

COMPARATIVE ANALYSIS OF PROGRAMMING LANGUAGES USED IN EDUCATION

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Learning to program is one of the most important skills in today's world. Programming is the process of creating computer programs that can perform various tasks. It is used in many areas such as business, science, medicine and technology.

the IT -specialist training system includes universities, secondary special educational institutions, training centers, advanced training and retraining programs, as well as specialized educational programs.

The President of the Republic of Uzbekistan instructed to include disciplines from the One Million Programmers project into the school curriculum of informatics. IT literacy of the population will be raised with the help of training centers - at least 100 - in all regions with short courses on the basics of programming [3].

There are many programming languages such as Java, Python, C++, JavaScript , and many more. Each language has its own strengths and weaknesses, and the choice of language depends on the specific task that needs to be done.

Learning to code can help people become more productive and efficient at their jobs, as well as broaden their horizons and understanding of technology. It can also be a great source of income for people who are proficient in programming [4].

In general, programming is an important and interesting subject that will help people develop and achieve their goals in various fields.

One of the main advantages of programming is its versatility. With the help of programming, you can automate various tasks, simplify routine operations and create new tools for work.

In addition, programming allows you to create new products and services that can improve people's lives and solve various problems. For example, applications for mobile devices, social networks, online stores and many other services have been created through programming.

However, learning to program can be a challenge for many people. It takes a lot of effort, patience and time to master a programming language and start creating your projects. But you can cope with this challenge if you have stamina and perseverance.

All in all, programming is an important tool in today's world, and its importance will only grow in the future. Therefore, if you have an interest in programming, then you should not put off learning it, as it can bring many benefits in your life and career.

An important aspect of programming is the creation of teamwork and joint problem solving. In the modern world, programming is rarely a solitary activity, and often the development of projects takes place in a team. This helps to improve the quality of the product, distribute tasks and ensure more efficient use of resources [2].

Also, programming can be useful for solving various social problems, for example, in the field of healthcare, ecology, education and others. With the help of programming, you can create applications and tools that will help people solve social problems more effectively and improve the quality of life.

Finally, learning to program can be a very exciting and interesting activity. Creating new projects, solving complex problems and working with new technologies can be a great challenge, but also a lot of fun and satisfaction.

In general, programming is an important and interesting subject that can bring many benefits in various areas of life. If you want to start learning programming, then it is worth identifying a specific goal and choosing a programming language that is suitable for this purpose.

There are many programming languages used in education, but the most popular are Python , Java , C++, and JavaScript . Consider their features and benefits.

Python is a dynamic programming language that is easy to learn and is used in many fields such as data science, artificial intelligence, and web development. Python has a simple and clear syntax, which makes it accessible to novice programmers. However, Python can be slow compared to other languages and is not suitable for building high performance applications.

Java is an object-oriented programming language that is widely used in corporate and web development. Java is strongly typed and is well suited for building large applications. However, Java has a more complex syntax than Python and can be more difficult for novice programmers.

C++ is a programming language that is widely used in systems programming, gaming, and robotics. C++ has high performance and allows you to create large projects. However, C++ has a complex syntax and can be a challenge for beginner programmers [1].

JavaScript is a programming language that is used to create interactive websites and web applications. JavaScript has a simple and easy to read syntax, making it accessible to novice programmers. However, JavaScript has some features that can be a challenge for programmers, such as asynchronous programming and event handling [5].

In general, each programming language has its own strengths and weaknesses, and the choice of language depends on the specific task and level of knowledge of the programmer. Python and JavaScript are well suited for beginner programmers, while Java and C++ may be more suitable for building larger projects.

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