

# Frameworks & Technologies I'm Familiar With

- **Frontend:** HTML5, CSS3 (Flexbox, Grid, Animations, Pseudo-selectors), JavaScript (ES6+), React.js, Bootstrap, TailwindCSS
- **Backend:** Node.js, Express.js, Django, Flask
- **Databases:** MySQL, MongoDB, PostgreSQL
- **Other Tools & Tech:** REST APIs, GraphQL, WebSockets, JWT Authentication, Git/GitHub, Docker

## 1. HRIDYAVAYU Smart Inhaler Portal

### Problem Statement:

Patients with respiratory diseases often fail to track their inhaler usage properly, leading to missed doses and poor treatment adherence. Doctors lack real-time insights into patient inhaler usage patterns.

### Solution:

A **web portal** for HRIDYAVAYU Smart Inhaler that collects patient inhaler data, visualizes treatment adherence, and allows doctors to monitor patient progress remotely.

### Ideology Used:

- **Frontend:** React.js for a responsive, interactive dashboard.
- **Backend:** Node.js + Express.js for RESTful APIs to fetch device data.
- **Database:** **SQLite** to store patient records, device logs, and usage data. SQLite was chosen for its lightweight nature, ease of integration, and suitability for projects with moderate-scale data.
- **Charts:** Chart.js/D3.js to visualize inhaler usage trends and missed doses.
- **Authentication:** JWT-based login system for doctors and patients.

### Efficient Code Highlight:

- Used **SQLite indexing** on columns like `patient_id` and `device_id` for faster retrieval of usage logs.
- Implemented **lazy loading in React** for charts and reports so that only visible data loads initially, improving performance.

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## 2. Team Garvit Website

### Problem Statement:

Team Garvit (a student innovation/technical team) needed an official website to showcase their achievements, projects, sponsors, and attract new talent/support.

### Solution:

A dynamic **portfolio-style website** that highlights the team's vision, projects, competitions, and updates.

### Ideology Used:

- **Frontend:** HTML5, CSS3, JavaScript (with responsive design principles).
- Used **Bootstrap/Tailwind** to speed up design and ensure mobile-first responsiveness.
- Optimized SEO with meta tags and structured schema for better online visibility.
- Integrated contact forms with email notifications.