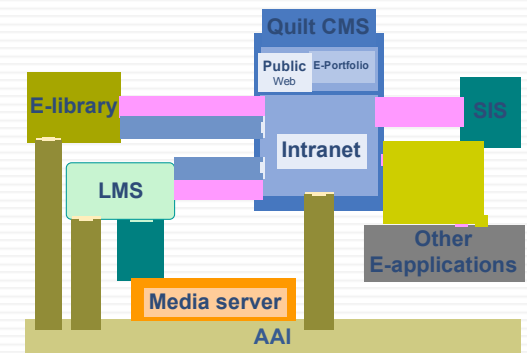


# SIS → CMS → Other Systems Notification



# Learning Management Systems

- LMS provides learning environment
- We are currently supporting integration with three advanced Learning management systems:
  - › Moodle
  - › WebCT
  - › AHyCo
- Teaching staff can select most appropriate tool for their teaching style



# Available Functionalities of LMS's

FER sveučilište u zagrebu fakultet elektrotehnike i računarstva

You are logged in as Admin User (Logout)

FER-Moodle » Administration » Configuration » Modules

### Modules

Activity module	Activities	Version	Hide/Show	Delete	Settings
Assignment	1	2005060100		Delete	Settings
Chat	0	2005031000		Delete	Settings
Choice	0	2005041500		Delete	
Forum	32	2005042600			Settings
Glossary	0	2005041900		Delete	Settings
Hot Potatoes Quiz	0	2005031418		Delete	
Journal	0	2005041100		Delete	
Label	0	2004111200		Delete	
Lesson	0	2005060900		Delete	
Quiz	79	2005060300		Delete	Settings
Resource	132	2005041100		Delete	Settings
SCORM	0	2005052200		Delete	Settings
Survey	5	2005031600		Delete	
Wiki	0	2005031000		Delete	
Workshop	0	2005041200		Delete	

myWebCT Resume Course Course Map Check Browser Log Out Help

Otvoreno računarstvo

Control Panel Designer Options

Course Menu Expanded Control Panel

Designer Links

- Add Page or Tool
- Edit Page or Tool
- Manage Files
- Manage Course
- Course Settings

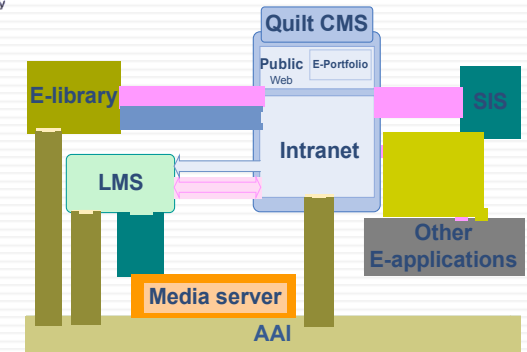
Homepage Početna stranica Pošta Cvrljanje (Chat) Svijet Jave Opis predmeta Predavanja Kalendar Rasprave Moji osvrti Dodatni materijali Samoprovjere znanja Komunikacija Tehnička podrška H - Hidden

Expanded Control Panel Basic Control Panel

Add Page or Tool	Edit Page or Tool	Manage Files	Manage Course	Course Settings
Assignments	Update the student view of the Content Modules in your course.	Upload	Manage Students	Instructor's name
Calendar		Create	Track Students	Language
CD-ROM		Edit	Manage Teaching	Numeric data format
Chat		Copy	Assistants	Time display format
Compile		Move	Track Pages	Course Menu display
Content Module	Homepage	Rename	Backup Course	Designer start page
Discussions	Assignments	Delete	Reset Course	Designer links
Glossary	Calendar	Zip	Share Access	Edit Course Menu
Image Database	Chat	Unzip	Import Content	Edit welcome page
Index	Content Modules	Download	Export Content	Customize course colors
Language Selector	Discussions	Convert Charset		Modify/Add background image
Mail	Mail			Modify icon style
My Grades	Organizer Pages			Replace individual icon
My Progress	Quizzes/Surveys			Customize course news
Organizer Page	Single Pages			
Quizzes/Surveys	Student Homepages			
Resume Course	Whiteboard			
Search				
Self Test				
Single Page				
Student Homepages				
Student Presentations				
Student Tips				
Syllabus				
URL				
Whiteboard				

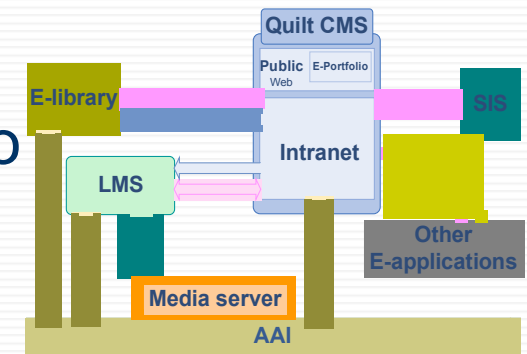


➤ Since May 2005:  
 FERWeb team = developers  
 Joint effort with developers



# CMS – LMS Integration

- Implemented standard:
  - › IMS (<http://www.imsproject.org/>)
  - › XML based
- Direct login into course from Quilt CMS
- Simple, yet powerful administration from CMS:
  - › Import of student-related data
  - › Administration of teaching staff
  - › Automated creation of new courses
- Data synchronization
  - › Quiz results and grades retrieval from LMS to CMS





# Comparing Administration Tools

## WEBCT: OTVORENO RAČUNARSTVO

Sign on | Students | Teachers | Help | Contact | My courses

What do you like to do:

- held course
- view students' scores
- work with students
- communicate with students
- ...

Start

- create new course materials
- change existing course materials

Start



## MOODLE: OTVORENO RAČUNARSTVO

Sign on | Students | Teachers | Help | Contact | My courses

What do you like to do:

- held course
- view students' scores
- work with students
- communicate with students
- ...

Start

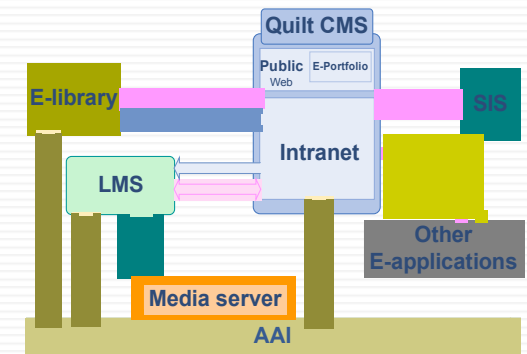
- create new course materials
- change existing course materials

Start



## E-standard:

- IMS API
- WebCT API



# Administration of LMS

[Login](#)   [Students](#)   [Teaching staff](#)   [Help](#)   [Contact](#)   [My courses](#)

Sign on   Students   Teachers   Help   Contact   My courses

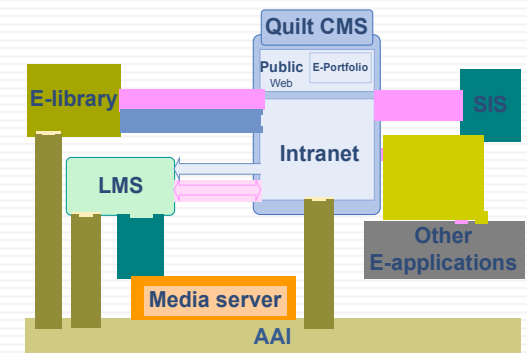
**Choose the course:**

Course	LMS	www.fer.hr
Compilers	Admin	Course web
Databases	Admin	Course web
Open computing	Admin	Course web

Send Question

**Note:** You don't need to enter your personal or course information since they will be automatically attached to your question.

