



JAVA PROGRAMMING LANGUAGE DEVELOPMENT OF SOFTWARE PRODUCTS AS AN EXAMPLE OF THE ANDROID SYSTEM

Qodirov Farrux Ergash o'g'li

Teacher of the "Information Technologies" department
Karshi branch of the Tashkent University of Information
Technologies named after Muhammad al-Khorazmi

Jo'rayev Suxrojon Saloxiddi o'g'li

Shahrisabz State Pedagogical Institute
Teacher of the Department of "Mathematics and Informatics".
<https://doi.org/10.5281/zenodo.8064149>

Abstract: In this article Development of software products using the Java programming language as an example of the Android system opinions are discussed.

Keywords: Java programming technologies, Android studio, mobile application, programming languages, JDK, ADT, Eclipse.

Nowadays, the Android market is developing a lot. Doubling the number of apps coming to the Android market each month, and the development of many Android mobile devices and tablets, indicates that this development is not going to stop anytime soon, but rather an increase. Among these developments, every user who is interested in computer technology or in the field close to it should be interested in writing a program for his mobile communication tool. Android applications are written using the Java programming language, which is a relatively easy language for those just entering the world of programming. Android apps are written, compiled, and downloaded to a mobile device (whether it's your phone or tablet) for testing, just like any other mobile app. Android applications are built on the Java software system. It is possible to create a program for Android on Windows, MacOS, Linux operating systems. It is recommended to use Eclipse as a programming environment. We present the necessary tools for creating a program for the Android operating system.

These are:

1. JRE (Java Runtime Environment);
2. JDK (Java Development Kit);
3. Eclipse programming environment;
4. Android SDK (Android Software Development Kit);
5. ADT (Android Development Tools).

JRE. Java in the language to be written programs turn on and to use For this, it is necessary to install JRE (Java Runtime Environment) on computers.





JDK. JDK (Java Development Kit) for creating programs in Java

The Java programming language must be installed. The JDK contains the Java compiler, Java libraries, various utilities, examples, and documentation. But the JDK does not include the Java programming environment.

Eclipse. We use Eclipse to create a program in Java. Reasons why the Eclipse programming environment is recommended for Android:

First, Eclipse is free and it's very easy to learn how to use Eclipse.

Second, Google has developed an ADT plugin specifically for Eclipse.

ADT. ADT can be used to build and compile Android projects in Eclipse and use Android device emulators. As soon as we install the ADT plugin on the computer, it is automatically configured for Android projects.

Android SDK. To build on Android, you need the Android SDK. The Android SDK also includes an Android device emulator. Therefore, if we want to build an application on Android, we do not need to have a real switch, the application can be tested on a virtual device easily[11].

To write an application on Google Android is given above programs need to be downloaded and compatible with each other. Below are instructions for downloading and installing the necessary programs:

Phase 1: Eclipse

To write the program, you first need Integrated Development Environment (IDE) is required. Eclipse IDE is widely used nowadays, but if you can't use Eclipse, you can try using NetBeans. Eclipse IDE from your system properties from the link below come came out in case choose get

can:<http://www.eclipse.org/downloads/>

Step 2: Java JDK

If the Java JDK is not installed on your computer, the Java JDK will be downloaded:

(<http://www.oracle.com/technetwork/java/javase/downloads/jdk6-jsp-136632.html>)

And set: Next-> Next-> Finish

Step 3: Android SDK Tool

Now you will need the Android SDK Tool. Get it straight

You can get it from Google:

(<http://developer.android.com/sdk/index.html>)

Step 4: Adapt Eclipse for Android

Start Eclipse and select Help-> Install New Software. After we click on —Add...|| button



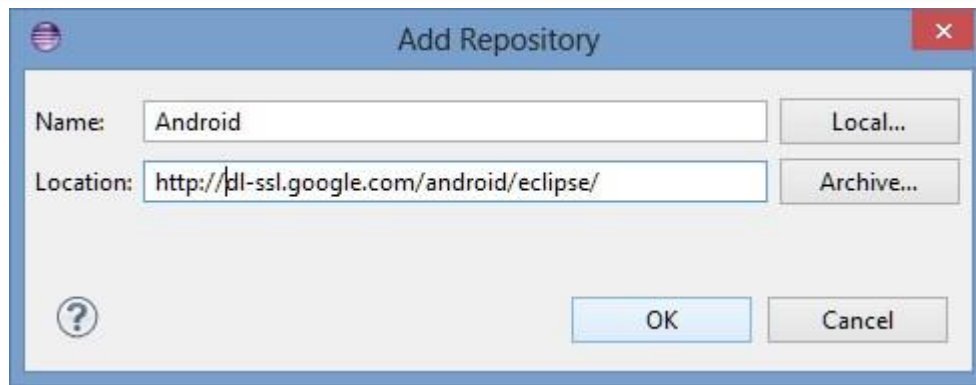


Figure 1. "Add Repository" window when installing a new software tool

As shown in Figure 9 above, the name of the software tool is –Android||, and the link is –Android|| "<https://dl-ssl.google.com/android/eclipse/>" (if the link is not working, you can write "http" instead of "https").

