

Concepts Notes:

2) Prisma + MongoDB

- Prisma is an ORM - object Relation mapping.
- It creates a bridge between server and database.
- It helps ~~you~~ to save, get and delete data easily without writing complex database code.
- MongoDB is a data storing place where all of the quotes are saved.
- It's a NoSQL database, we don't need to create table, columns like SQL databases.

Imagine, our quotes are stored in library (MongoDB) and we don't understand library's language.

Here, Prisma becomes a medium to talk to library for storing, accessing or deleting data.

We just write JS code to fetch or store data from database (MongoDB).

2) Express

It is a web framework for Node.js.

- while we are building a website:

without Express:

- we'd have to do everything by ourselves - set up servers, handle requests, deals with routes etc.

With Express:

- It gives you us tools to build website faster helping us. to set up servers, handling routes etc.

Express listens to the ~~front~~ user request sent from frontend and do accordingly.

If user asks for quotes, it returns the quotes and if user requests to save quotes, it saves them.

3) API routes

They are message ~~to~~ doors between frontend and backend.

GET /api/quotes → asking backend to send the quotes. uses fetch().

POST /api/quotes → giving backend ~~to~~ quotes to save.

Adding the quotes in Mongo DB via prism.

4) HTML + Javascript = frontend

Frontend is the part of application running in browser and interact directly to the users.

It is built using HTML + Javascript.

HTML provides an structure to the page.

```
<div id = "quoteslist" > </div>
```

This means reserving space to display list of quotes.

We ~~not~~ write Javascript code to talk to the backend and show the quotes.

```
fetch( ... )
```

```
  .then(response => response.json())
```

```
  .then(data => {
```

```
    // quotes
```

```
  });
```

here,

1) calls the backend

2) waits for reply

3) Displays them on the page.

5) connecting Backend and frontend

⇒ This is a core concept in full-stack development.

Backend (Express + Prisma + MongoDB) manages the data.

Frontend (HTML + JavaScript) displays the data to users.

Backend and frontend communicate through HTTP requests.

- Frontend sends a request to the backend and backend processes it and sends a response (in JSON format)
- JavaScript receives the response and displays it in the browser.