Covid-19 free travel

Technological system for comfortable transportation



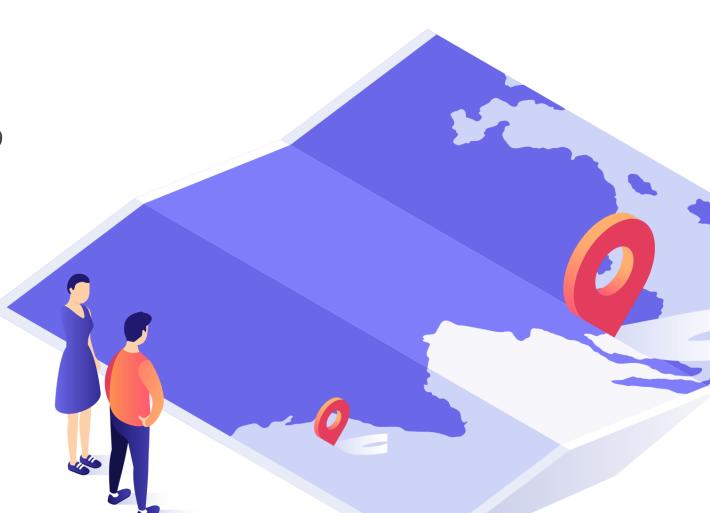
Platform Description

Due to the coronavirus pandemic the borders were closed and travels between Eurasian countries with visa-free regime were significantly limited. Such limitations negatively affect not only integration processes, but also economic development.

To reduce the risk of the coronavirus spreading through cross-border transportation, countries implement certain travel requirements. One of them is the mandatory requirement to have 3-day valid negative COVID-19 test results.

In order to ensure an easy way for citizens to travel from one country to another while following the requirements of both of them, we suggest suggest establishing a "COVID-19 Free Travel" system, would include a net of authorized laboratories and a mechanism to verify test results.

3-day valid COVID-19 test results are required.



Project Design

For pilot implementation

National Departure Component (NDC)

NCD is regulated by a competent authority of the State. It is deployed in the infrastructure in accordance with the national regulation, uses its own or rented data centers, with the authorized body bearing infrastructure rent expenses. NCD maintains a register of national laboratories and accumulates on the national level anonymous test results that include no personal information. For the national results system, NCD detects the minimum value of uniform data for ensuring the interoperability of the information in a framework of the project. It integrates with the LS and the Integration Component. Through the integrational component NCD the country of arrival receives acknowledgement from the laboratories.

Laboratory's software (LS)

The local laboratories system gathers test results of citizens, who are willing to cross the borders between the countries. Software (LS) is developed within the framework of the project and sent to the laboratories included in the National register. LS is deployed in its own or rented data centers, with laboratories bearing the infrastructure rent expenses.

Integration Component

Keeps records of verified laboratories, integrates with the national component of departure and user's mobile application.

The informational flow does not include user's personal information. The Integration Component has an open (authorization-free) automated web-service for verifying results (anonymous information, requested by QR-code of the application). It ensures the business logic behind the processing and use of information provided by the participating countries with regard to the current restrictions. It is deployed in its own or rented data centers with the Eurasian Bank of Development bearing infrastructure renting expenses.

User's Mobile Application

Provides the process of user's registration, informs user about current restrictions and rules in the country of departure and the country of arrival as of the date of the trip. It offers a list of verified laboratories. It provides the User with the information about test results from the Integration Component.



