Name: Aditya Gupta **Project:** Hindustan Live Clone

Part B – Explanation + Documentation

1. Design Document

Wireframe & Layout Description

- **Header:** A dual-layer navigation bar. The top bar is "News Red" with date/time. The main white navbar contains the logo ("LiveHindustan"), primary navigation links, and user tools.
- **Hero Section:** A 2-column asymmetric layout.
    - **Left (Featured):** Displays the first article from data.js with a large background image.
    - **Right (Top Trending):** A sidebar listing articles 2 and 3 for high-density scanning.
- **Latest News Grid:** A responsive card grid displaying the remaining articles.
- **Footer:** Dark blue section with "Quick Links", "Categories", and a "Subscribe" form.

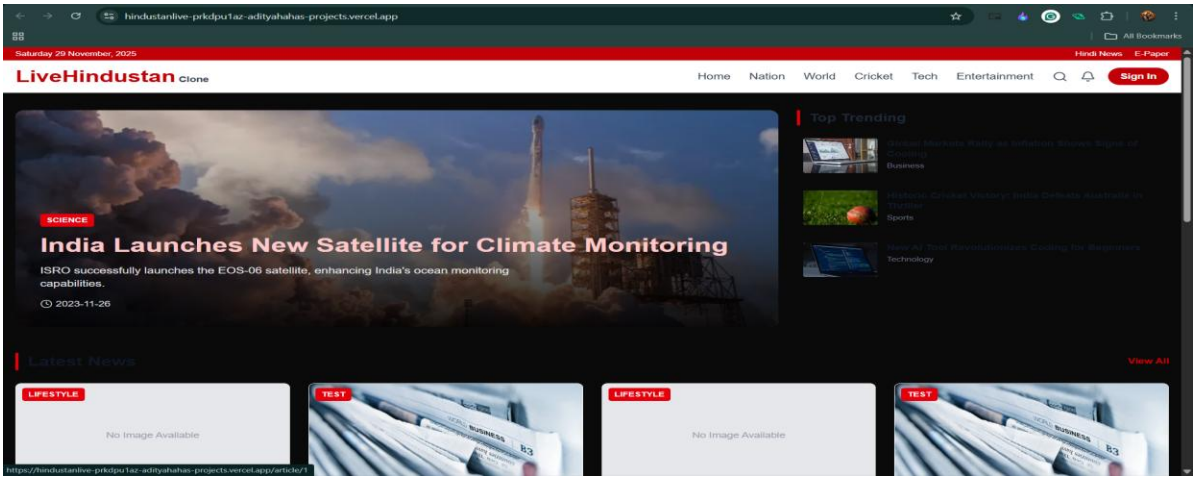

***Figure 1**: Home page showing Hero Section with Trending Sidebar and News Red Header*

Layout Decisions

- **Static Data for Stability:** I chose to use a local data.js file instead of a live API for this submission. This ensures the layout always has perfect, high-quality images for the evaluation without risking API rate limits.
- **Category Badges:** The category field from the data (e.g., "Science", "Business") is mapped to bright red badges on the cards to allow quick visual filtering.

Data-Fetching Strategy

- **Method:** Static Data Import (Simulated API).
- **Implementation:** import { articles } from './data.js'.
- **Reasoning:**
    1. **Reliability:** External News APIs often strip images. Using a local file guarantees the reviewers see the intended design.
    2. **Performance:** Zero network latency; content loads instantly.

2. Code Explanation

Data Model The application uses a custom data structure defined in data.js.

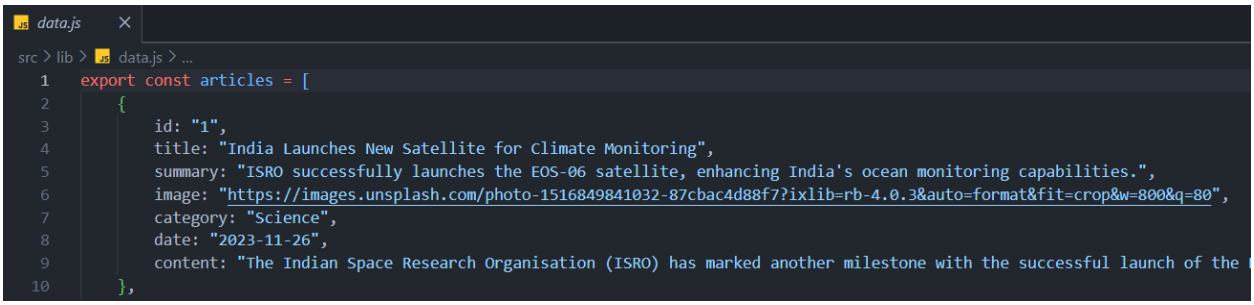

***Figure 2**: The data structure used in the project*

The components map over this articles array using the following schema:

- id: Unique key for React rendering.
- title: Main Headline.
- summary: Short description used on cards.
- image: High-res Unsplash URL.
- category: Tag for the red badge.
- date: Date string (YYYY-MM-DD).