0036400857	Peter	Night	pn84324.fer
------------	-------	-------	-------------



# Providing Support

Subject: [WebCT - FER] Open computing

Course : Open computing  
Title : B.Sc.  
Person : Kristijan Zimmer  
Email : kristijan.zimmer@fer.hr  
Status : Assistant (FER) / Assistant (WebCT)  
Department : Support centre  
Phone : 160

## Question

-----

How can I backup my course?

## INFO

====

## Quilt

-----

Login : kzimmer  
Person : Kristijan Zimmer  
Name : Kristijan Zimmer  
Course : http://www.fer.hr/course/347  
Primary : Mario Zagar

## WebCT

-----

Login : kzimmer.fer  
WebCT ID : FER\_KZ01  
Course ID : FER\_ZRS12A2  
Term : Summer (2 - 1478980832)

Received e-mail

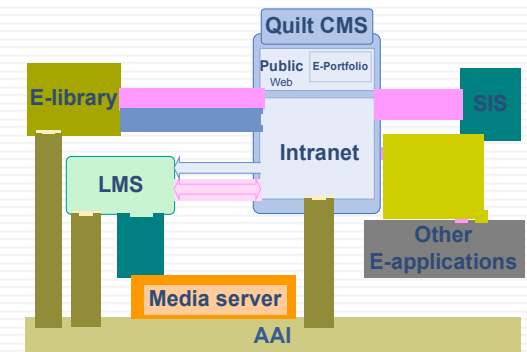
Sign on Students Teachers Help **Contact** My courses

If you have any problems or questions with LMS please fill in this form and press "Send question". Your question will be sent to technical support. You will receive answer by e-mail at:  
**john.higgins@fer.hr**

How can I backup my course?

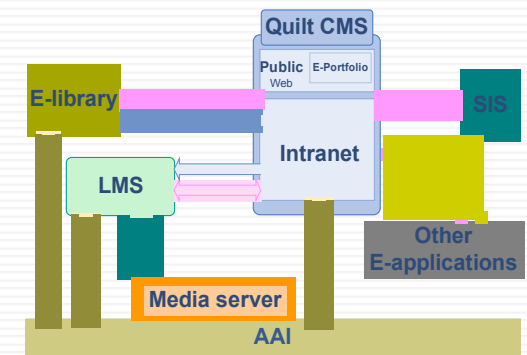
Send Question

**Note:** You don't need to enter your personal or course information since they will be automatically attached to your question.



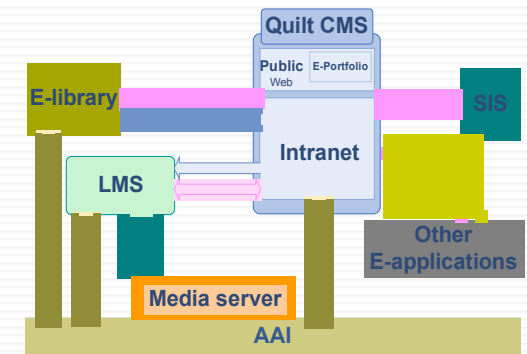
# A Day in Life of CMS – LMS Integration

- How to open a LMS user account
  - › Check if user already exists
  - › Check type of user
  - › Choose correct username (AAI)



# Direct Login from CMS to LMS

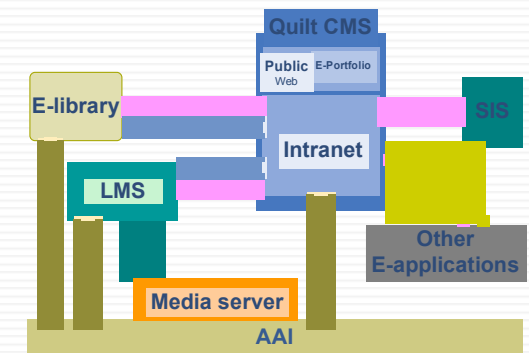
- Never sends password
  - › Checks digital signature instead
    - › MD5
  - › Digitally signs:
    - › User login
    - › Course ID
    - › Current time
    - › Additional information
  - › NTP synchronization



## ➤ EPrints

- › School of Electronics and Computer Science, University of Southampton, UK
- › Open Source solution

The screenshot shows the FER e-Library website. The header includes the FER logo (Fakultet elektrotehnike i računarstva) and the text 'e-Library'. Navigation links for 'Home', 'FER', and 'Help' are present. A left sidebar contains menu items: 'Browse', 'Search', 'Language', 'User home', 'Information', and 'Hrvatski'. The main content area features a 'Welcome to e-Library' message, a search bar with 'Search items:' and 'Search full text:' fields, and a 'Search' button. Below the search bar are sections for 'Browse', 'Latest Additions', 'Simple Search', 'Advanced Search', 'Registered Users Area', and 'Register'. At the bottom, there is a footer with the FER logo and contact information: 'Contact: root@localhost'.



# E-portfolio

- Implemented as Quilt CMS module
- Automatically generated upon user account creation
- User chooses what to present:
  - › Contact information
  - › Curriculum vitae
  - › Published papers and books
  - › Grades
    - › Students
  - › Courses
    - › Students
    - › Teaching staff
  - › Awards
  - › Membership

Mladen Kos

Diplomirao:	1972
Magistrirao:	1976
Doktorirao:	1983
Soba:	C08-17
Telefon direktni:	6129-863 6129-836 6129-794
Telefon kućni:	363 336 294
E-mail:	E-mail
Zavod/Sluzba:	Zavod za telekomunikacije
Adresa:	Unska 3, 10000 Zagreb, Hrvatska



Skraćeni prikaz

**Životopis**

Rođen je 1949. godine u Varaždinu gdje je završio osnovnu školu i gimnaziju. Diplomirao je 1972., magistrirao 1976., a doktorirao 1983. sve na Elektrotehničkom fakultetu u Zagrebu. Redoviti je profesor na Zavodu za telekomunikacije FER-a. Godine 1995. utemeljio je Laboratorij za napredne telekomunikacijske studije (LATS). Dobitnik je srebrne plakete "Josip Lončar" (1976). Član je strukovnih društava IEEE i INFORMS, te član Programskih odbora brojnih domaćih i inozemnih konferencija.

**Nastava**

- Teorija informacija
- Telekomunikacijske mreže
- Teorija prometa
- Algoritmi i metode optimizacije / Optimizacija u telekomunikacijama
- Lokalne i pristupne mreže / Širokopolasne mreže

**Objavljeni radovi u Hrvatskoj znanstvenoj bibliografiji (CROSBİ)**

Napomena: Ove radove održava Knjižnica Instituta Ruđer Bošković koja vodi projekt Hrvatske znanstvene bibliografije CROSBİ. Ovim linkom možete vidjeti sve podatke o radovima koje su autori unijeli u bazu podataka.

