Part – 3 Applied Case Study

A. Require Breakdown

- HTML
  - ❖ Used to build the basic structure of the website pages like Home, Contact, order Form.

  It defines headings, forms, buttons, and overall layout.

- CSS :
  - ❖ Used to style the website like colors, fonts, spacing, and responsiveness.

   It makes the laundry website clean and user-friendly.

- JS
  - ❖ Used for interactive features like validating customer forms, updating order status on the dashboard, and sending API calls to the backend.

- Node.js:
  - ❖ It is for the backend because it handles API requests efficiently, works well with JavaScript, and is good for small digital systems.
  - ❖ It helps store and fetch orders from the database.

- Python:
  - ❖ Python can be used for the AI chatbot logic.
  - ❖ It's easy to integrate machine learning/FAQ bots using Python libraries.

- Database (PostgreSQL):
  - ❖ PostgreSQL (or Postgres) is a powerful, open-source Database system.
  - ❖ Used for customer records, and tracking data..

- APIs
  - ❖ APIs connect the website to the backend.
  - ❖ Website → API→ Database (store orders)
  - ❖ Dashboard → API→ fetch order list

- Cloud Hosting:
  - ❖ Use services like AWS, Azure, GCP to deploy the website and backend.
  - ❖ Cloud hosting ensures the site is available online and can scale when more customers use it.

- AI Chabot:
  - ❖ Use ChatGPT API, or BotPress to create a simple FAQ bot.
  - ❖ It answers common questions like pricing, delivery time, and services..

B. **Simple System Diagram (EcoClean Laundry – Digital Transformation)**