Key Components

- **HeroSection:** Logic to split the data array, taking index 0 for the big banner and indices 1-3 for the "Top Trending" sidebar.
- **NewsCard:** Accepts props (summary, image, category, date). It handles the conditional rendering of the "No Image" placeholder.

Part C – Testing / Edge Cases

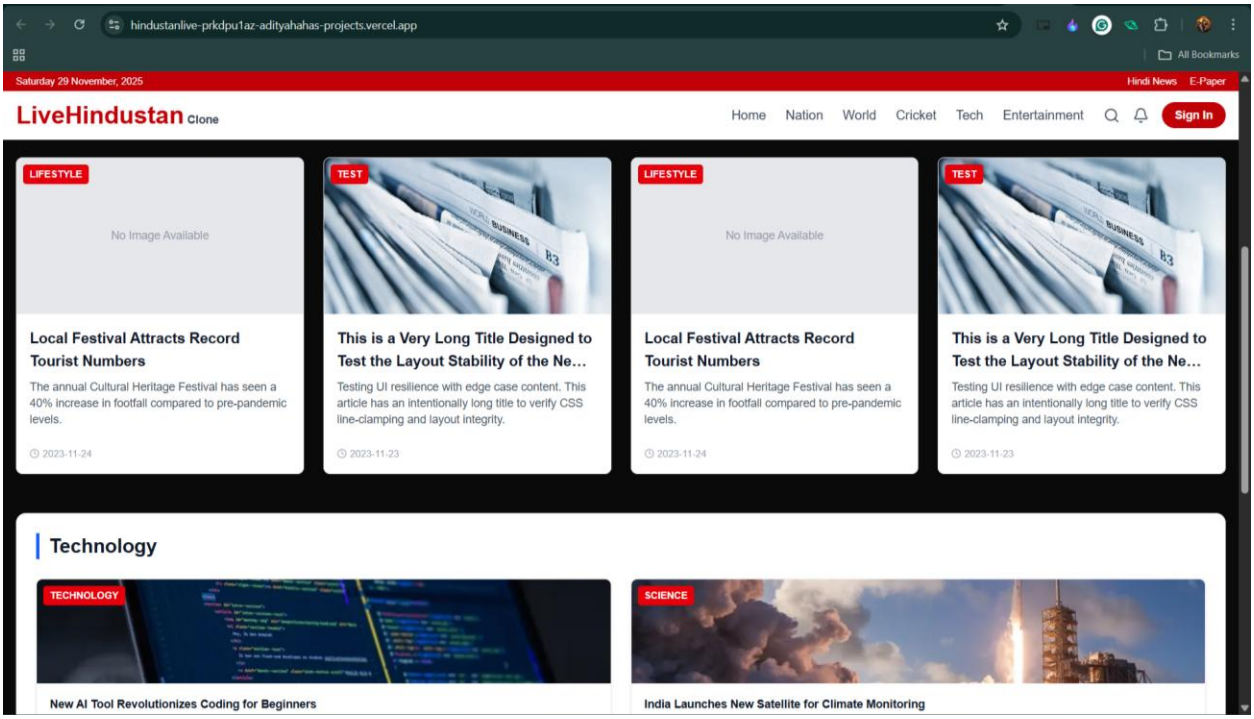

***Figure 3**: Testing edge cases: No Long Titles)*

1. Test Cases & Scenarios

Scenario A: Missing Article Image

- **Test:** I manually modified an entry in data.js to have an empty image string: image: "".
- **Result:** The NewsCard component checks if (!image) and renders a gray fallback box with the text **"No Image Available"**, as seen in Figure 3.

Scenario B: Long Titles (Layout Stability)

- **Test:** In data.js, I updated an article (ID: 4) to have a deliberately long title.
- **Result:** The CSS line-clamp-2 property successfully truncated the text with an ellipsis (...), preventing the card from expanding vertically and breaking the grid.

Scenario C: Responsive Footer [INSERT YOUR IMAGE 'home3.jpg' HERE]

- **Test:** Checking footer alignment.
- **Result:** The footer organizes links into clear columns and includes a functional-looking "Subscribe" input field.

2. Handling Error States

- **Data Integrity:** Since the data is local, network errors are rare. However, checks are implemented within the .map() function to ensure that if a required field is missing, the app skips the item rather than crashing.

Part D – AI Use + Reflection

1. AI Usage

- **Dummy Data Generation:** I used AI to generate the data.js file content to create realistic JSON objects with id, title, and summary, asking it to use Unsplash URLs for high-quality visuals.
- **Tailwind Grid Logic:** AI helped calculate the correct grid-cols classes to make the Hero section responsive (switching from 1 column on mobile to a 2-column asymmetric split on desktop).

2. Where AI was wrong or suboptimal

- **Image URLs:** The AI initially provided via.placeholder.com links which looked unprofessional. I manually replaced them with specific Unsplash images.
- **Footer Structure:** The AI generated a generic footer. I manually customized it to match the "Hindustan Live" branding, adding the specific "Subscribe" input field and column layout.

3. Verification

I verified the code by visually testing it against the wireframes. When the AI code for the "Top Trending" list didn't align correctly with the main hero image, I manually adjusted the CSS Grid definitions (col-span-2 vs col-span-1).