

Course description:

The aim of the course is to introduce students to object-oriented programming language which is Java. It is the language simple, precisely defined, equipped with an extensive and well-documented set of libraries. Key packages are discussed in the lecture. This modern programming language is also used in the technology of the Web page on the Internet, you can easily create graphical interfaces, supports multithreaded programming. There are technologies to support network programming, database, etc.

Program:

1. konstrukcje basic language in Java (pierwotne data types, literals, declarations of variables, plaques, operators and expressions, flow control);
2. exceptions and assertions;
3. classes and objects;
4. inheritance, polymorphism (virtual functions);
5. abstract classes, interfaces;
6. GUI AWT and Swing;
7. streams and file operations;
8. Standard collection;
9. concurrent programming, multithreading;
10. reflection and annotations;
11. calculations;
12. generic programming.

At the workshop we carried out a number of simple programs. Tasks labs are synchronized with the topics covered in the lecture.

Requirements: language C / C ++ object-oriented programming, basic algorithms