[Prikaži radove](#)

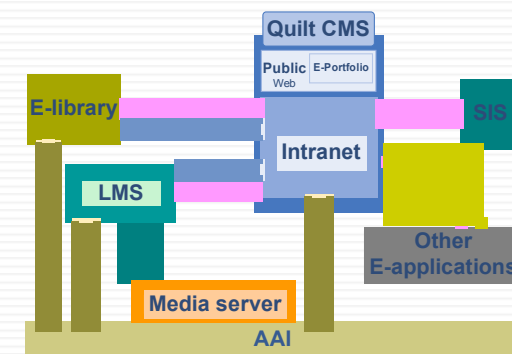
Za sve izmjene možete se obratiti na help@bib.irb.hr, a na istu adresu možete uputiti i sva vaša pitanja i sugestije vezana uz CROSBİ.

**Stručni interesi**

- Planiranje i optimizacija telekomunikacijske mreže
- Teorija prometa
- Dinamika mreža i protokola

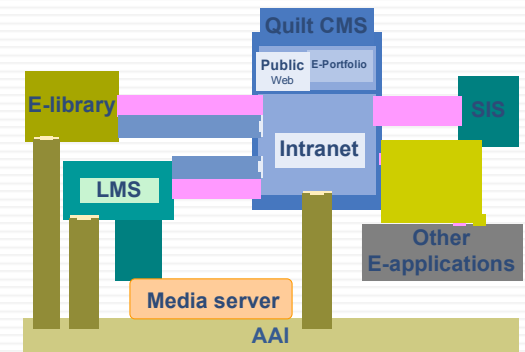
**Akademске teme:**

Skraćeni prikaz



# Media Server

- Stores and delivers all streaming video and audio files relevant to course
- W3C SMIL (Synchronized multimedia integration language)
  - › Audio
  - › Video
  - › Interactive elements (Flash)
  - › Presentation slides
  - › Subtitles
  - › Notes
  - › Important links





# SMIL Example

\* Rabbit2000  
\* Tiny InterNet Interfaces  
\* Moore's Law

PC<=>Pico (HW for internal FLASH and EEPROM programming)

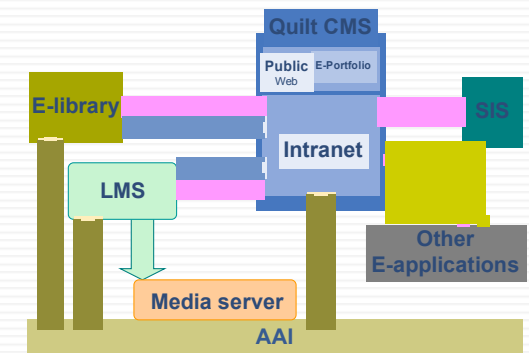
JDMv2.2 PIC programmer

all of the rest of it is just interface, so the real computer is very, very small.

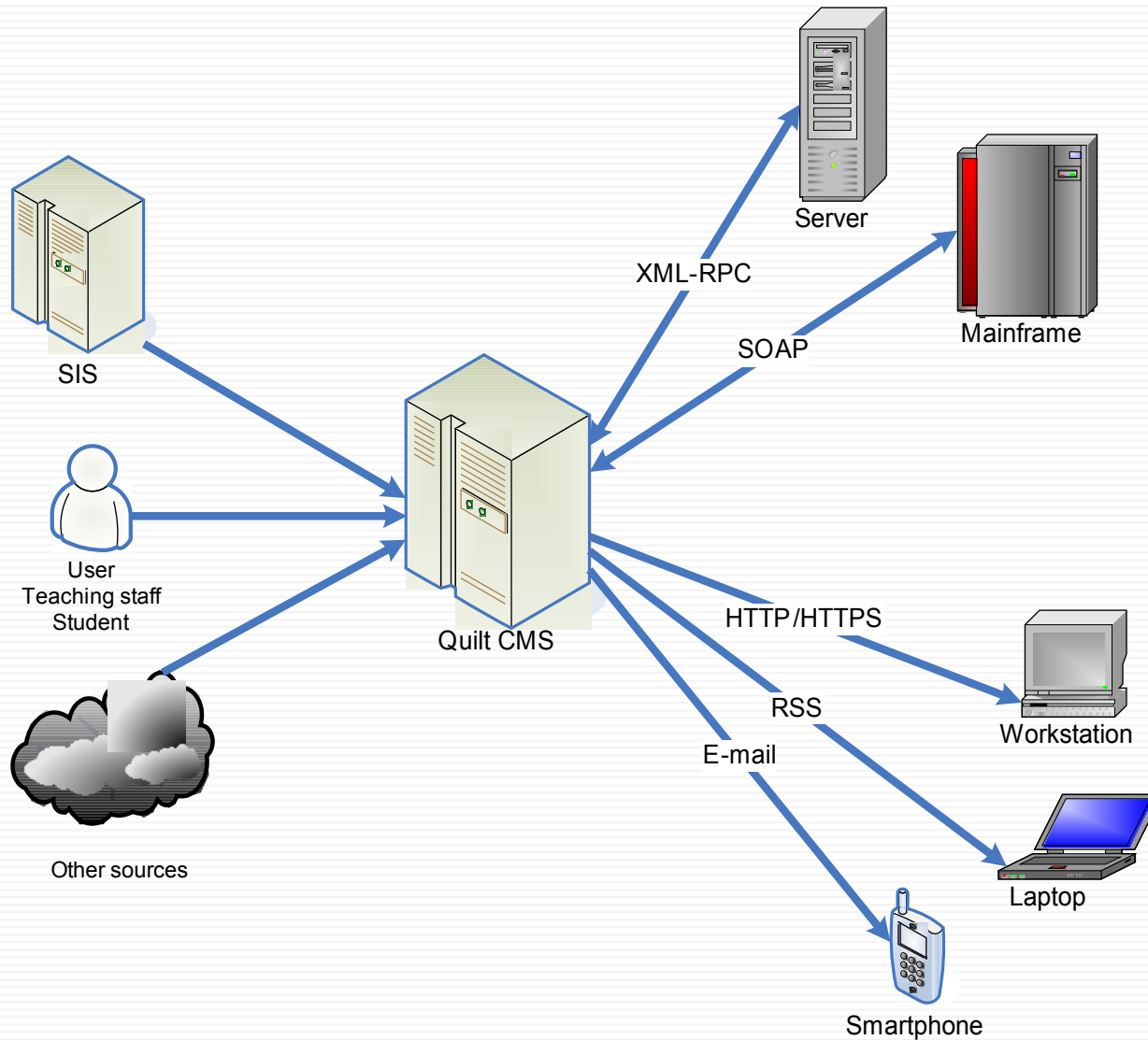
Now Playing DSD / OPIPI ( Introduction ) - Mario Zagar (41 Kbps) 18:52 / 45:56

