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MOBILE APP FOR TRACKING CORONAVIRUS STATUS WORLDWIDE

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Анотація
Пандемія COVID-19 швидко поширюється та вона загрожує життю людей, а також порушує багато питань, які стосуються не тільки боротьби з епідемією у вузькому розумінні, але і всього життя суспільства. І саме в таких реаліях людей потрібно інформувати про події, ситуації та останні новини пандемії. Для зручності користування було розроблено інформаційну систему саме у вигляді мобільного додатку.

Ключові слова: covid-19, мобільний додаток, крос-платформа, відслідковування

Abstract
The COVID-19 pandemic is spreading rapidly and threatening people's lives, as well as raising many issues that concern not only the fight against the epidemic in the narrow sense, but also the whole life of society. And it is in such realities that people need to be informed about the events, situations and latest news of the pandemic. For ease of use, an information system was developed in the form of a mobile application.

Keywords: covid-19, mobile application, cross-platform, tracking

Introduction

The situation in the world in connection with the COVID-19 pandemic is challenging the whole society, which is affected by a number of events that are covered by official sources of power and the media.

The media are the main disseminators of information among the population, and therefore they are responsible for the completeness and accuracy of information. However, there are often cases when published publications or information said on the air contains unverified data, which contributes to the distortion (distortion) of the perception of certain phenomena in the minds of people.

There is no doubt that the activity of the media for the principles of information relations has both positive and negative factors, especially in the quarantine period. Often it is inaccurate information that has the greatest impact on the consciousness of the individual, which can lead to panic and uncertainty for each individual and for the state as a whole.

As a scientific and technical solution to the problem of spreading false information about the pandemic, the idea of creating a mobile application was chosen, where users can track all relevant information and statistics taken from the World Health Organization using a convenient and easy-to-use application operation without Internet access. Allowing to track the status of vaccines and the state of it, as well as submit their own data for data-processing and more.

Informatic approach

For this purpose, we've developed an app that does exactly as mentioned. With agreements done by the side of government hospitals, we were able to develop an app that they use to collect patient data and in the works of an algorithm in the form of a chatbot that collects data and responds based on the user's response. The user then

is able to collect a report from the app, showing all the user's data based on their symptom inputs. Certified and approved users will be able to sign up for vaccinations using this app. They can check whether vaccination is available in their city and apply for the first vaccine. Once successfully applied, they can then apply for the second one specific number of days apart. The endpoint uses the hospital's database as a base of all the submitted resources. As new and updated information gets sent to the medical informatic department, the data is immediately uploaded to the app, updating all questionnaires and informing all patients.

The patients have access to their personal help assistant desk, allowing them to consult an available doctor and get live support. This data is then submitted to the world health organization which then updates all news and information networks. This means that with this app, the users data is the base of statistics that we see

Results

With the pandemic waves that have arisen and may continue for an unknown period of time, and with the social distancing and ongoing quarantine, the world's population has faced the risks and dangers of today's environment.

Disinformation from the World Health Organization (WHO) can be singled out as a particular danger, as it provides rather confusing and contradictory information about the world situation and the possible danger to people. Although the population should only receive up-to-date information on the number of cases worldwide, new information from the WHO on the pandemic and the most important information on cases in their hometown, as well as easy and simple access to this information.

The source of information must be transparent, independent of the manipulative influence of the media and be accessible via the Internet. For the convenience of the population one should be able to use everyday communication devices and quickly receive up-to-date information and real feedback from patients.

However, policies prohibiting the distribution of any COVID-19-related software applications that are not approved by the national government or health care provider block information, and small organizations are unable to publish, in particular, mobile applications that disseminate pandemic information. .

Because smartphones are the main communication devices, this ban makes it impossible to use the most convenient way to receive information. This information in itself prevents large enterprise groups from developing applications using the experience of acceptable standards to connect users to the program, receive constant reminders and updates about the pandemic, and analyze health based on personal indicators.

The first section analyzed the development tools and the analysis of architectural templates for the development of mobile applications.

The second section described the development of a mobile application using Firebase and the possible integration of machine learning technologies with Tensorflow to track face masks.

The development of this information technology should not end due to limitations, as modern opportunities for the use of information technology, especially machine learning and artificial intelligence, provide increased efficiency of diagnostic algorithms in medicine. Therefore, the creation of its own system for forecasting the development of epidemic situations on the basis of historical data is a promising area of research and opens new horizons for professionals in the field of information systems and technology.

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