

Adjusting Programming Applications With Programming Languages Of Multimedia

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Abstract

The humanity in the XXI century found itself face to face with such global correlative problems, that their solution is in innovative contemporary conception in the style of life and motivational upbringing.

The contemporary educational processes with their new response to the provoke follow the distinct aims and purposes. Such an aim offers a principled orientation to the future of the Educational system. The previous Educational conception expresses the orientation.

The connection of the information science with the standard of development of the Society is obvious. The more the information level of society is high, the more adaptable it is in a rapidly changeable environment. Computer technic and technology are the active components of this environment. Their mastery is often determined in the sphere of employment of the young generation.

In this Master Thesis (majesty work) the contemporary multimedia programming languages are examined and by means of them, the program apps are created and processed (treated).

The aim of this work is also to show beginners, children under school age, schoolchildren, and the senior generation the programming languages Scratch, App Inventor, and Small Basic are easy useful, and master.

This work has also presented the conception, that it can be possible to create visual and effective programming apps by means of multimedia programming languages.

For contemporary marketing demands in a rapidly changeable epoch multimedia programming languages with their wide possibilities offer lots of remedies.

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I. Introduction

The connection between information sciences and the level of development of society is obvious. The higher the level of society's informatization, the more complete its mentality, and the more adaptable it is to the rapidly changing environment. Computer equipment and technologies are active components of this environment. Their knowledge is often decisive in the field of youth employment. Therefore, it is not surprising that there is currently a great demand for personnel knowledgeable in practical and applied informatics, computer sciences, and information technologies.

Computer science is a complex, interdisciplinary discipline. It combines semantic, logical, and linguistic models of the research object. These issues are closely related to "computer programming", which is the object and subject of the research on the given topic.

Informatics is a science that studies the systematic processing of information using computing techniques. Historically, it was formed based on the development of mathematical science (applied mathematics), and computer technology originates based on electrical engineering, microelectronics, and communication technology.

adopted for the first time at the scientific conference in Dresden, Germany, at the initiative of Russian and French scientists. In the English-language literature of America and other countries, it corresponds to Computer Science and Information Systems. Computing technology plays the role of a tool in informatics. The famous Dutch scientist E. Dijkstra wrote that "a computer is to informatics what a telescope is to astronomy."

Informatics has three main branches: theoretical informatics, practical informatics, and technical informatics. Based on them, directions of applied informatics are created, for example, economic informatics, Bioinformatics, Geoinformatics, Computational Linguistics and so on. Informatics institutes, faculties and/or departments in the leading countries of Europe and America unite the chairs of the mentioned directions.

Theoretical informatics studies the theory of formal languages. For example, systems analysis and complex systems theory, set theory and logic, automata and graph theory, Petri nets, predicate accounting and relational algebra, formal semantics and categorical analysis, operations research, economic-mathematical modeling methods, mass service theory, and so on. All this is the backbone of informatics.

Practical informatics serves the specific field of informatics. Problem solving, especially computer programming development for software technologies (Software Engineering). Programming languages, operating systems, data and knowledge base management systems are important here. It develops basic concepts for solving such standard tasks as storing and managing information through data structures. Machine algorithms play an important role here, which serve as an automated solution to complex and frequently used tasks, such as corporate management, WEB-application testing, remote production management, validation and verification. The central and ever-present topic of practical informatics is the creation and development of software technologies for building applied systems (Windows and WEB-applications). These are structural, functional, object-oriented, visual and multimedia application programming methods, unified modeling language (UML) and tools for their automated programming.

Technical informatics studies the fundamentals of computer hardware, such as microprocessor technology, computer architectures, network and communication systems, controllers and peripherals, robotics and sensor systems, and so on. It is directly related to electrical engineering, especially digital technology, as well as logic and discrete mathematics, switching circuit theory. In recent years, special attention has been paid to the creation and development of multimedia technologies, which are the basis for building computer audio-visual systems.

Applied informatics is a wide-ranging science. It is based on the theoretical, practical, and technical achievements of informatics and will study their pragmatic application in various fields (economy and business, jurisprudence, energy, industry, transport, medicine, agriculture, education, linguistics, and others) for the computerization of complex technological processes and the creation and administration of information repositories... Decision-making computer systems are becoming a necessary tool in every field. Expert systems play an important role in solving modern diagnostic and prognostic tasks.

The main object and implementer of all of the above is a representative of computing equipment, already a multi-functional computer. It is known that The theoretical considerations that formed the basis for the creation of the personal computer date back centuries and appear in the works of many eminent scientists. The practical realization of these ideas was possible only in the second half of the 20th century. The first computing machines were enormous in size, unreliable, expensive, and relatively low in performance, but through the rapid pace of development, computing improved rapidly. This process is still ongoing.

Chapter I. Contemporary multimedia programming languages.

There are more than 2000 programming languages today, and their number increases every year. Some languages are popular, while others are used only by authors. These languages have played a significant role in the creation and development of contemporary technologies. The classification of programming languages has been implemented in them.

Through the eyes and styles of methods: Universal Procedural, functional, logical, scripted, object-oriented, visual, multimedia, and so on. It is also possible to use several programming languages simultaneously to create professional programs. Multimedia is the technology of transmitting, storing, and producing information (acoustic, visual, textual, and graphical) using various technologies, as well as the integration of such technologies into multimedia applications and information systems.

Both high-level and low-level programming languages are selected.

Everything necessary for multimedia is provided for high-level programming languages, they are suitable for high-level programming languages. Along with this, they are selected for user-friendly visual capabilities and the possibilities of interaction systems.

This master's thesis discusses contemporary multimedia programming languages (Scratch, App Inventor, and Small Basic) and the creation and development of software applications with them. Programming languages Scratch, App Inventor, and Small Basic are easy to use and easy to understand. The creation of visually attractive and effective software applications is possible with multimedia programming languages.