Real Guide Music & My Library Music Store

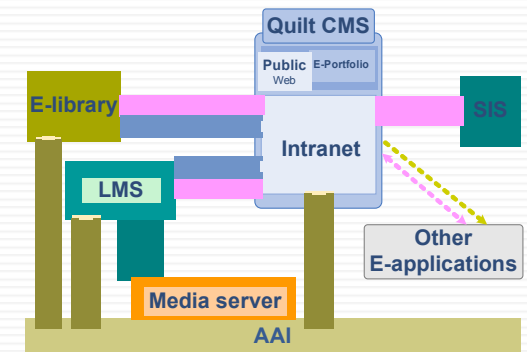
➤ Example of course presented using SMIL



# Sharing the Data Securely

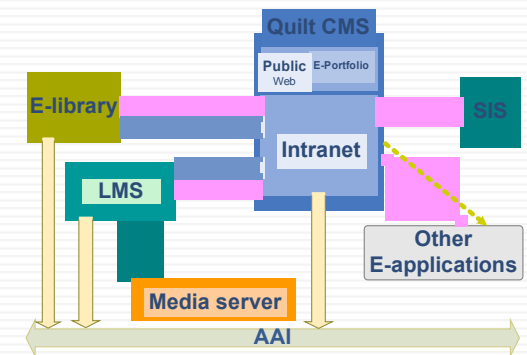


➤ E-campus is not an isolated place



# Entering the World of E-Campus

- E-campus enables users to use the same login and password on all integrated systems
  - Once authenticated by the Quilt CMS, the user doesn't need to re-authenticate on other systems
  - Quilt CMS enables other systems to use AAI infrastructure:
    - › SOAP
    - › XML-RPC
  - Result:
    - › For 3500 students and 300+ teaching staff...
- Only 1.5 people in technical support!



# Input From You is More Than Welcome...

- Does this E-Campus implementation correspond to your e-learning strategy on a technical level?
- What parts of the E-Campus are missing to meet your needs?
- Are there standards that we don't implement, that we should?
- What do further research should we do in this area?

Moodle LMS – from one man's  
project to global killer

# LMS – Moodle – Community in numbers

- **100.000** – total number of registered administrators
- Interface available in **70** languages
  - › Includes:
    - › Croatian
    - › German
    - › English
    - › Franch
    - › Chinese
    - › Japanese, etc.
- Used in more than **150** countries in **5** continents
  - › One of the instations is in Vatican
- More than **15** instalations in Croatia



# LMS – Moodle – Usage in numbers

- Registered instalations in the World: **11.624**
- Registered courses: **361.288**
- Registered students: **3.834.736**
- Registered teachers: **678.341**
- Registered participants: **6.074.099**
- Forum publishes: **4.183.351**
- Separate contents: **2.184.107**
- Questions in test modules: **2.369.119**
  
- The biggest number of courses on one institutions:
  - › **6.187** courses, **54.955** users (New Zeland)

Source: <http://www.moodle.org/stats/>



# Choosing course type – course settings

Category: CUC 2005 Workshop ?

Full name: CUC10 ?

Short name: CUC10 ?

ID number: ?

Summary: Vaše informacije i objašnjenja o detaljima predmeta ?

Format: Topics format ?

Course start date: 22 November 2005 ?

Enrolment duration: Unlimited ?

Number of weeks/topics: 10 ?

Group mode: No groups ? Force: No ?

Availability: This course is available to students ?

Enrolment key: ?

Guest access: Do not allow guests in ?

Hidden sections: Hidden sections are shown in collapsed form ?

News items to show: 5 news items ?

- Mentor defines course settings
- Multilingual

## Course settings

Show grades: Yes ?

Show activity reports: No ?

Maximum upload size: 2MB ?

Your word for Teacher: nastavnik (eg Teacher, Tutor, Facilitator etc)

Your word for Teachers: nastavnici (eg Teachers, Tutors, Facilitators etc)

Your word for Student: student (eg Student, Participant etc)

Your word for Students: studenti (eg Students, Participants etc)

Force language: Do not force

Is this a meta course?: No

Save changes



# Content entry

- **Types of content**
  - › **Plain text**
  - › **HTML content (created by WYSIWYG editor)**
  - › **Flash**
  - › **Audio / Video**
  - › **Link**
  - › **IMS/SCORM content**
  
- **Colaborative content creation**
  - › **Wiki**
  - › **“Database”**

## ➤ Different types of questions

- › Multiple choice
  - › One correct answer
  - › More correct answers
- › Finish the sentence
  - › Student should enter the word or phrase
- › True / Lie (Yes / No)
  - › Student should know difference between the two
- › Finding pairs
  - › Connecting words from the first column, with the one from the second
- › Calculated (numerical) questions
  - › A number should be given as number, too.
- › Short essay
  - › Student should write a smaller piece of text.



# Quiz statistics

Informacija Izveštaji Pregled (preview) Uredi test

Pregled Regrade attempts Item analysis

Display options:  Show students with no attempts  Show mark details [Kreni](#)

Ime: Sve ABCČČDĎEFGHIJKLMNOPQRSŠTUVWXYZŽ  
Prezime: Sve ABCČČDĎEFGHIJKLMNOPQRSŠTUVWXYZŽ

Stranica: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 (Sljedeći)

	Ime / Prezime	Started on	Utrošeno vrijeme	Ocjena/10
<input type="checkbox"/>	Sve Ivančić	23 March 2006, 08:34 AM	5 min 2 sek	10
<input type="checkbox"/>	Sve Ivančić	23 March 2006, 08:34 AM	4 min 30 sek	7.14
<input type="checkbox"/>	Sve Ivančić	29 March 2006, 04:14 PM	6 min 46 sek	7.14
<input type="checkbox"/>	Katarina Brčić	23 March 2006, 08:34 AM	7 min 39 sek	5.71
<input type="checkbox"/>	Sve Ivančić	22 March 2006, 06:11 PM	9 min 44 sek	2.86
<input type="checkbox"/>	Sve Ivančić	22 March 2006, 06:29 PM	9 min 53 sek	7.14
<input type="checkbox"/>	Sve Ivančić	23 March 2006, 08:33 AM	4 min 47 sek	8.57
<input type="checkbox"/>	Sve Ivančić	22 March 2006, 04:38 PM	9 min 48 sek	8.57
<input type="checkbox"/>	Sve Ivančić	23 March 2006, 08:34 AM	7 min 1 sek	4.29
<input type="checkbox"/>	Sve Ivančić	23 March 2006, 08:20 AM	9 min 21 sek	10

Combined quiz results

### Review of Attempt 1

Katarina Brčić

Started on: Thursday, 23 March 2006, 08:34 AM  
Završen: Thursday, 23 March 2006, 08:41 AM  
Time taken: 7 min 39 sek  
Raw score: 4/7 (57 %)  
Ocjena: 5.71 od maksimalno 10

**1 (3876)** Visina stabla odlucivanja je jednaka:  
Marks: 1

Odgovor:  a. najmanjoj visini grane u stablu  
 b. najvećoj visini grane u stablu  
 c. broju odluka (cvorova) u stablu  
 d. najvećoj dužini grane u stablu

Netočno  
Marks for this submission: 0/1.

