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#Report on the architecture of the app

Caching is a technique that stores a copy of a given resource and serves it back when requested. When a user requests a resource, a cached copy of it is delivered. If a web cache contains the requested resource, it intercepts the request and returns a copy of the stored resource instead of redownloading it. The architecture that was used in this prototype was the Server-side caching.

Server-side caching refers to the temporary storing of web files and data on the origin server for reuse. On the first visit to a website, when a user requests a page, the website automatically requests information from the server. The data was saved from the API Server to the database and then retrieved later. It works in different ways but specifically in this prototype there were distinct processes. The data was saved from the API Server to the database and then retrieved later. Firstly, the data from the API server was stored to the database server. Then the data was sent to the console with php and then was displayed to the main page with the JavaScript codes. There are many advantages and disadvantages of this architecture.

Advantages:

- There will be no issue while accessing the data as it will already be stored in the local database.
- As the network is decentralized, even if the webserver is down the still can be accessed up to some point.
- The server is not influenced by any external factors so regular monitoring is not mandatory.
- The data can be accessed faster, easily and can be reused.

Disadvantages:

- There may be stale data as the page might not update every time.
- The caching concept may lead to complexity in projects.
- The data privacy is compromised as it is retrieved and stored at different channels.
- The architecture is not highly scalable as the local database may have limited functionality.