COVID-19 FREE TRAVEL

Use of "Covid-19 free travel" application

1 Download the app.

User's mobile application













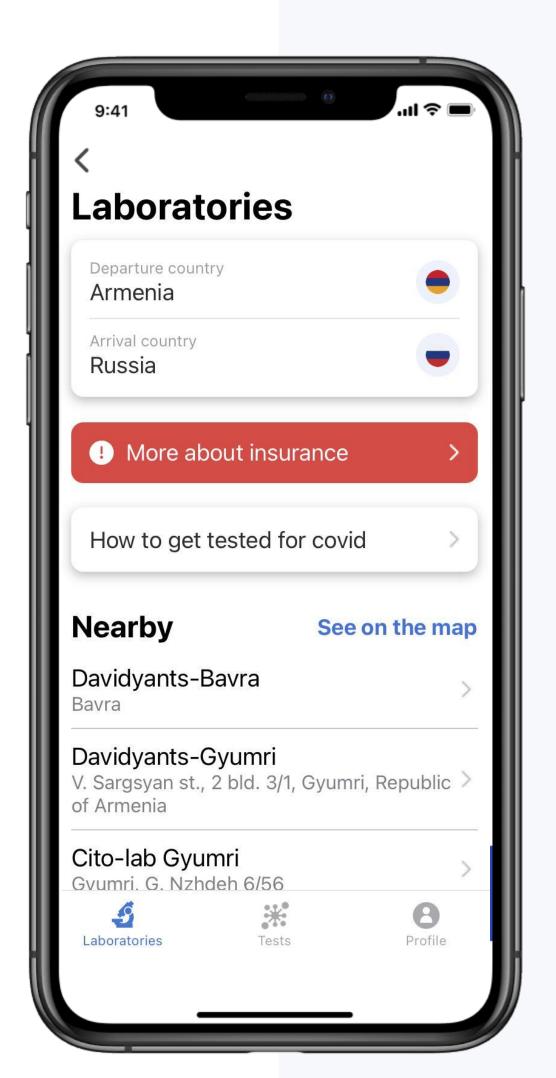




Testing

The application detects a country of departure using geolocation.

User selects a country and a date of arrival.

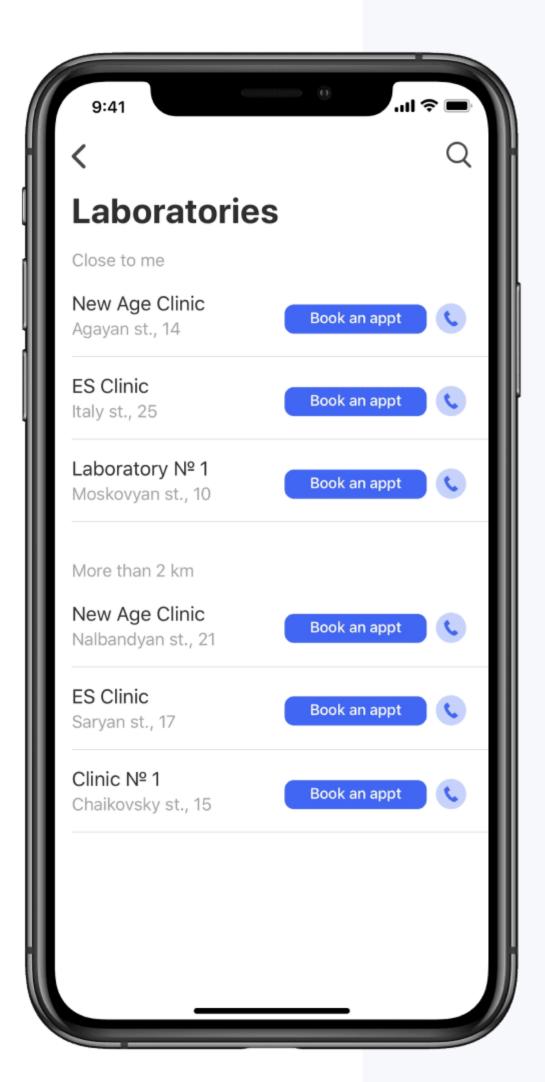


The embedded algorithm suggests laboratories where the PCR testing can be taken.

Testing

User selects their preferrable laboratory from the list suggested in the application and makes an appointment.

User passes a standard process of testing and expects the results to reach his mobile app.