**2 (3770)** Komunikacijskim kanalom prenosi se 100 poruka kodiranih Hammingovim kodom. Ukoliko se usljed smetnji invertira 10 bitova, minimalni broj pogresno primljenih poruka na odredistu je:  
Marks: 1

Odgovor:  a. 1  
 b. 99  
 c. 100  
 d. 0

Točno  
Marks for this submission: 1/1.

One student's result on a quiz

# Quiz from a student perspective

1 (3839)

Marks: 1

Komunikacijskim kanalom potrebno je poslati 10 poruka, svaka duljine 4 bita. Ukoliko se prije slanja na kanal, poruke kodiraju Hammingovim kodom, koliko se bitova prenosi komunikacijskim kanalom.

- Odgovor:  a. 40 bita  
 b. 60 bita  
 c. 70 bita  
 d. 50 bita

2 (3861)

Marks: 1

Kroz kanal kapaciteta  $C$  se prenose poruke prosjecne duljine  $B$  bita. Prosjecno vrijeme zadržavanja u kanalu je:

- Odgovor:  a. neovisno o duljini poruke  $B$   
 b. proporcionalno duljini poruke  $B$   
 c. obrnuto proporcionalno duljini poruke  $B$

3 (3879)

Marks: 1

Ukoliko je za donosenje odluke potrebno  $D_v$  vremena, a za grananje  $D_e$  vremena, koliko je ukupno vrijeme potrebno za donosenje konacne odluke za koju je visina grane 4?

- Odgovor:  a.  $D=2*D_v + 3*D_e$   
 b.  $D=3*D_v + 2*D_e$   
 c.  $D=3*D_v + 4*D_e$   
 d.  $D=4*D_v + 3*D_e$

4 (3867)

Marks: 1

Komunikacijskim kanalom salju se tri vrste poruka ( $p_1$ ,  $p_2$  i  $p_3$ ). Vjerojatnost pojavljivanja poruke  $p_1$  je 80%, poruke  $p_2$  je 10%, a poruke  $p_3$  je 10%. Ukoliko se primieniue Huffmanova metoda kodiranja, koji su ispravni kodovi za poruke  $p_1$ ,  $p_2$  i  $p_3$ .

- Odgovor:  a. Optimalnih kodova  
 b. Ciklickih kodova  
 c. Zastitih kodova  
 d. Prirodnih binarnih kodova

Save without submitting

Predajte sve i završite

## Quiz example

# Quiz – question analysis

Tablica analize čestica (pitanja) ?									
Stranica: 1 2 3 4 5 (Sljedeći)									
Q#	Tekst pitanja	Tekst odgovora	partial credit	R. Counts	R.%	% Correct Facility	SD	Diskr. indeks	Diskr. koef.
(3757)	<p>Poruke se kodiraju Shannon-Fanovom metodom. Tako dobiveni kod spada u klasu: :</p> <p>Poruke se kodiraju Shannon-Fanovom metodom. Tako dobiveni kod spada u klasu:</p>	Optimalnih kodova	(1.00)	20/21	(95%)	62 %	0.498	0.57	0.04
		Zastitih kodova	(0.00)	1/21	(5%)				
		Ciklickih kodova	(0.00)	0/21	(0%)				
		Prirodnih binarnih kodova	(0.00)	0/21	(0%)				
(3861)	<p>Kroz kanal kapaciteta C se prenose poruke prosjecne duljine B bita. Prosjecno vrijeme zadržavanja u kanalu je: :</p> <p>Kroz kanal kapaciteta C se prenose poruke prosjecne duljine B bita. Prosjecno vrijeme zadržavanja u kanalu je:</p>	obrnuto proporcionalno duljini poruke B	(0.00)	2/17	(12%)	65 %	0.493	0.63	0.17
		proporcionalno duljini poruke B	(1.00)	13/17	(76%)				
		neovisno o duljini poruke B	(0.00)	2/17	(12%)				
	Pretpostavite BER 0,01. Ukoliko se komunikacijskim kanalom prenosi 1000	Nije moguće egzaktno odgovoriti							

# Other ways for assesment

- Besides automated quizzes, the following activities are monitored:
  - › Taking part in Chat
  - › Taking part in Fora
  - › Viewing of content pages
  - › Tasks fullfilment
    - › Assignments
      - › Upload of one file
    - › Workshop
      - › Grade consists of potentialy many factors
      - › Upload of several files by students

# Communication

## ➤ Chat

- › Synchronous
- › All chat sessions can be logged
- › Unlimited number of chatrooms

## ➤ Forum

- › Asynchronous
- › All communication can be logged
- › Organized by topics – threads



# Chat

Adding a new Chat to topic 3 ?

**Name of this chat room:**

**Introduction text:**

[Write carefully ?](#)  
[Ask good questions ?](#)  
[Use emoticons ?](#)

**Next chat time:** 9 May 2006 - 17 35

**Repeat sessions:** Don't publish any chat times

**Save past sessions:** 30 days

**Everyone can view past sessions:** No

**Group mode:** No groups ?

**Visible to studenti:** Show

Chat settings



Chat example

## General forums

Forum	Description	Discussions	Subscribed
<a href="#">Forum novosti</a>	Opće novosti i najave	1	Yes
<a href="#">Forum za nastavno osoblje</a>	Forum rezervisan za nastavno osoblje	0	No

## Forum groups

### Your new discussion topic

**Subject:**

**Message:**

[Read carefully](#) ⓘ  
[Write carefully](#) ⓘ  
[Ask good questions](#) ⓘ  
[Use emoticons](#) 😊

**Formatting:** Moodle auto-format ⓘ

**Subscription:** Everyone is subscribed to this forum ⓘ

**Attachment:**   ⓘ Max size: 2MB

## New post

[Display replies in nested form](#) ▼

[Display replies flat, with oldest first](#)

[Display replies flat, with newest first](#)

[Display replies in threaded form](#)

[Display replies in nested form](#)

**Problem**  
by [Admin User](#) - Tuesday, 9 May 2006, 05:55 PM

Imam problem s otvaranjem datoteke iz prvog poglavlja. Da li može neko pojašnjenje?

[Edit](#) | [Delete](#) | [Reply](#)

**Re: Problem**  
by [Admin User](#) - Tuesday, 9 May 2006, 05:55 PM

Za odgovor na vaše pitanje najbolje je kontaktirati internu tehničku podršku.

