

Секция 3 «Автоматизация исследований»

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AUTOMATION OF THE ACCOUNT OF CARGO TRANSPORTATION

The developed application provides information on upcoming flights, prices, departure and arrival dates and the number of available seats for a particular flight. Users can book and pay for packages. Depending on the needs, the manager has the opportunity to add the number of seats, by replacing the transport or adding a new one. The administrator changes the status of the order, depending on its status.

On the client side the AngularJS JavaScript framework is used to route to the appropriate patterns and controllers. The layout was written using HTML5 and styled using the LESS preprocessor. For the convenience of users, the adaptability of the screen for the phone, tablet and personal computer is implemented with media queries.

On the server side, a REST API is used, implemented on the basis of the JAVA programming language and the Spring MVC JEE application, using Spring Security for authorization and authentication and Hibernate in order to simplify the work with the database.

To convert data transmitted from the client part in JSON format the lightweight GSON library is used.

The server is Apache Tomcat 9. The quality of the information warehouse uses the MySQL Server database.

To control the assembly of the project, the Maven Framework is used. During the build process Maven wraps the database, as well as the application itself in Docker containers, which greatly simplifies and speeds up the deployment process.

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AUTOMATION OF ACCOUNTING OF CLEANING SERVICES

All information is stored in a cloud database called MongoDB. It allows to get simple access to the information. All the testing is performed with Jest framework. All the tests are executed automatically before deployment.

The application has very simple and good for understanding interface. Creating new order involves several stages.

Technologies on the server side are: NoSQL database; JavaScript programming language; Compass NoSQL programming interface; Email library called Nodemailer. Technologies and tools on the client side are: HTML, CSS, JavaScript, React.js, React.js Material UI, Axios.

NoSQL database has a data structure for storing data. The data structure is shown in the figure 1.

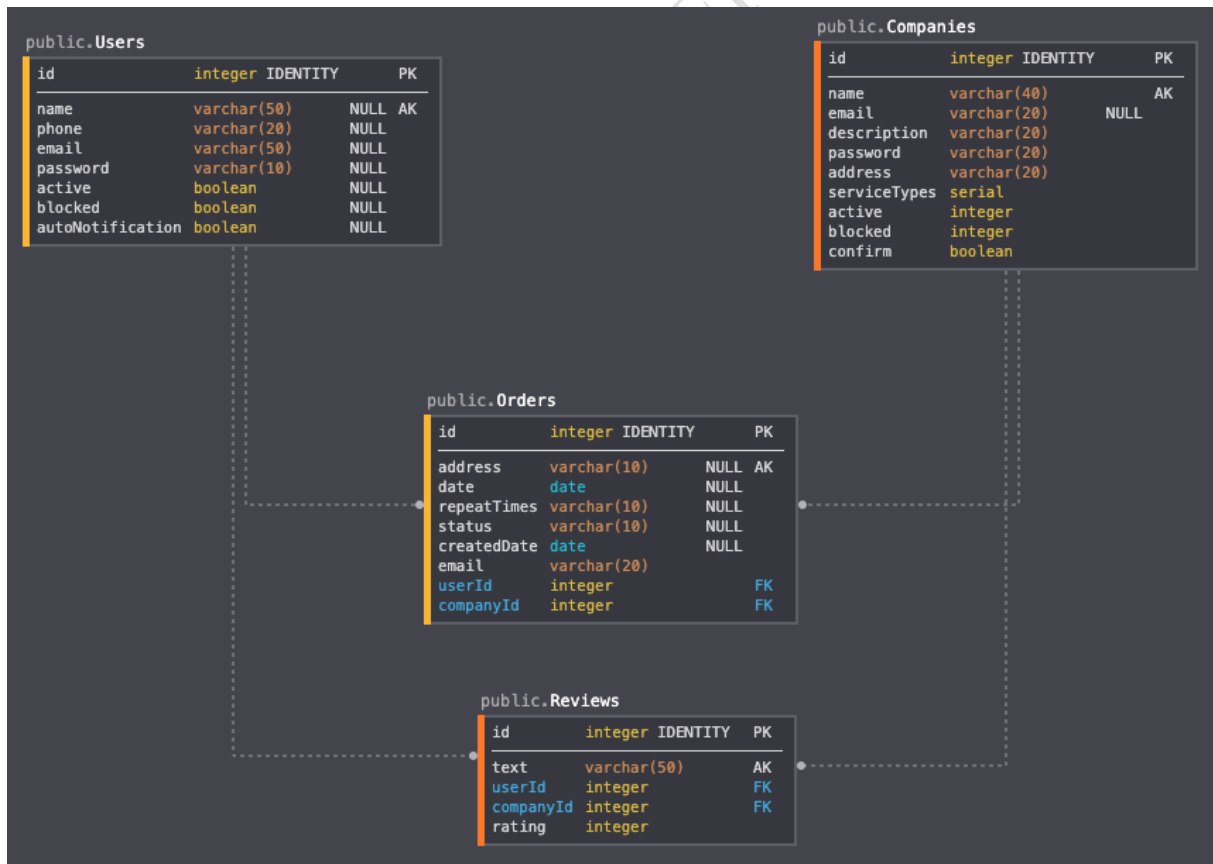


Figure 1 – The NoSQL database data structure

The application was integrated and deployed on the Heroku platform.