**SUMMARY**

**Full-Stack application** is like a restaurant, front-end like customer see (menu, tables, decorations), While the Back-end is the kitchen where cooking happens. Then APIs(Application Programming Interface) is like a waiters to carrying the orders to the kitchen and bringing food back to customers. The Database is the pantry storing the ingredients.

**FRONT-END** this is everything the user sees and interacts with. It’s built to be easy to use, visually appealing, and functional on different devices (phones, tablets, desktops).

HTML – The “skeleton” of the webpage.

CSS – The “clothes and style” of the page.

JavaScript – The “movement and brain” of the page.

**BACK-END** The back-end is what makes the app actually work behind the scenes. Users don’t see it, but it’s doing the heavy processing data, applying rules, and making sure everything runs smoothly.

LANGUAGES- Python, Java, PHP, Node js.

**DATABASE** Store, organize, and retrieve data.

SQL Databases – Organized like spreadsheets with tables and rows (MySQL, PostgreSQL).

NoSQL Databases – Flexible, document graph key-value based (e.g., MongoDB).

**APIs (Application Programming Interfaces)** Middle layer that allows the front-end to communicate with the back-end.

Example when you click “Submit” on a form, the API carries your info to the server, tells the back-end what to do, and brings the result back to your screen, just like a waiter delivering orders.