A responsive HTML5 Application using a NodeJS REST API

Client application

Mobile support

NodeJS REST API

Server
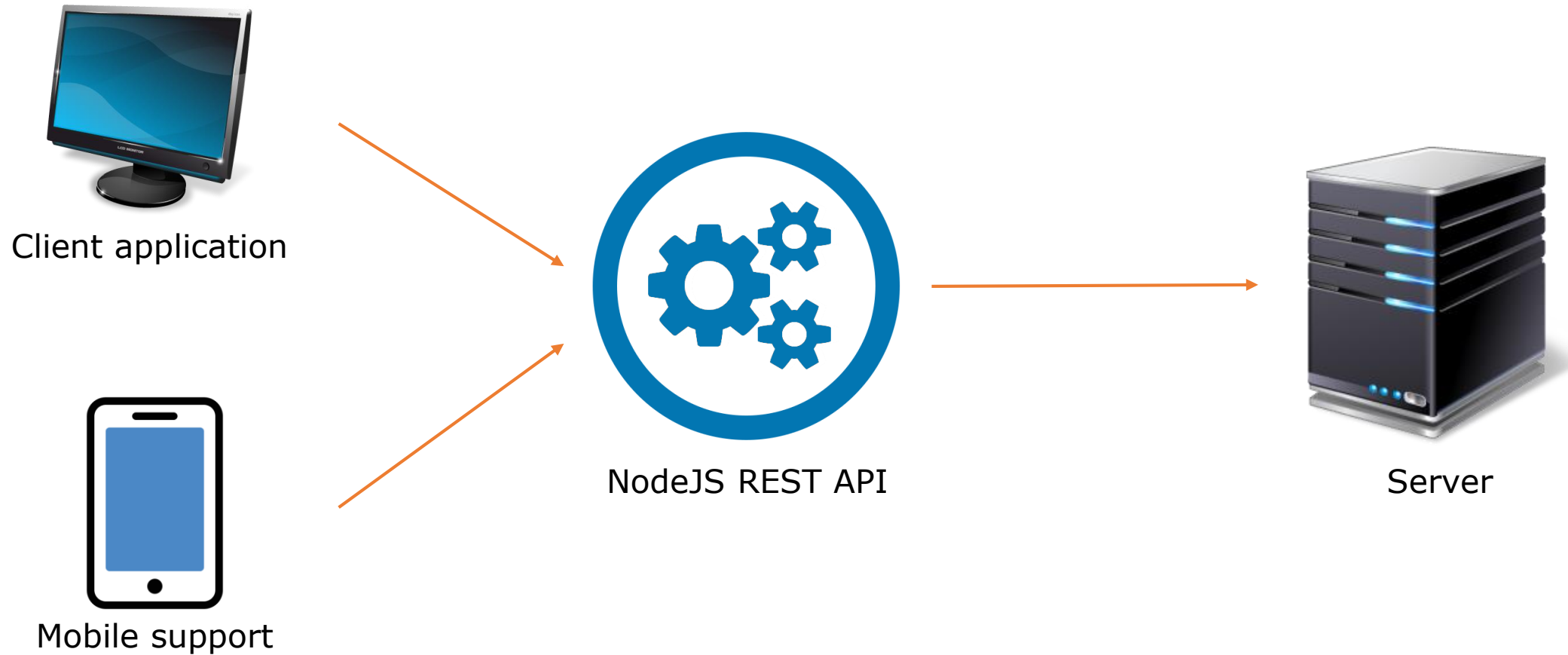
Using a client or mobile application, or only the API with tools like Postman, a user can connect and modify data in a remote database. Using