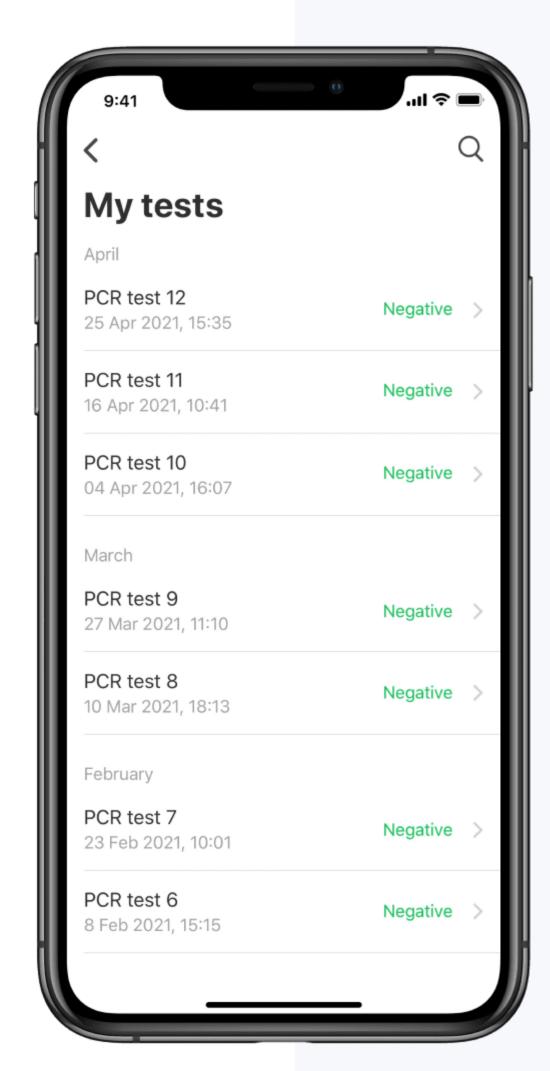
Test results

As soon as the test results are ready, the laboratory uses its software to embed a QR-code of the application in the laboratory certificate issued in accordance with the national legislation and:

sends a certificate to the e-mail address indicated in the registration form. The certificate includes test date and time, name of the testing laboratory, contact information of the laboratory, as well as the QR-code of the application;

gives User, upon their request, the original paper certificate with test results (with the QR-code of the application) issued in accordance with the procedure set out in this document;

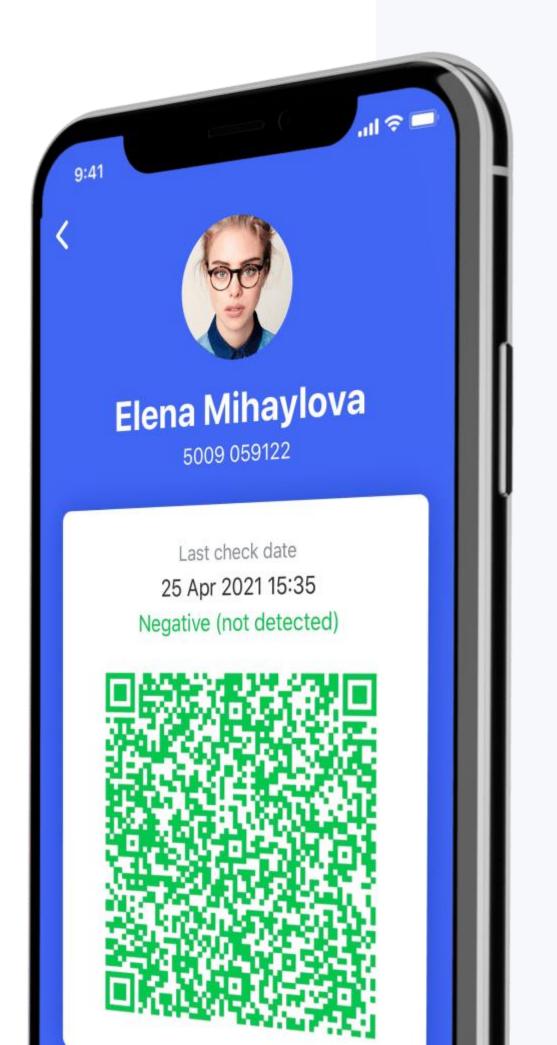
sends anonymous test results (including the QR-code of the application, test date and time, name of the testing laboratory, last 4 digits of User's passport) to the National Component. The National Component saves this anonymous certificate in its database.



Test results

In order to receive anonymous test results in the mobile application, the User selects "Tests". The request goes to the Integration Component and then anonymous test results will be downloading to the user's mobile application (the QR-code of the application is used as an indicator for the request and the answer.

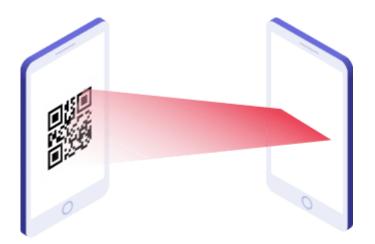
If the results are negative during the validity time of the certificate, the QR-code is colored green. If the results are possible or the certificate is no longer valid, the QR-code is colored red.



Arrival

In the country of arrival, the QR-code color controller in the mobile application of the user decides whether the traveler can be allowed to enter the country: color green means entry is allowed; color red means that the user should act in accordance with the national regulation.

