

## ELECTRONIC LIBRARY SYSTEM BASED ON QR- CODE TECHNOLOGY AND CREATE SOFTWARE AND HARDWARE SUPPLY

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**Annotation:** This article is about QR code technology. How it works currently, there are opinions and comments on where this technology can be used and its effectiveness. Based on the QR code technology, the QR-bookland mobile application was developed, and the ease of use of this application is described in detail.

**Keywords:** QR code, QR-Bookland, Digital library, CODE\_128.

"Nowadays our country focused on increasing reading skill and the strategies of reading books. You know that great importance is attached to promotion. But many of our children are from books the fact that he is far away and spends a lot of time on social networks - that's all. Surely we are we do not deny the role and importance of the Internet and other modern sources of information.

It is difficult to imagine our life today without the Internet. Given that, The Youth Union of Uzbekistan conducts spiritual propaganda work through the Internet system, including electronic it is necessary to increase reading." Sh.M. Mirziyoyev, President of the Republic of Uzbekistan.

First of all, in this article, in which areas can QR code technology be used, Let's look at the benefits : special shelves consisting of e-books with QR-codes are central streets, are installed in avenues and parks. Such shelves are not only for gardens, but also for large communities, places such as railway stations, airports, hospitals, markets and other such public places installed in crowded places. Amusement parks, recreation within the framework of the "Mobile Library" project special seats with QR codes have been installed on the streets. Cultural recreation young people who came for the release to themselves on the seats turned into electronic book shelves you can easily download and read a sample of your favorite literature on your mobile device they can read books. It doesn't take much. Only desire and mobile just have a phone. The interior of the buses on the routes where students are the most crowded will be turned into a unique library.

In addition, those buses are provided with free Wi-Fi. To read a book Young people who want to do not need to spend too much.

In this QR code, the name of the book and the electronic package of the book will be stored on the mobile device. When the barcode is scanned, the book is downloaded to the mobile device and this book can be read offline. Scan the book again and again

to read it again there is no need. Through this program, the user goes to the library to read the book they want membership or purchase of the book, as well as searching on the Internet they will get rid of the hustle and bustle. QR-book the possibilities of the program are wide. Most in the program view a list of popular books and download and share them with others have a chance.

QR CODE – A bar code consisting of squares with a special matrix that responds quickly was used for the first time in 1994 in the automobile industry in Japan. A dash is computer-readable optical drive that contains information about the attached object labeled. QR code is four standardized encodings for efficient storage of information uses modes (numeric, alphanumeric, byte/binary and kanji); extensions too can be used. The QR code system is faster to read than standard UPC barcodes and became popular outside the automotive industry due to its large storage capacity. The algorithmic process of the program is implemented in the Java programming language it ensures more flexibility of our program and quick operation on mobile devices. Java programming language is one of the most popular programming languages in the enterprise level products (programs) can be created. Our "QR-Bookland" program. It is designed to work in all versions of the Android mobile operating system. Ability to read and generate QR codes and CODE\_128 type barcodes is available. Android — communicators based on the Linux kernel, tablet computers, e-books, digital music equipment, wristwatches, netbooks and smartphones is a portable (network) operating system. Initially, Android Inc. by the company started to be created, which was later bought by Google. Next is Google Open Handset Alliance (OHA) formed the alliance, which is still supporting the platform and more is engaged in development. Android through a library developed by Google allows you to create a Java application that controls the device. Total height of the stand It is 240 cm, and its radius is 60 cm. Placing a total of 160 books with QR codes on the stand possible Used products: fomix, tin, oracle, banner Shape: rectangle, circle, in stand mode Function: rotating, non-rotating.

Another advantage of the program is that it is specially designed for viewing downloaded files is that it has a file manager and a special environment for reading PDF files. Program Easily add downloaded PDF files using the included mini file manager it is possible to read without software. The first version of the QR-bookland program It has the ability to work in Uzbek, Russian and English languages. More will be added in the next versions with the addition of Chinese, Korean, Arabic, French, and Spanish languages planned. QR/BAR codes created in the program and stored in the database the ability to send to social networks through quick sharing functions, its free and the fact that it is free from various advertising content makes the program more widely and quickly popular will help. In conclusion, everyone in our country can use this mobile application a convenient and understandable program for promoting

reading among people aged is considered. For the user to read books through this QR-bookland application does not need to go to the library or buy books. It is enough to teach a special code through the stand and the book you need will be downloaded to your mobile phone. You want it when you are stagnant you can open and read it anywhere, and even share it with others.

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