

Andrei Papliatseyeu, Maryna Repich,
Boris Ilyushonak, Aliaksandr Hurbo,
Katsiaryna Makarava, Vladimir Lutkovski

Web-based encyclopedia on physical effects

*System Analysis Department
Radiophysics and Electronics Faculty
Belarusian State University
Minsk, Belarus*

E-mail: SRLSA@bsu.by



- The aims of the project
- History of development
- Current version
- Used technologies
- Conclusions

The aims of the project



- Traditional information sources
 - Complicated and time-consuming search
 - Low update rate
 - Limited number of copies
 - Rather high cost
- Most Internet sources:
 - Complexity of relevant search
 - Different material quality
 - High data dispersion

The aims of the project



We wanted to create a system that provides

- Systematized information
- Comprehensive material
- Fast and easy search
- Convenient interface



Standalone application



Web-based system



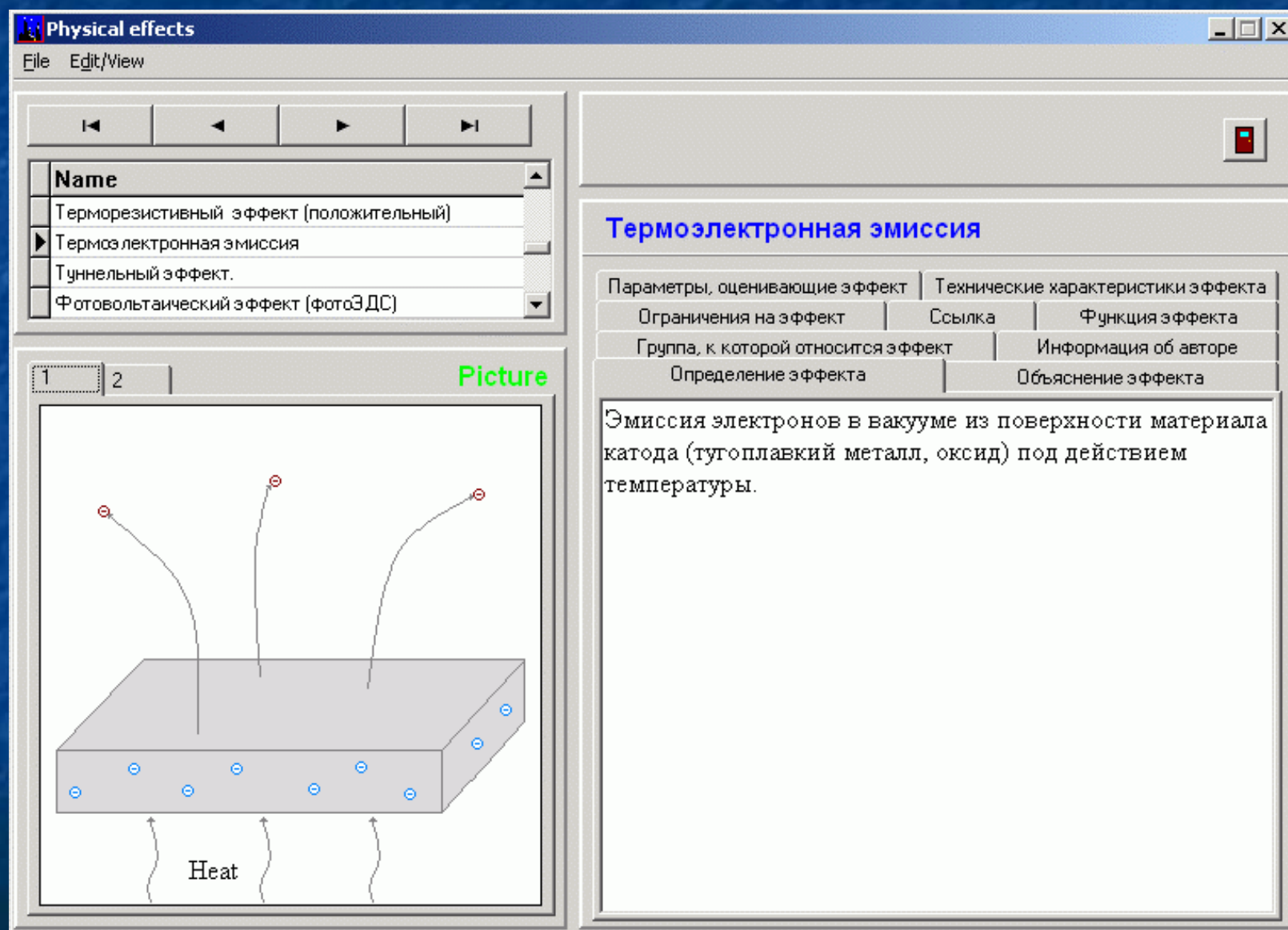
Edia



Standalone application

The first version of the system was standalone Delphi application with following features:

