

Notes for Assignment Submission – BeyondChats

Candidate Name: Md Akram

Role: Assignment Submission

Tech Stack Known: MERN Stack (MongoDB, Express.js, React.js, Node.js)

Overview

This notes file is written to **honestly explain my knowledge, learning approach, and work done** for the BeyondChats assignment.

I have **clearly mentioned everything I know and attempted** for this assignment, and all related details are also documented properly in the **README.md** file of the GitHub repository.

Phase 1 – Laravel & PHP (Moderate Difficulty)

- To be completely honest, **I do not have prior experience with PHP or the Laravel framework.**
 - I am mainly experienced in **Node.js with Express.js** and understand how **CRUD operations work using MongoDB.**
 - I know how backend APIs work conceptually:
 - Request handling from client to server
 - Database operations (Create, Read, Update, Delete)
 - API response flow
 - For this assignment:
 - **I studied and explored how Laravel works**, its folder structure, routing, controllers, and models.
 - I tried to understand how CRUD APIs are implemented in Laravel and how data is stored in a database.
 - This phase helped me **learn the fundamentals of Laravel**, even though I am still in the learning stage.
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Phase 2 – Node.js + LLM Integration (Very Difficult)

- I am **comfortable working with Node.js and Express.js.**
- I have **hands-on experience integrating LLM APIs** from backend to frontend.
- I have already worked on the **Google Gemini API** in my [AI-powered DSA Chatbot project](#).
- I understand and have experience with:
 - Calling external APIs from Node.js
 - Handling API responses

- Processing and transforming data
 - Sending processed data to frontend applications
 - Conceptually, I understand:
 - Fetching articles from a backend API
 - Searching content programmatically
 - Scraping article content
 - Using an LLM API to rewrite or enhance content
 - Publishing updated content back using APIs
 - This phase aligns closely with my **existing AI + backend experience**.
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Phase 3 – React.js Frontend (Very Easy)

- I have **strong knowledge of React.js**.
 - I can build:
 - Dynamic user interfaces
 - Responsive layouts
 - API-driven components
 - I understand how to:
 - Fetch data from backend APIs
 - Display original and updated articles
 - Create a clean and professional UI
 - This phase was **very familiar and comfortable** for me.
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Overall Experience

- I have **2 years of hands-on experience in MERN stack web development**.
 - My strengths include:
 - React.js (frontend development)
 - Node.js with Express.js (backend APIs)
 - MongoDB (CRUD operations)
 - AI/LLM API integration
 - Laravel & PHP are **new technologies for me**, but I am actively learning and improving.
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Documentation & Repository

- I have **clearly mentioned all implementation details, limitations, and learning points** in the `README.md` file.
- The repository contains:

- Setup instructions
 - Architecture/data flow explanation
 - Information about what is completed and what is partially implemented
 - I have followed the submission guidelines honestly and transparently.
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Final Note

This submission reflects:

- My **current skill set**
- My **learning mindset**
- My **problem-solving approach**
- My **willingness to learn new technologies quickly**

Thank you for reviewing my assignment.