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WWW.HR: Introducing XML-Based Content Management To General Info On Croatia

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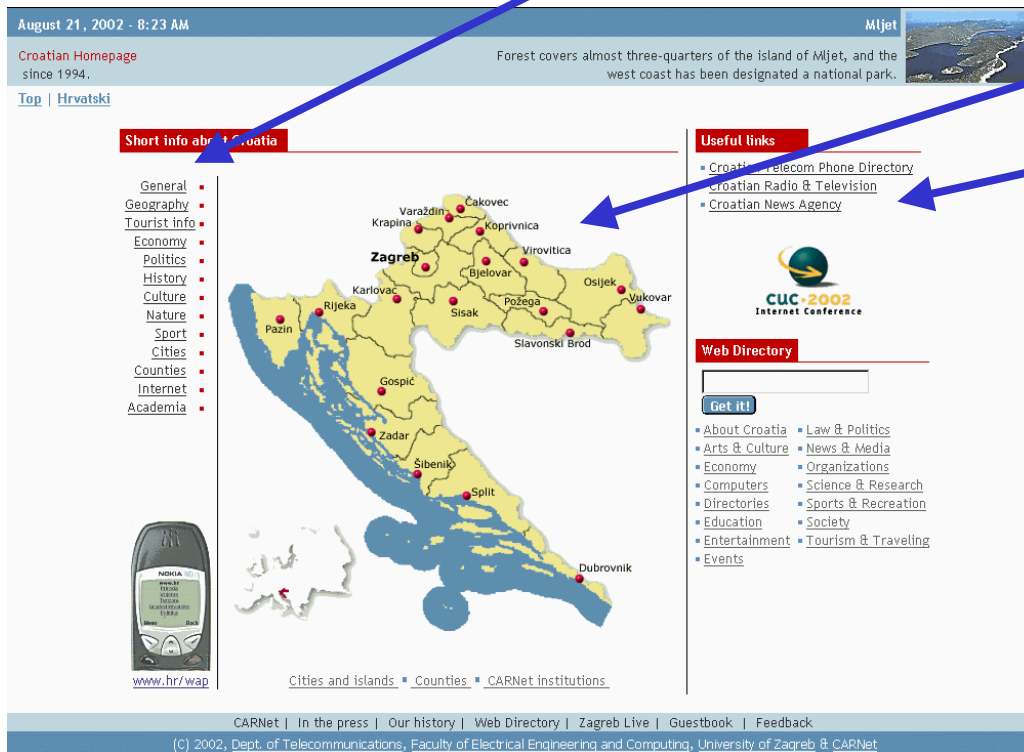University of Zagreb

Presentation outline

- Current difficulties with "general info on Croatia"
- Proposed XML-based content managment system
- System components
- Results
- Conclusion

Current situation on "general info on Croatia"

- part of WWW.HR service
- provides basic and useful information about Croatia
- Includes: **hierarchical menu** with 13 different categories,