- ✓ Provides textual information on a few dozens of physical effects
- ✓ Effect description as a predefined set of fields
- ✓ Each effect may be accompanied with up to two bitmap images
- ✓ Built-in tool for DB management
- ✓ Low hardware requirements





The next generation of the project is web-based system which has a number of additional features:

- Uses client-server architecture
- Accessible via Intranet/Internet
- Effects are united in sections
- Administrator and client parts
- Security subsystem



Administrator part:

- Data input
- Section management
- User authentication
- System maintenance

Client part:

- View effect description
- View sections
- Fast search on all fields
- Quick jump to effect description



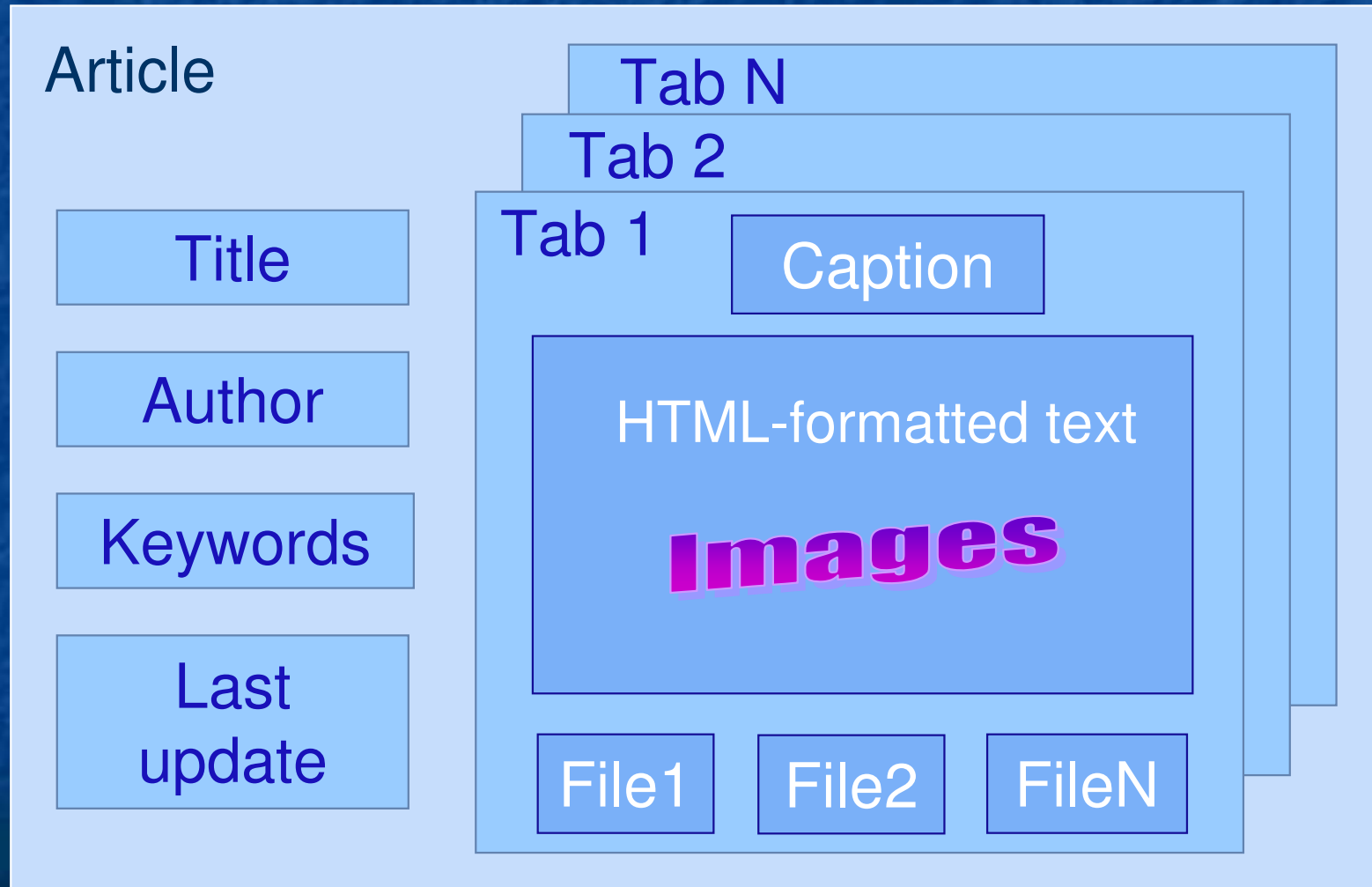
- Universal system, not limited to physical effects
- Article as basic informational element
- Sections make up a hierarchy
- HTML instead of plain text
- Inline multimedia
- Glossary