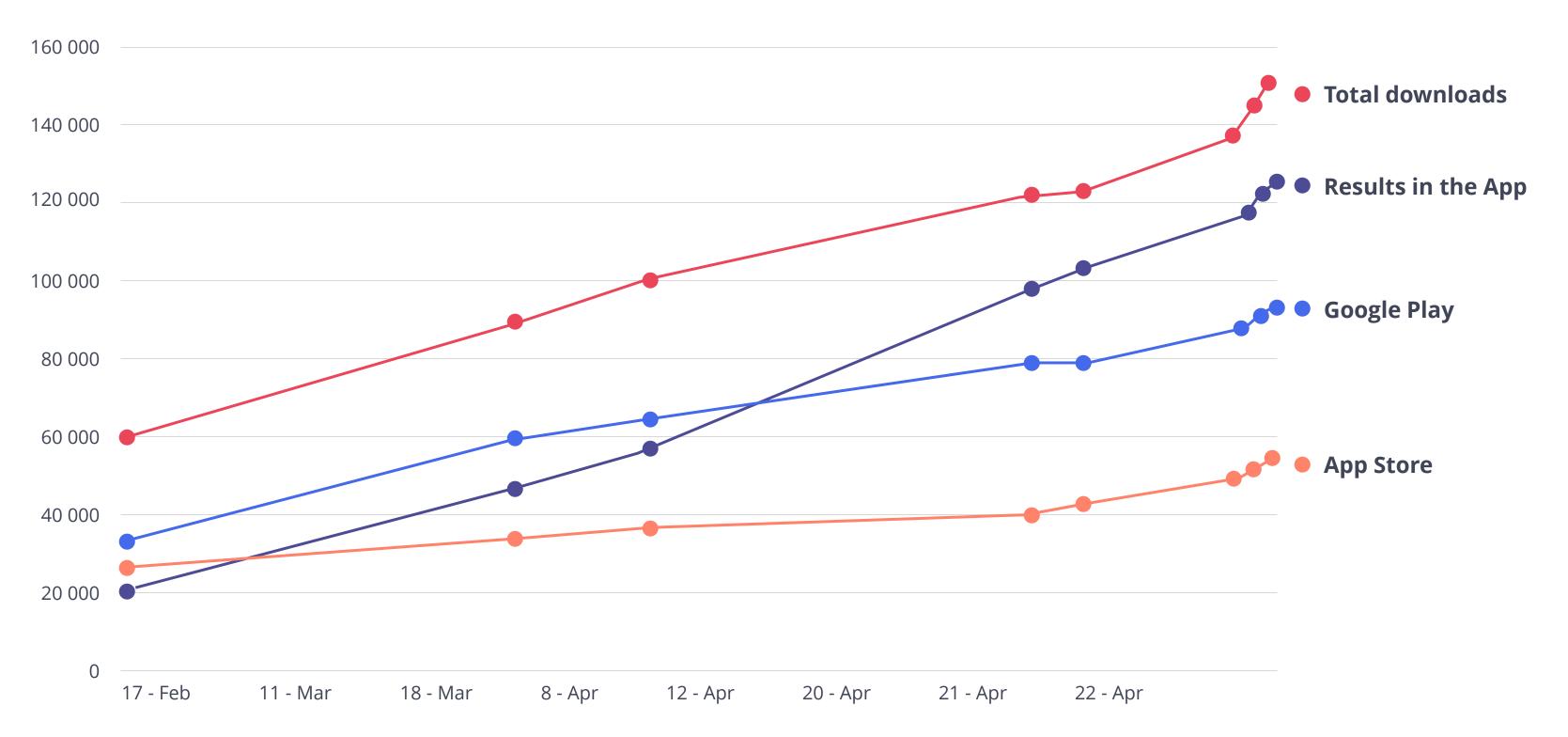
The QR-code and test results can be verified by scanning QR-code via regular mobile applications utilized for this purposes. Test results from user's mobile application are automatically verified against the web-service of the Integration Component.



COVID-19 FREE TRAVEL

Statistics of downloads

and achievement of test results in the application



What are the options of joining the app?

For arriving from Russia:

When crossing the border, the user shows a QR code in the application, the regulatory authorities scan the QR code and confirm the Covid-free status of a person who has arrived.

For travelling to Russia:

A person who plans a travel to Russia receives a QR code in his/her home country from a laboratory verified to join the application. The laboratory can connect using our software.

Or our application can be integrated with the national PCR test results system and receive the results from it. In both cases, non-personalized information is loaded to the app.

Thank you for your attention!