References:

1. Qodirov, Farrux. "Econometric modeling of medical services in the territories." International Conference on Information Science and Communications Technologies ICISCT. 2022.
2. Qodirov Farrux Ergash o'g'li. Econometric modeling of the development of medical services to the population of the region / Berlin Studies Transnational Journal of Science and Humanities. 2022/5/9. 1.1 Economical sciences.
3. Ergash o'g'li, Qodirov Farrux. "Аҳолига тиббий хизмат кўрсатиш соҳасининг келгуси ҳолатини башоратлаш." Сервис" илмий-амалий журнал (2022): 56-59.
4. Ergash o'g'li, Qodirov Farrux. "ECONOMETRIC MODELING OF THE DEVELOPMENT OF MEDICAL SERVICES TO THE POPULATION OF THE REGION." Berlin Studies Transnational Journal of Science and Humanities 2.1.1 Economical sciences (2022).
5. Ergash o'g'li, Qodirov Farrux. "CREATION OF ELECTRONIC MEDICAL BASE WITH THE HELP OF SOFTWARE PACKAGES FOR MEDICAL SERVICES IN THE REGIONS." Conferencea (2022): 128-130.
6. Ergash o'g'li, Qodirov Farrux. "IMPORTANCE OF KASH-HEALTH WEB PORTAL IN THE DEVELOPMENT OF MEDICAL SERVICES IN THE REGIONS." Conferencea (2022): 80-83.
7. Қодиров, Ф. "ИЖТИМОЙ ВА ХИЗМАТ КЎРСАТИШ СОҲАСИНИ РИВОЖЛАНТИРИШДА СОҒЛИҚНИ САҚЛАШ ХИЗМАТЛАРИНИ ЭКОНОМЕТРИК МОДЕЛЛАШТИРИШНИНГ АҲАМИЯТИ". ЎзР ФА В.И.Романовский номидаги Математика институти, 2022.



8. Қодиров, Ф. “ВИЛОЯТ АҲОЛИСИГА СОҒЛИҚНИ САҚЛАШ ХИЗМАТЛАРИ КЎРСАТИШ ТАРМОҚЛАРИ РИВОЖЛАНИШ МЕХАНИЗМИНИНГ СТАТИСТИК ТАҲЛИЛИ”. Andijon Mashinasozlik Instituti, 2022.
9. Қодиров, Ф. “АҲОЛИГА ТИББИЙ ХИЗМАТ КЎРСАТИШ СОҲАСИНИНГ КЕЛГУСИ ҲОЛАТИНИ БАШОРАТЛАШ”. Самарқанд иқтисодиёт ва сервис институти, 2022.
10. Qodirov, F. “OPTIMUM SOLUTIONS FOR THE DEVELOPMENT OF MEDICAL SERVICES IN PRIVATE CLINICS”. MUHAMMAD AL-XORAZMIY NOMIDAGI TOSHKENT AXBOROT TECHNOLOGIYALARI UNIVERSITETI QARSHI FILIALI, 2022.
11. Қодиров, Ф. “Қашқадарё вилояти аҳолисига тиббий хизмат кўрсатиш тармоқларини ривожлантиришнинг истиқболлари”. «O‘ZBEKISTON QISHLOQ VA SUV XO‘JALIGI» àà «AGRO ILM», 2022.
12. Қодиров, Ф. “ҲУДУДЛАРДА ТИББИЙ ХИЗМАТ КЎРСАТИШНИ ЭКОНОМЕТРИК МОДЕЛЛАШТИРИШ”. ХОРАЗМ МАЪМУН АКАДЕМИЯСИ АХБОРОТНОМАСИ, 2022.
13. Qodirov, F. “Қашқадарё худуди аҳолисига хизмат кўрсатиш тармоқлари ва уларга таъсир этувчи омиллар”. “O‘zbekiston Qishloq Va Suv xo‘jaligi” Jurnalı, 2022.
14. ҚОДИРОВ, Ф. “Аҳолига хизмат кўрсатиш соҳасининг моделлаштиришни тизимли имитация қилиш”. ИЎТИСОДИЙ ИЛМИЙ-АМАЛИЙ ОЙЛИК НАШР, 2022.
15. Qodirov, F. “QR-KOD TECHNOLOGIYASI ASOSIDA ELEKTRON KUTUBXONA TIZIMINI DASTURIY VA APPARAT TAMINOTINI YARATISH”. MUHAMMAD AL-XORAZMIY NOMIDAGI TOSHKENT AXBOROT TECHNOLOGIYALARI UNIVERSITETI QARSHI FILIALI, 2021.
16. Қодиров, Ф. “СОЗДАНИЕ ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ И АППАРАТА ЭЛЕКТРОННОЙ БИБЛИОТЕЧНОЙ СИСТЕМЫ НА ОСНОВЕ QR-КОВОЙ ТЕХНОЛОГИИ”. Kokand University, 2020.
17. Кодиров, Ф. “АНАЛИЗ БИОСИГНАЛОВ В ЭЛЕКТРОКАРДИОГРАФИИ И МЕТОДЫ ИХ ОБРАБОТКИ”. МУҲАММАД АЛ-ХОРАЗМИЙ НОМИДАГИ ТОШКЕНТ АХБОРОТ ТЕХНОЛОГИЯЛАРИ УНИВЕРСИТЕТИ ҚАРШИ ФИЛИАЛИ, 2020.
18. Qodirov, F. “MASOFAVIY TA‘LIMDA O‘QISHNING QULAYLIKLARI VA KAMSHILIKLARI”. МУҲАММАД АЛ-ХОРАЗМИЙ НОМИДАГИ ТОШКЕНТ АХБОРОТ ТЕХНОЛОГИЯЛАРИ УНИВЕРСИТЕТИ ҚАРШИ ФИЛИАЛИ, 2020.