IndexedDB, which is a local Database within the client's web browser, the client application can persist changes even if the remote server's database can't be reached. Upon reconnection, the client application synchronises both databases.
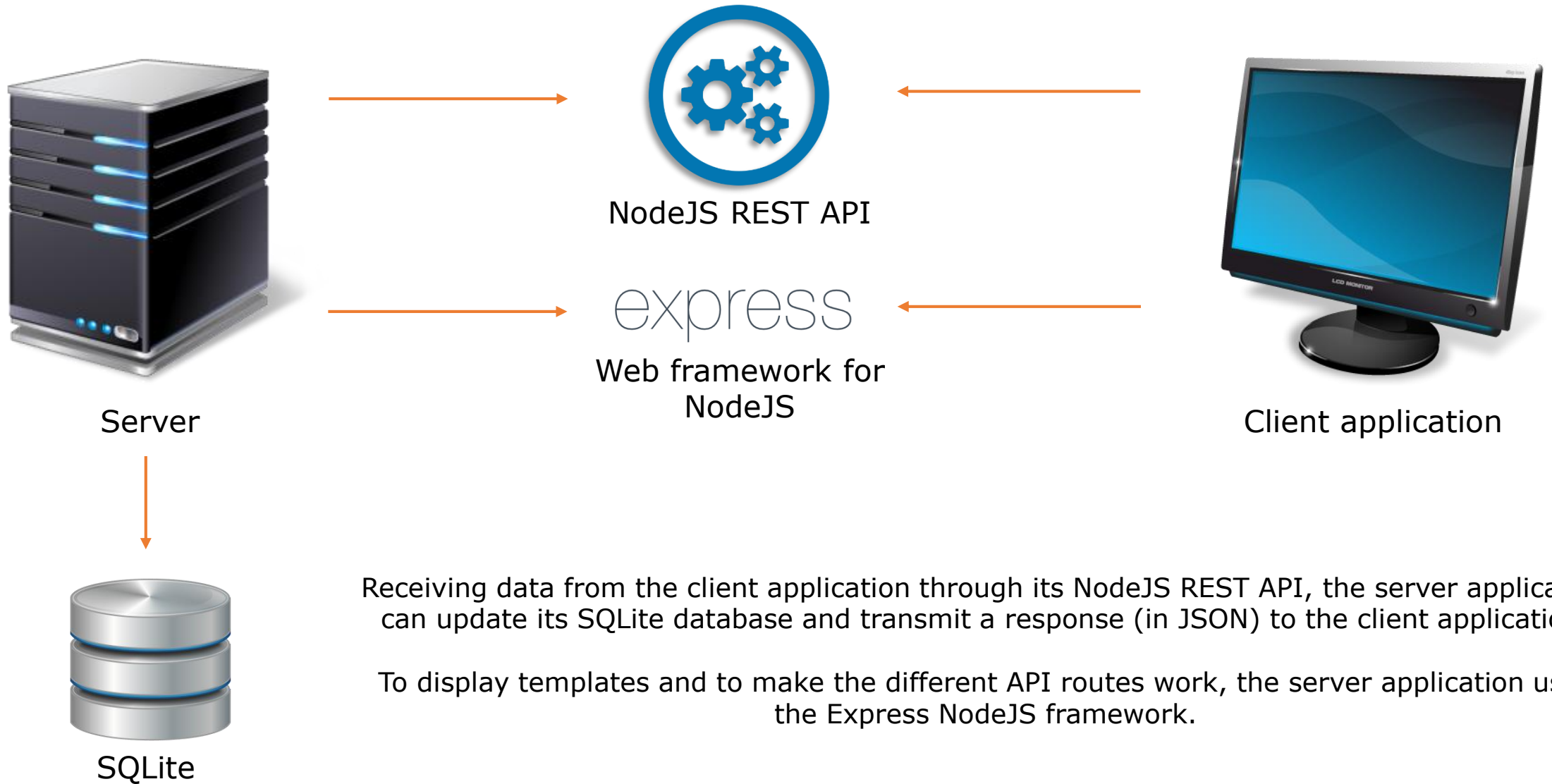
Client application

