**Phase 3-> Design**

The **Design** phase focuses on creating a blueprint for the application’s structure and user interface. It translates the documented requirements into visual and technical specifications, ensuring usability and consistency across the system. For SkyLens, both UI design and system architecture were carefully planned to deliver a smooth and informative user experience.

**UI Design**

User Interface design emphasizes clarity, responsiveness, and seamless navigation. A fixed navigation bar appears on all pages, allowing users to move between Home, Search, Alerts, Moon Phases, and the 10-Day Forecast.

1. **projectfinal.html** serves as the home page, displaying daily weather updates in a clean, centered layout with background visuals for aesthetic appeal.
2. **searchfinal.html** provides a search bar where users can enter a city name and view real-time weather data dynamically.
3. **alertsfinal.html** is designed to clearly present weather alerts such as storms, heatwaves, or flood warnings using bold headings and alert boxes.
4. **moonfinal.html** visualizes the current moon phase, using both imagery and descriptions to create an engaging lunar experience.
5. **tendayfinal.html** displays the 10-day weather forecast in a tabular or card format with icons, dates, and temperature details.

**System Architecture**

The system uses **HTML, CSS, and JavaScript** for the front end, responsible for layout, interactivity, and API integration. The weather and moon data are fetched using client-side JavaScript. Though this project is mostly front-end focused, a backend could be built using **Node.js or Python** for enhanced data handling or security in the future.

**Files Categorized**

Each file plays a distinct role in the design:

1. projectfinal.html: Home page
2. searchfinal.html: Weather search page
3. alertsfinal.html: Alerts display
4. moonfinal.html: Moon phase viewer
5. tendayfinal.html: 10-day forecast view

This design ensures a cohesive and functional weather app experience.