19. Қодиров, Ф. “ЗАМОНАВИЙ КОМПЬЮТЕР УЙИНЛАРИ ВА УЛАРИНИНГ СИНФЛАНИШИ”. МУХАММАД АЛ-ХОРАЗМИЙ НОМИДАГИ ТОШКЕНТ АХБОРОТ ТЕХНОЛОГИЯЛАРИ УНИВЕРСИТЕТИ ҚАРШИ ФИЛИАЛИ, 2019.
20. Qodirov, F. “YOSHLAR MA’NAVIYATINI YUKSALTIRISHDA MILLIY ONLAYN KИТОВ DO’KONINI ISHLAB CHIQISH VA TADBIQ ETISH”. МУХАММАД АЛ-ХОРАЗМИЙ НОМИДАГИ ТОШКЕНТ АХБОРОТ ТЕХНОЛОГИЯЛАРИ УНИВЕРСИТЕТИ ҚАРШИ ФИЛИАЛИ, 2019.
21. Қодиров, Ф. “ЎУДУДУЛАРДА ТИББИЙ ХИЗМАТЛАРНИ ДАСТУРИЙ ПАКЕТЛАР ЁРДАМИДА ЭЛЕКТРОН ТИББИЙ БАЗАСИНИ ЯРАТИШ”. O‘zbekiston Respublikasi Oliy Va o‘rta Maxsus ta‘lim Vazirligi Namangan Muhandislik-Qurilish Instituti, 2022.
22. Фаррух Қодиров. “АЎОЛИГА ТИББИЙ ХИЗМАТ КЎРСАТИШДАН ОЛИНГАН ДАРОМАД ВА ХАРАЖАТЛАРНИ ИМИТАЦИОН МОДЕЛИ”. " МОЛИYA BOZORINI RIVOJLANTIRISHNING USTUVOR YO'NALISHLARI, ZAMONAVIY TENDENSIYALARI VA ISTIQBOLLARI" mavzusidagi Respublika ilmiy-amaliy konferensiyasi MATERIALLAR TO'PLAMI. 2022/11/5
23. Ф.Э Қодиров, АЎОЛИГА ТИББИЙ ХИЗМАТ КЎРСАТИШДАН ОЛИНГАН ДАРОМАД ВА ХАРАЖАТЛАРНИ ИМИТАЦИОН МОДЕЛИ, TOSHKENT DAVLAT IQTISODIYOT UNIVERSITETI “O‘ZBEKISTON IQTISODIYOTINI RIVOJLANTIRISHNING ILMIY, 922