[Show parent](#) | [Edit](#) | [Split](#) | [Delete](#) | [Reply](#)

## Threads

# Polls

**Choice name:**

**Choice text:**

[Write carefully](#) ?  
[Ask good questions](#) ?  
[Use emoticons](#) ☺

Formatting: Moodle auto-format

**Choice 1:**  ? **Limit:**

**Choice 2:**  ? **Limit:**

**Choice 3:**  ? **Limit:**

**Choice 4:**  ? **Limit:**

**Choice 5:**  ? **Limit:**

**Choice 6:**  ? **Limit:**

**Choice 7:**  ? **Limit:**

**Choice 8:**  ? **Limit:**

**Choice 9:**  ? **Limit:**

**Choice 10:**  ? **Limit:**

**Limit the number of responses allowed:** ?  **Enable**

**Restrict answering to this time period:**  ?

**Open:** 9 May 2006 19:20

**Until:** 9 May 2006 19:20

**Display Mode:** Display horizontally

**Publish results:** Do not publish results to students

**Privacy of results:** Publish anonymous results, do not show student names

**Allow choice to be updated:** No

**Show column for unanswered:** No

**Group mode:** No groups ?

**Visible to student:** Show

# Teaching survey

Adding a new Survey to topic 4 ?

Survey name:

Survey type: COLLES (Preferred and Actual) ?

Group mode: No groups ?

Visible to student: Show

## Survey setting

Name: New product

Introduction text:   
 Write carefully ?  
 How to write text ?  
 Use emoticons ?

Each one of the 24 statements below asks you to compare your <b>preferred</b> (ideal) and <b>actual</b> experience in this unit.

There are no 'right' or 'wrong' answers; we are interested only in your opinion. Please be assured that your responses will be treated with a high degree of confidentiality, and will not affect your assessment.

## Welcoming text

Relevance		Almost Never	Seldom	Sometimes	Often	Almost Always
1	I prefer that I found that my learning focuses on issues that interest me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
2	I prefer that I found that what I learn is important for my professional practice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
3	I prefer that I found that I learn how to improve my professional practice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
4	I prefer that I found that what I learn connects well with my professional practice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Reflective Thinking		Almost Never	Seldom	Sometimes	Often	Almost Always
5	I prefer that I found that I think critically about how I learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
6	I prefer that I found that I think critically about my own ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
7	I prefer that I found that I think critically about other students' ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>


Search   Search full text


[Browse by alphabet](#) [Browse by category](#) [Browse by date](#) [Browse by Author](#)


**All Categories** All Categories ▾


Page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) (Next)  
[ALL](#)

**COMPUTING TERMS**

 **Ajax**  
by [Helen Foster](#) - Saturday, 7 January 2006, 06:27 AM  
An abbreviation for "Asynchronous JavaScript and XML" - technologies for creating interactive web applications.

 **applet**  
by [Martin Dougiamas](#) - Wednesday, 22 October 2003, 10:28 PM  
Applets are small programs written in Java and embedded within web pages. Most recent browsers can run these small programs if you have Java installed on your computer.

 **Blackboard**  
by [Jeremy W](#) - Friday, 13 January 2006, 04:24 PM  
Probably the largest commercial competitor to Moodle, Blackboard recently purchased WebCT (10/21/05). Unlike Moodle, Blackboard is basically a commercial, closed source VLE.

 **Breadcrumb**  
by [Martin Dougiamas](#) - Saturday, 21 May 2005, 10:35 PM  
Breadcrumbs are what Hansel and Gretel used the famous fairy tale to remember the way back to where they came from.  
  
Moodle DOES NOT use breadcrumbs, as this is what your browser is for and why it has a back button/menu.






























Directly linked to content

# Other available modules

➤ Currently **25** officialy maintained modules

- › Appointments
- › Book
- › Flash
- › Scheduler
- › ...

➤ Large number of additional modules

Modules						
Activity module	Activities	Version	Hide/Show	Delete	Settings	
 Assignment	24	2005060100		Delete	Settings	
 Chat	1	2005031000		Delete	Settings	
 Choice	1	2005041500		Delete		
 Forum	133	2005042600			Settings	
 Glossary	0	2005041900		Delete	Settings	
 Hot Potatoes Quiz	0	2005031418		Delete		
 Journal	1	2005041100		Delete		
 Label	1	2004111200		Delete		
 Lesson	1	2005060900		Delete		
 Quiz	168	2005060300		Delete	Settings	
 Resource	191	2005041100		Delete	Settings	
 SCORM	10	2005052200		Delete	Settings	
 Survey	7	2005031600		Delete		
 Wiki	2	2005031000		Delete		
 Workshop	0	2005041200		Delete		

# Student statistics

Vidi ocjene | Podesi postavke | Podesi kategorije | Podesi težinu | Set Grade Letters | Grade Exceptions

Download u MS Excel formatu | Download u tekstualnom formatu

**uncategorised Ocjene**

Student Sortiraj po prezimenu Sortiraj po imenu	IM - blic 1		IM - blic 2		IM - Blic 3		Ukupno 30	Statistika Postotak	Student Sortiraj po prezimenu Sortiraj po imenu
	10	Raw %	10	Raw %	10	Raw %			
	-	0%	8.57	85.7%	4.29	42.9%	12.86	42.87%	
	7.14	71.4%	2.86	28.6%	1.43	14.3%	11.43	38.1%	
	5.71	57.1%	8.57	85.7%	4.29	42.9%	18.57	61.9%	
	7.14	71.4%	10	100%	7.14	71.4%	24.28	80.93%	
	7.14	71.4%	5.71	57.1%	7.14	71.4%	19.99	66.63%	
	8.57	85.7%	7.14	71.4%	2.86	28.6%	18.57	61.9%	
	10	100%	8.57	85.7%	5.71	57.1%	24.28	80.93%	
	4.29	42.9%	5.71	57.1%	4.29	42.9%	14.29	47.63%	
	-	0%	-	0%	-	0%	-	0%	
	8.57	85.7%	10	100%	10	100%	28.57	95.23%	
	7.14	71.4%	8.57	85.7%	7.14	71.4%	22.85	76.17%	
	8.57	85.7%	5.71	57.1%	4.29	42.9%	18.57	61.9%	
	8.57	85.7%	7.14	71.4%	8.57	85.7%	24.28	80.93%	
	8.57	85.7%	7.14	71.4%	-	0%	15.71	52.37%	
	-	0%	-	0%	-	0%	-	0%	
	-	0%	-	0%	-	0%	-	0%	
	7.14	71.4%	10	100%	2.86	28.6%	20	66.67%	
	8.57	85.7%	8.57	85.7%	8.57	85.7%	25.71	85.7%	
	-	0%	-	0%	-	0%	-	0%	
	-	0%	-	0%	-	0%	-	0%	
	10	100%	10	100%	8.57	85.7%	28.57	95.23%	
	10	100%	5.71	57.1%	8.57	85.7%	24.28	80.93%	
	10	100%	-	0%	7.14	71.4%	17.14	57.13%	
	10	100%	10	100%	7.14	71.4%	27.14	90.47%	
	-	0%	-	0%	-	0%	-	0%	
	-	0%	-	0%	-	0%	-	0%	
	7.14	71.4%	7.14	71.4%	2.86	28.6%	17.14	57.13%	
	8.57	85.7%	-	0%	7.14	71.4%	15.71	52.37%	
	8.57	85.7%	7.14	71.4%	10	100%	25.71	85.7%	
	5.71	57.1%	2.86	28.6%	2.86	28.6%	11.43	38.1%	
	-	0%	-	0%	-	0%	-	0%	
	10	100%	7.14	71.4%	-	0%	17.14	57.13%	
	8.57	85.7%	10	100%	8.57	85.7%	27.14	90.47%	
	5.71	57.1%	8.57	85.7%	5.71	57.1%	19.99	66.63%	