various content,

useful links

Problem statement
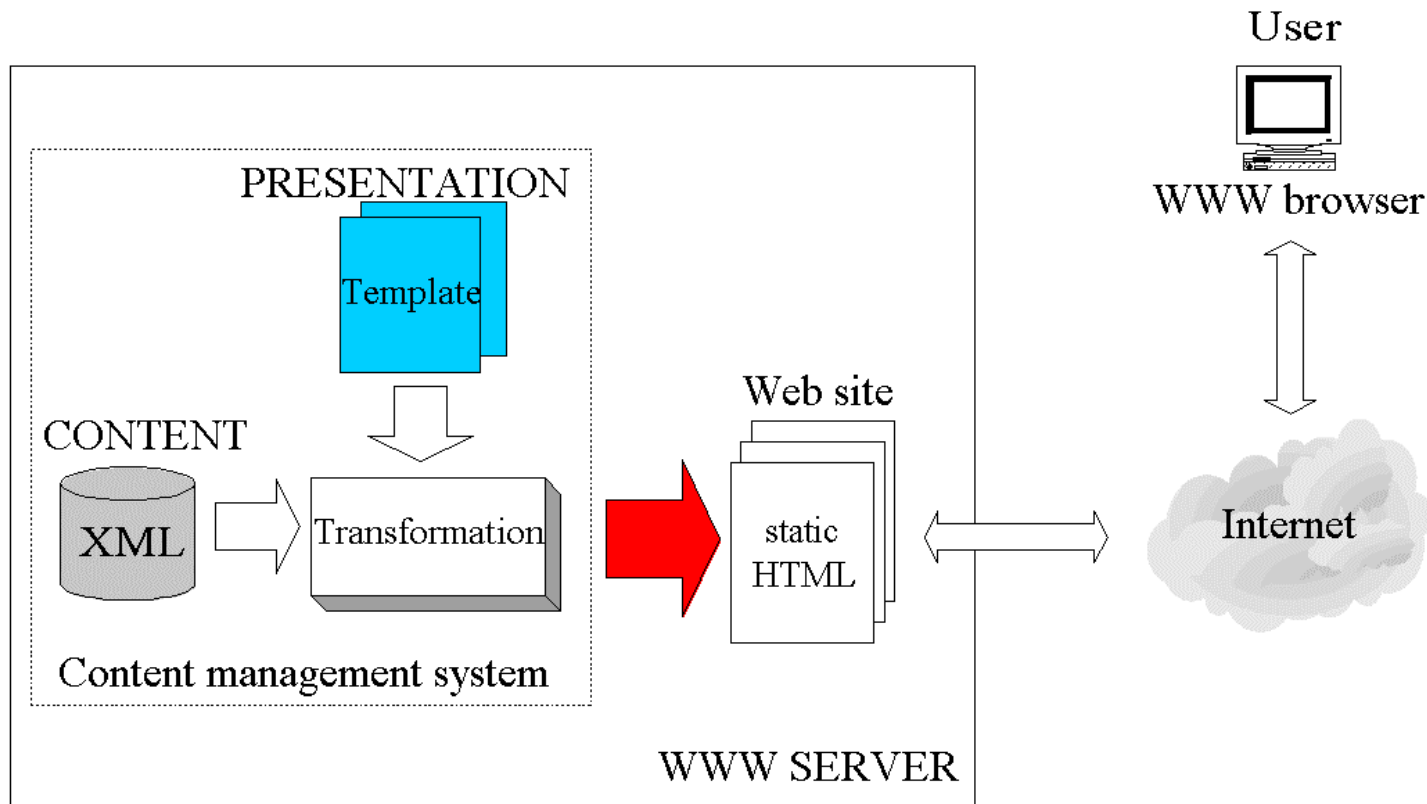
WWW.HR is organised as a server file system:

- many individual HTML pages

- time consuming and complicated maintenance

- information redundancy and inconsistency

- Croatian and English version

IMPROVEMENTS NEEDED!
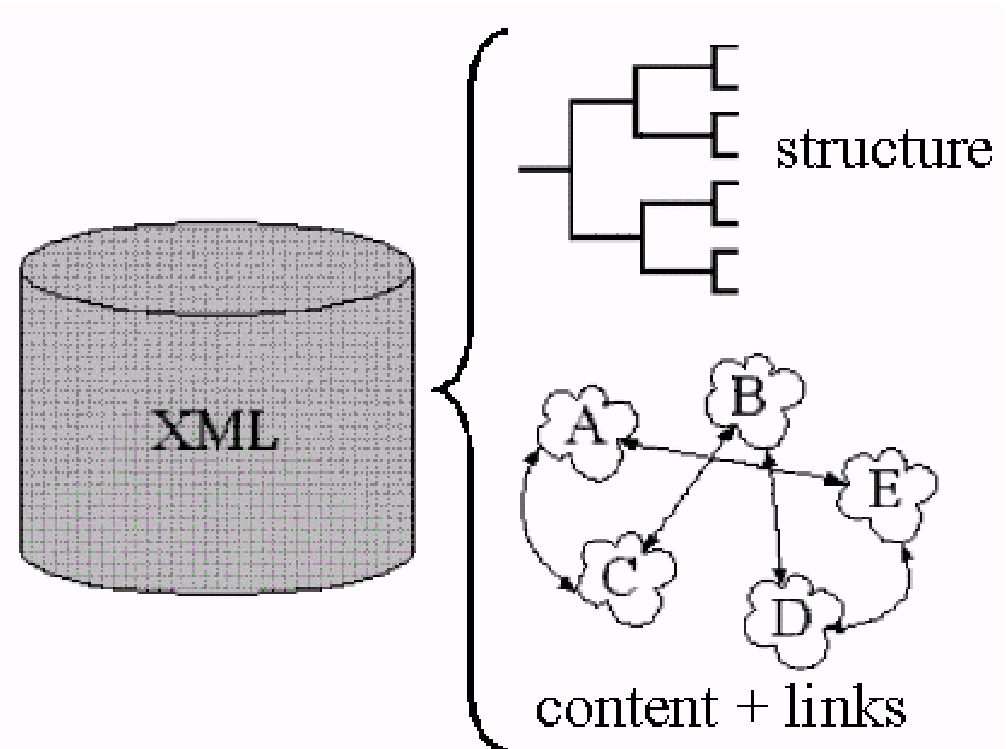
Proposed content management system