Vue.js

NodeJS REST API

Server
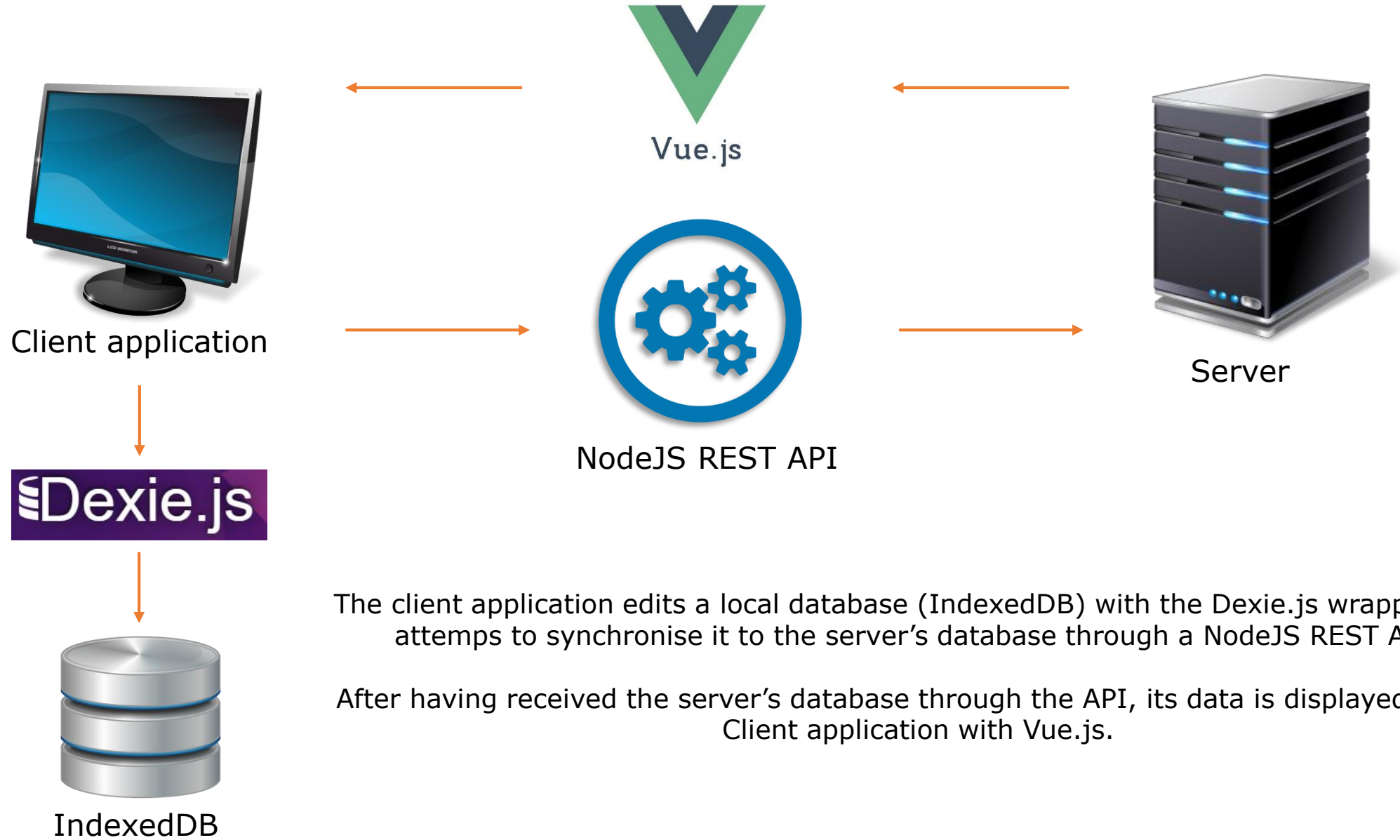
Dexie.js

IndexedDB

The client application edits a local database (IndexedDB) with the Dexie.js wrapper then attemps to synchronise it to the server's database through a NodeJS REST API.

After having received the server's database through the API, its data is displayed on the Client application with Vue.js.

NodeJS REST API

express

Web framework for
NodeJS

Server

Client application

SQLite

Receiving data from the client application through its NodeJS REST API, the server application can update its SQLite database and transmit a response (in JSON) to the client application.

To display templates and to make the different API routes work, the server application uses the Express NodeJS framework.

Languages:

      JavaScript   https://en.wikipedia.org/wiki/JavaScript

      HTML   https://en.wikipedia.org/wiki/Hypertext_Markup_Language

Environement:

      NodeJS   https://nodejs.org/en/

Databases:

      SQLite   https://www.sqlite.org/

      IndexedDB   https://en.wikipedia.org/wiki/Indexed_Database_API

Wrapper:

      Dexie.js   http://dexie.org/

Frameworks:

      Vue.js   https://vuejs.org/

      Express   http://expressjs.com/