Detailed statistics

**Podesi postavke**

Skrij napredne postavke

Display Weighted Grades: Ne

Prikaži Bodove: svima

Prikaži postotke: samo za Teachers

Display Letter Grades: Ne

Letter Grade: Koristi postotke

Reprint Headers: Nijedan

Prikaži skrivene elemente: Da

Spremi postavke

## Settings

**uncategorised Statistika**

Highest:	30
Lowest:	-
Prosjek:	16.05
Median:	18.57
Mode:	-
Standardna Devijacija:	9.60

Global statistics

**Set Grade Letters**

Grade Letter	Low	High
A	93	100
A-	90	92.99
B+	87	89.99
B	83	86.99
B-	80	82.99
C+	77	79.99
C	73	76.99
C-	70	72.99
D+	67	69.99
D	60	66.99
F	0	59.99

Spremi izmjene

To delete a grade letter just empty any of the three text areas for that letter and click submit.

Grade ranges

# Activity monitoring

- Detailed statistics of a course
- For dates, activities, students...

Informacijske mreže: **AB Blic**, Svi dani (Lokalno vrijeme poslužitelja)

Informacijske mreže ▾ **AB Blic** ▾ Svi dani ▾ Sve aktivnosti ▾ Prikaži ove logove








Prikaz 23 zapisa

Vrijeme	IP adresa	Puno ime	Akcija	Informacija
Wed 26 April 2006, 04:31 PM	161.53.73.130	AB Blic	course view	Informacijske mreže
Wed 26 April 2006, 04:31 PM	161.53.73.130	AB Blic	quiz view	IM - Blic 3
Wed 26 April 2006, 04:31 PM	161.53.73.130	AB Blic	quiz review	IM - Blic 3
Wed 26 April 2006, 04:31 PM	161.53.73.130	AB Blic	quiz close attempt	IM - Blic 3
Wed 26 April 2006, 04:31 PM	161.53.73.130	AB Blic	quiz continue attemp	143
Wed 26 April 2006, 04:20 PM	161.53.73.130	AB Blic	quiz attempt	IM - Blic 3
Wed 26 April 2006, 04:20 PM	161.53.73.130	AB Blic	quiz view	IM - Blic 3
Wed 26 April 2006, 04:20 PM	161.53.73.130	AB Blic	course view	Informacijske mreže
Wed 12 April 2006, 04:41 PM	161.53.73.142	AB Blic	course view	Informacijske mreže
Wed 12 April 2006, 04:41 PM	161.53.73.142	AB Blic	quiz view	IM - blic 2
Wed 12 April 2006, 04:41 PM	161.53.73.142	AB Blic	quiz review	IM - blic 2
Wed 12 April 2006, 04:41 PM	161.53.73.142	AB Blic	quiz close attempt	IM - blic 2
Wed 12 April 2006, 04:32 PM	161.53.73.142	AB Blic	quiz attempt	IM - blic 2
Wed 12 April 2006, 04:32 PM	161.53.73.142	AB Blic	quiz view	IM - blic 2
Wed 12 April 2006, 04:32 PM	161.53.73.142	AB Blic	course view	Informacijske mreže
Wed 12 April 2006, 04:31 PM	161.53.73.142	AB Blic	quiz view	IM - blic 2
Wed 12 April 2006, 04:31 PM	161.53.73.142	AB Blic	course view	Informacijske mreže
Wed 29 March 2006, 04:36 PM	161.53.73.36	AB Blic	quiz view	IM - blic 1
Wed 29 March 2006, 04:36 PM	161.53.73.36	AB Blic	quiz review	IM - blic 1
Wed 29 March 2006, 04:36 PM	161.53.73.36	AB Blic	quiz close attempt	IM - blic 1
Wed 29 March 2006, 04:27 PM	161.53.73.36	AB Blic	quiz attempt	IM - blic 1
Wed 29 March 2006, 04:27 PM	161.53.73.36	AB Blic	quiz view	IM - blic 1
Wed 29 March 2006, 04:27 PM	161.53.73.36	AB Blic	course view	Informacijske mreže