Group	Rights
Guest	View main page and register or logon in the system
Student	Search and view articles, read and add comments, use glossary, change own profile
Tutor	Add and change articles
Administrator	Register tutors. Manage users and sections, articles, comments.

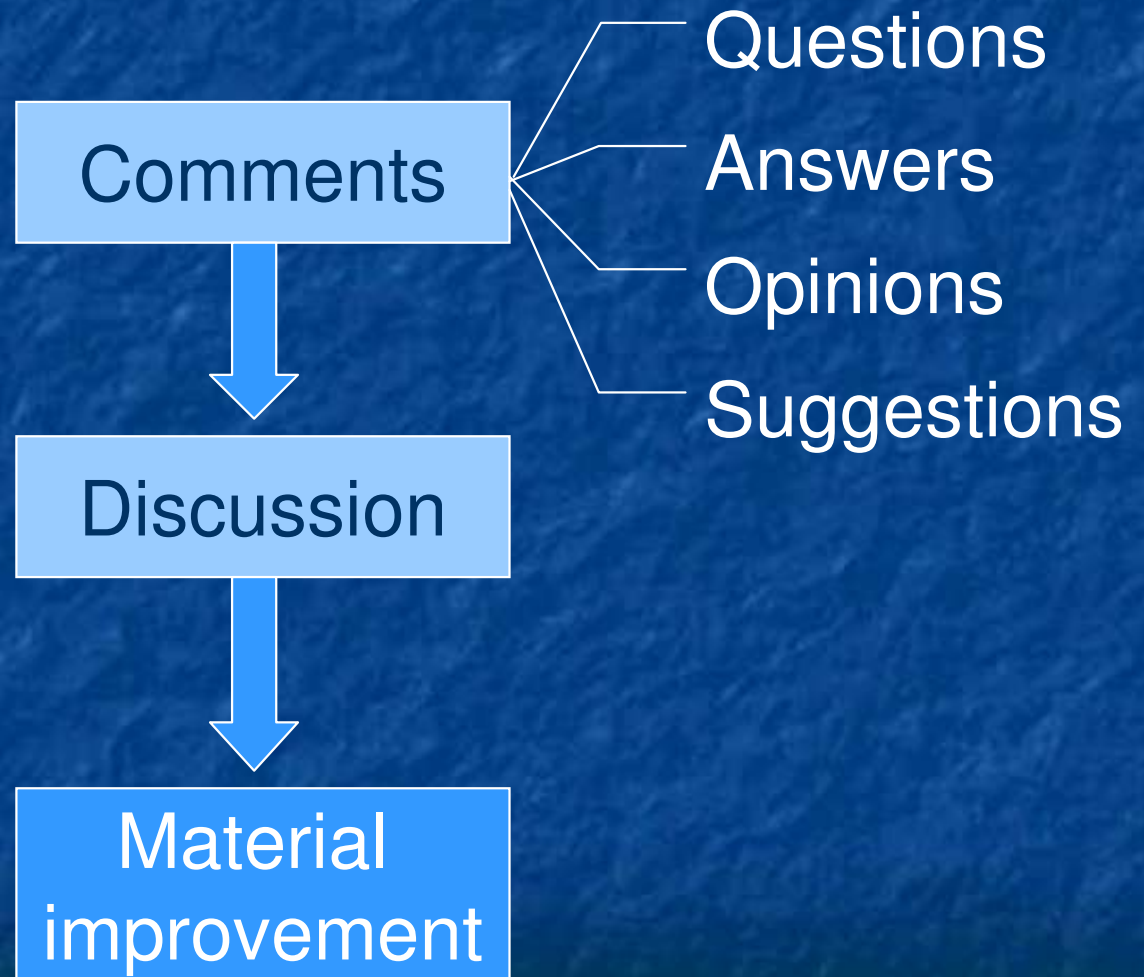


The article





Comments on article





Article

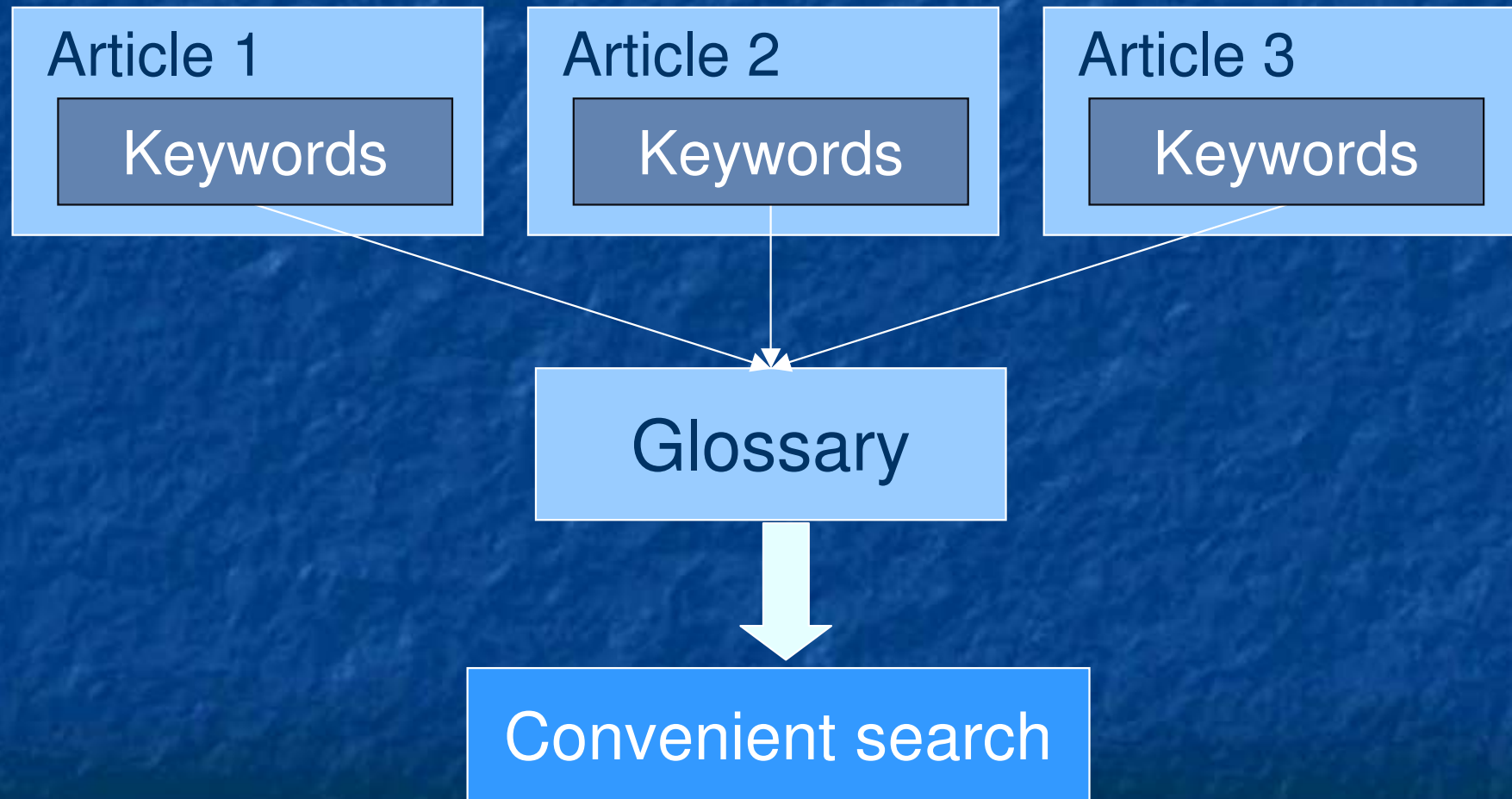
Each article in the **Edia**-system has a set of **keywords**. These words describe the topic of the article and may be used for **fast search**.

