Southern Skin Cancer Treatment Center of America

UV Index Chart Website Development
Conceptual Design

1. Project Overview

The Southern Skin Cancer Treatment Center of America is developing a UV Index Chart website to help patients manage their daily UV exposure. The website will show UV index forecasts for any U.S. location, allowing patients to plan their activities safely.

2. Design Goals

- Functionality First: Simple and reliable interface.

- Ease of Use: Patients can input a city or zip code to get UV data.

- National Accessibility: Work for any city or zip code across the U.S.

- UV Information: Show hourly UV levels across each day, not just daily averages.

- Historical and Forecasted Data: Display the past 5 days and next 5 days of UV exposure.

- Visualization: Use clean and readable charts to show UV trends.

3. Key Features

- Search Input:
    - City name or zip code entry field.
    - Submit button to fetch UV data.
- UV Data Display:
    - Current location and date.
    - The past 5 days of UV exposure by hour.
    - The next 5 days of UV forecast by hour.
- Chart Integration:
    - Graph showing UV index through the day.
    - Separate charts for past and forecasted days.
    - Ability to go between past and future views.
- Responsive Messages:
    - Feedback if a location is not found.

4. Technology Stack

- Frontend:
    - HTML, CSS, and JavaScript.
- API:
    - Open-Meteo UV Forecast API for live and historical data.
- Charting Library:
    - Chart.js for visual representation of UV levels.

5. Conceptual Wireframe

Header:

- Southern Skin Cancer Treatment Center

- Page title: UV Index Chart

Input Section:

- Input field: Enter City or Zip Code

- Submit button

Main Content:

- Location name and date range

- Two tabs:

    - Past 5 days UV data chart

    - Next 5 days UV forecast chart

6. User Interaction Flow

1. Patient opens website.

2. Patients enter the city name or zip code.

3. System gets UV data from Open-Meteo API.

4. Charts display:

    - UV exposure trends for the past 5 days.

    - UV forecasts for the next 5 days.

5. Patients will use the data to plan outdoor activities safely.

7. Future Enhancements

- Save favorite cities and locations.
- Personalized alerts.
- Mobile friendly version.
- Daily tips based on forecast.