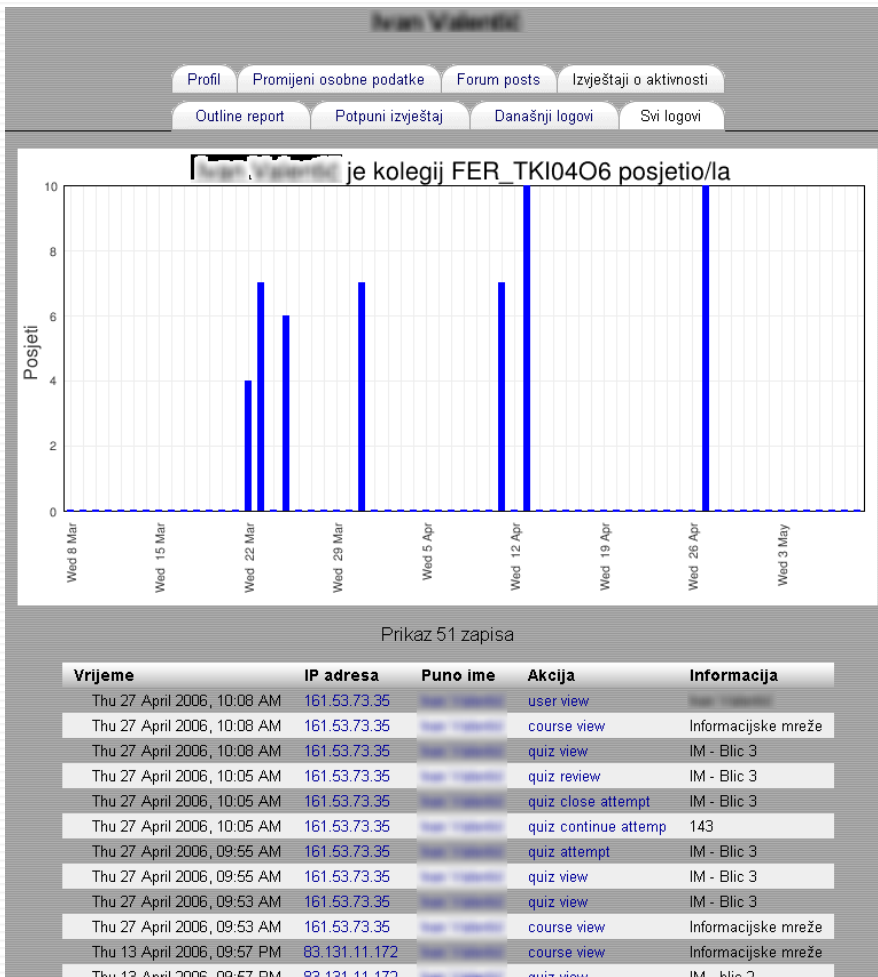
# Course participants

## ➤ Detailed view of students and teachers

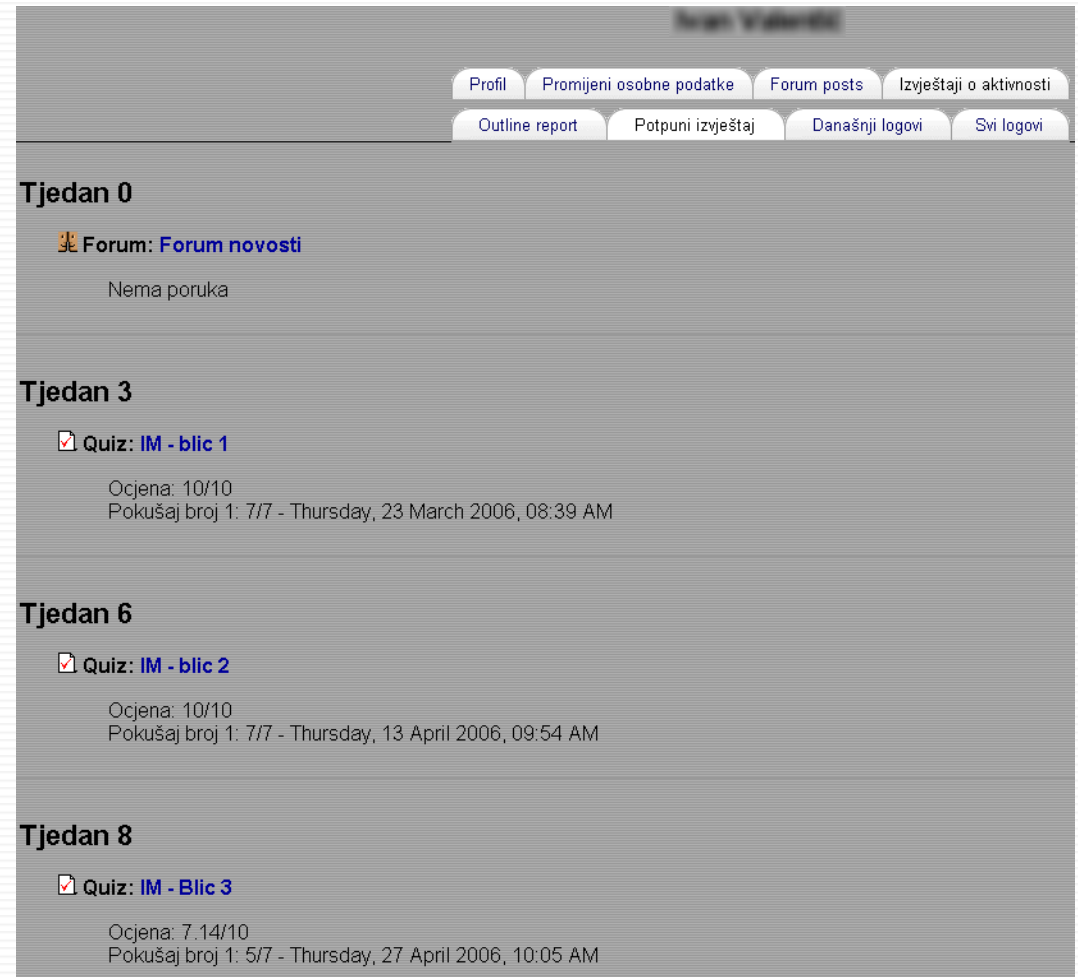
Teachers  				
	Ime / Prezime	Grad	Država	Zadnji pristup
	<a href="#">Doroteja Mikac</a>			49 dana 6 sat(a)
	<a href="#">Nina Šušteršič</a>			48 dana 2 sat(a)
	<a href="#">Maja Mikac</a>			48 dana 4 sat(a)
	<a href="#">Zlatica Vrhovjak</a>			27 dana 2 sat(a)
	<a href="#">Vjekoslav Šimković</a>			8 dana 5 sat(a)

196 Students 				
Ime : <a href="#">Sve</a> <a href="#">A</a> <a href="#">B</a> <a href="#">C</a> <a href="#">Č</a> <a href="#">D</a> <a href="#">E</a> <a href="#">F</a> <a href="#">G</a> <a href="#">H</a> <a href="#">I</a> <a href="#">J</a> <a href="#">K</a> <a href="#">L</a> <a href="#">M</a> <a href="#">N</a> <a href="#">O</a> <a href="#">P</a> <a href="#">Q</a> <a href="#">R</a> <a href="#">S</a> <a href="#">Š</a> <a href="#">T</a> <a href="#">U</a> <a href="#">V</a> <a href="#">W</a> <a href="#">X</a> <a href="#">Y</a> <a href="#">Ž</a>				
Prezime : <a href="#">Sve</a> <a href="#">A</a> <a href="#">B</a> <a href="#">C</a> <a href="#">Č</a> <a href="#">D</a> <a href="#">E</a> <a href="#">F</a> <a href="#">G</a> <a href="#">H</a> <a href="#">I</a> <a href="#">J</a> <a href="#">K</a> <a href="#">L</a> <a href="#">M</a> <a href="#">N</a> <a href="#">O</a> <a href="#">P</a> <a href="#">Q</a> <a href="#">R</a> <a href="#">S</a> <a href="#">Š</a> <a href="#">T</a> <a href="#">U</a> <a href="#">V</a> <a href="#">W</a> <a href="#">X</a> <a href="#">Y</a> <a href="#">Ž</a>				
Stranica: <a href="#">1</a> <a href="#">2</a> <a href="#">3</a> <a href="#">4</a> <a href="#">5</a> <a href="#">6</a> <a href="#">7</a> <a href="#">8</a> <a href="#">9</a> <a href="#">10</a> (Sljedeći)				
	Ime / Prezime	Grad	Država	Zadnji pristup
	<a href="#">Ivan Vuković</a>			12 dana 7 sat(a)
	<a href="#">Borislav Vlagović</a>			12 dana 7 sat(a)
	<a href="#">Kuzmina Perić</a>			26 dana 7 sat(a)
	<a href="#">Katarina Bragić</a>			12 dana 7 sat(a)
	<a href="#">Maja Mikac</a>			Nikad
	<a href="#">Anita Čardić</a>	zagreb	Croatia (Hrvatska)	5 dana 7 sat(a)
	<a href="#">Maja Vukarić</a>			12 dana 22 sat(a)



Activity report



Results activity

# Moodle in Croatia



From: <http://www.hr>

# Moodle in corporate training?

- Some things are missing
- Some features are better to hide

# Conclusions

- Before choosing a platform, think about the users and the context
- Learn about standards and critically think when and which to apply
- Integrate systems in the way they contribute to ease of use and efficiency
- Don't put too high obstacles in front of teachers (who will most probably all be SMEs, instructional designers, course developers and tutors at the same time!)
- Be open to new tools such as social software
- Be open to user needs
- Guide your partners towards your real needs: creation of pedagogically sound, technically advanced, interactively rich fully-online and blended courses