Three components: XML DB, HTML template, Perl script

Content, Presentation, Implementation → separated

XML database (1)

- plain text document (easy to edit)

- elements designated with markups (easy to follow)

- contains:
    - structure
    - content (fragments)
    - links
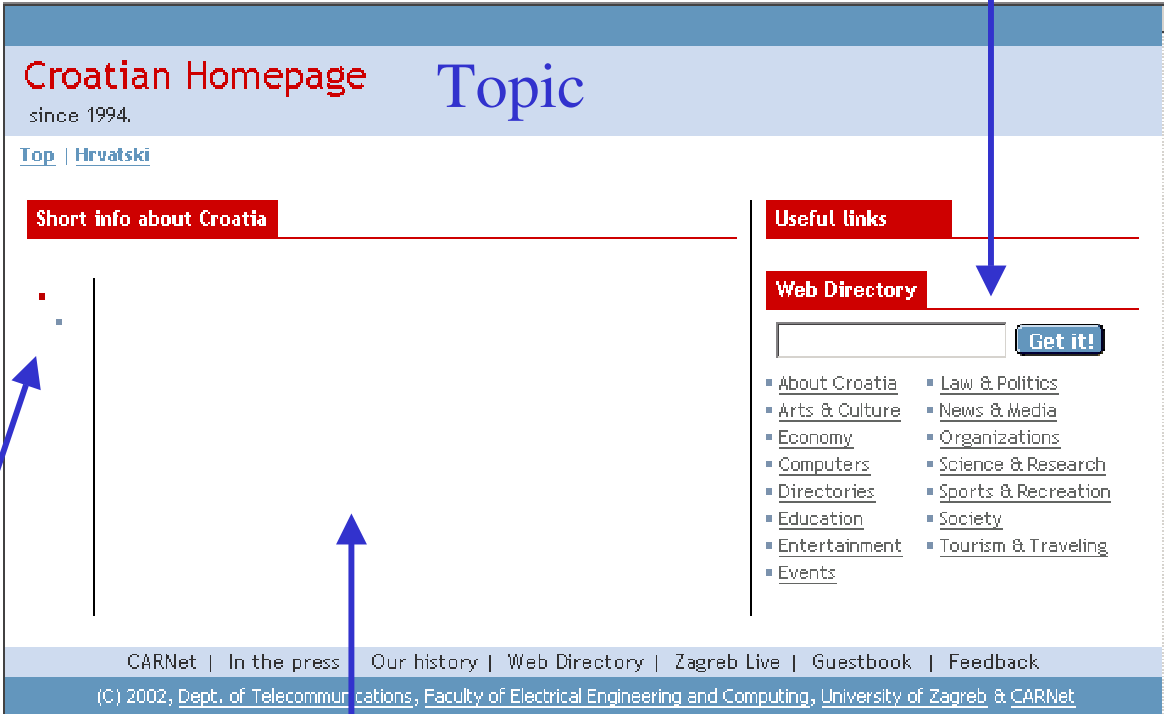
XML database (2)

XML document is divided into 2 parts:

```
<?xml version="1.0" ?>
<!DOCTYPE WWWHR (View Source for full doctype...)>
- <WWWHR>
    <!--  DIO XML-a S IZBORNICIMA  -->
  + <MENU>
    <!--  DIO XML-a SA SADRZAJEM  -->
  + <SADRZAJ>
  </WWWHR>
```