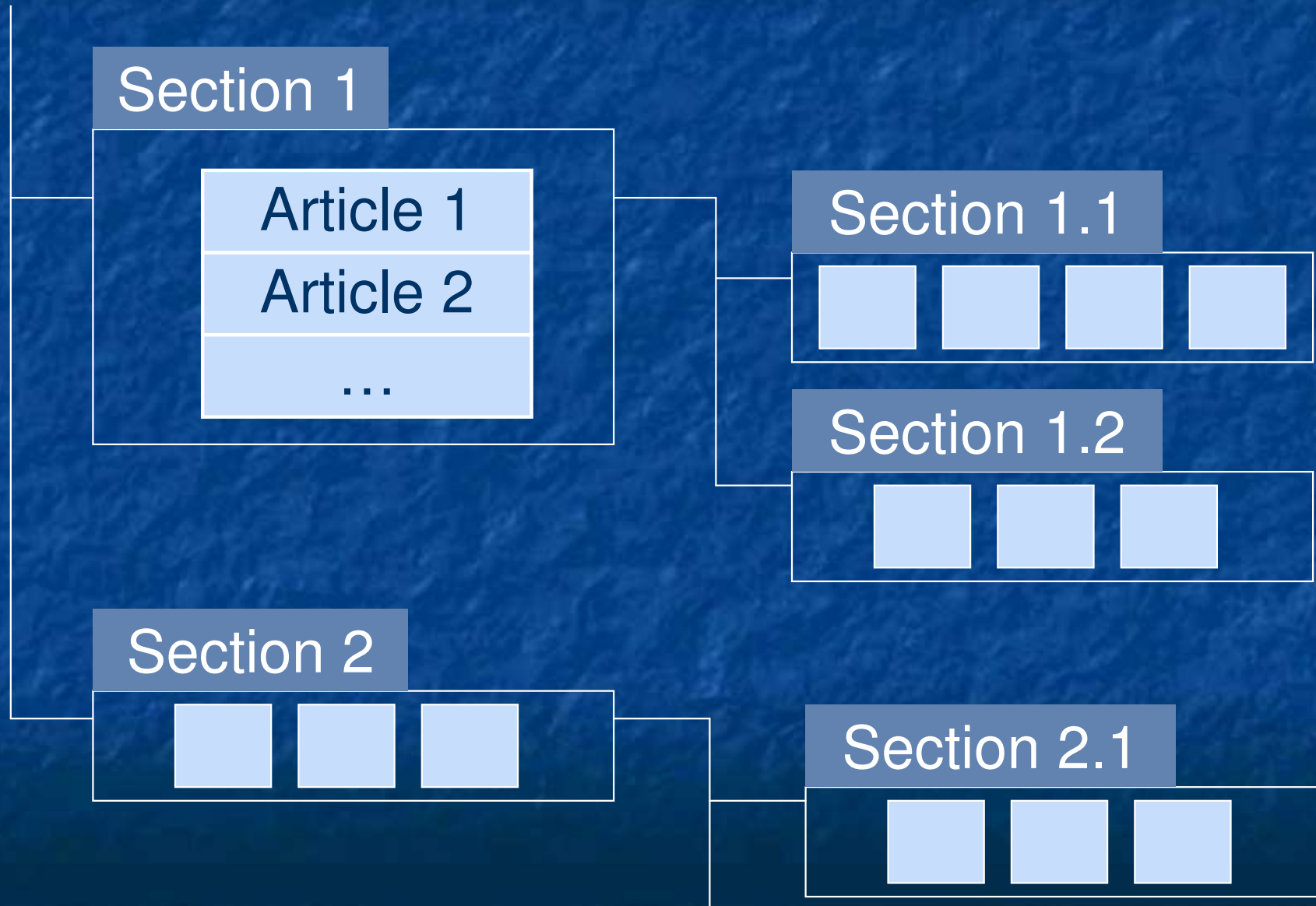
Glossary

- **Edia**
- ▶ **keywords**
- ▼ **fast search**



Glossary







Object-oriented design:

- Rational Rose 2000
- ErWin 4.0

Programming:

- IBM VisualAge for Java 3.5
- Apache Jackarta Tomcat 4.0
- Java Servlet 2.3
- JSP 1.2
- MySQL 2.23



The systems presented are used in the learning process at Radiophysics and Electronics Faculty of Belarusian State University.

Current version is under construction now and will be complete by the end of September, 2003. It is intended for use at Radiophysics and Electronics Faculty and Faculty of Applied Mathematics and Informatics of Belarusian State University.



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Faculty of Applied Mathematics and Informatics

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The end



Thank you