

DESIGN OF A MOBILE APPLICATION FOR MONITORING THE CONDITION OF PATIENTS WITH EPILEPSY

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Epilepsy is a fairly common disease these days. Epileptic seizures happen suddenly, but there are precursors that can be noticed in time. The use of fitness bracelets to monitor the condition of patients is quite a rational choice. But modern mobile applications developed by manufacturers of fitness bracelets do not have the necessary functionality. Therefore, the idea arose to create a mobile application that would be able to constantly collect and analyze information about a person's physical activity, send this information to his doctor, and warn the user about a possible attack. The goal of the work is to improve the quality of treatment for people with epilepsy and help them prevent seizures through the development of a mobile application for a fitness bracelet. Deployment diagrams help model the hardware topology of a system. The deployment diagram of the designed application can be seen in Figure 1.

"Android based smartphone" is an Android-based smartphone for the patient. "Client-Side-App" is a component of server rendering of application pages. "Web-socket-client.js" is a component for initializing a web socket connection. "Webpack.js" is a library component for optimizing the project bundle during compilation. "WebServer/LocalServer" is a device or machine rented for deployment. "NodeJS" is a framework component for triangulating a server application. "DataBase Server" - a node is a physically existing element of the system, that is, a database. "Android" is a device with an operating system (android). "Fitness Tracker" is a device in the form of a fitness bracelet that can be connected via Bluetooth connection.

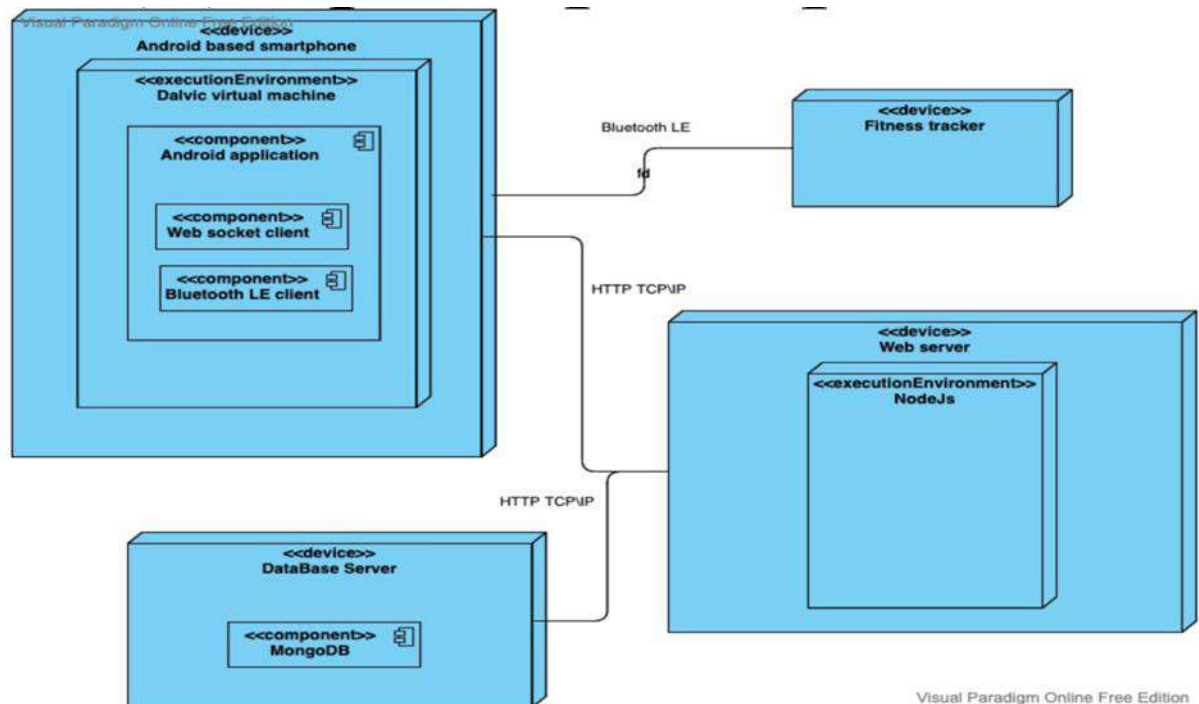


Figure 1 – Deployment diagram