1. Element <MENU>:
   Logical structure,
   topics, names, links and fragment references

2. Element <SADRZAJ>:
   Content fragments (saved only once),
   each with a unique identification (ID number)

Presentation template

- One template for all the pages

- Predefined spaces

- New graphical and interactive elements possible

- Additional style adaptation with CSS script

Useful links

Topic

Menu

Content space

Transformation

```
C:\PERL\DIPLOM~1>perl xth.pl

DOBRO DOSLI !
Ovo je program za pretvorbu XML dokumenata u HTML datoteke.

Upisite ime XML datoteke: hrvatski.xml

Upisite ime predloska: okvir.htm


Stvaram datoteke...
index.htm
opcenito.htm
geografija.htm
gospodarstvo.htm
politika.htm
povijest.htm
kultura.htm
priroda.htm
sport.htm
visoko.htm
gradovi.htm
zupanije.htm
internethr.htm
turist.htm
XML dokument sadrzi glavni izbornik i 13 podizbornika.....

...KRAJ!
C:\PERL\DIPLOM~1>_
```
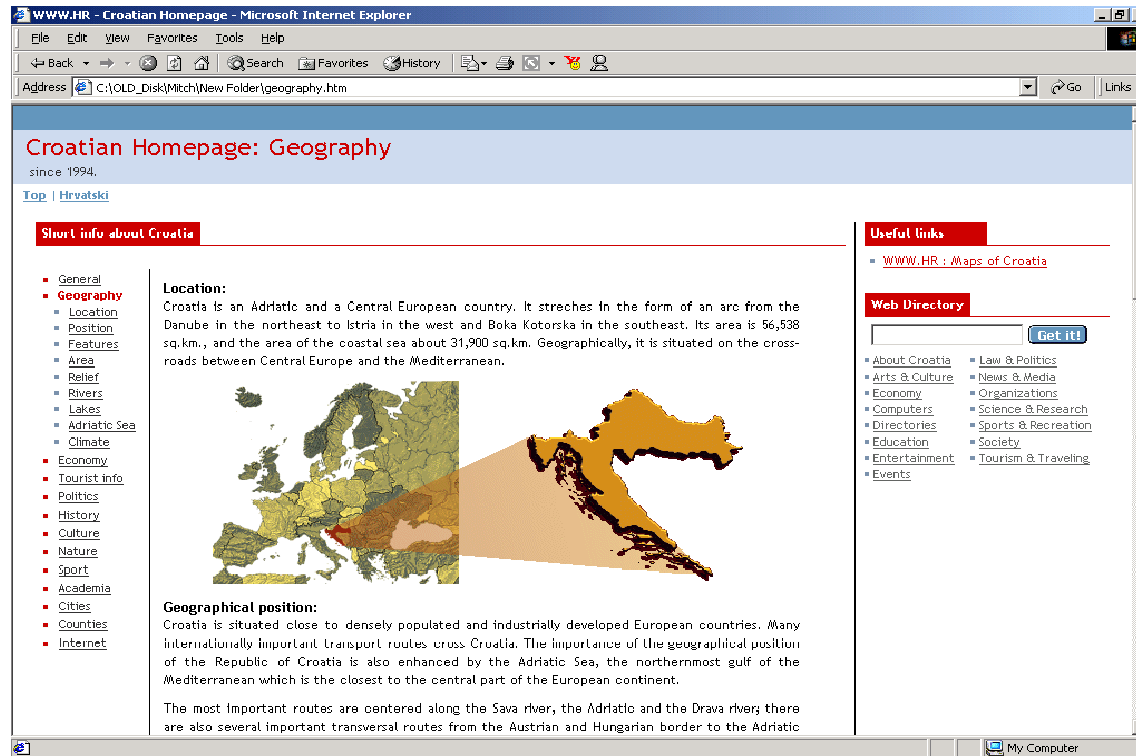
- Perl script used for XML → HTML transformation

- Perl: simple syntax, portable to different platforms, easy editing

- All changes are applied in seconds with just one execution

Result

Final result: totally functional Web site, immediately ready for browsing

Conclusion

- Content managment system improved

- Proposed solution accomplished:
    - Simplified maintenance
    - Efficient and improved organisation (just 3 components)
    - Accelerated data update
    - System portability (MS Windows, Unix, Linux...)