PROJECT ANALYSIS AND DESIGN
UV INDEX CHART TOOL FOR PATIENTS

SOUTHERN SKIN CANCER TREATMENT CENTERS OF AMERICA
123 MAIN STREET
DALLAS, TX 00000

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INTRODUCTION

This project analysis and design document is to provide a detailed plan for the UV Index Chart Tool project. It details the analysis, design, and proposed implementation of an integrated tool that will help patients of Southern Skin Cancer Treatment Centers of America to track their UV exposure in support of their respective treatment plans. The UV Index Chart Tool will be integrated into the company's existing patient portal website. The tool will allow patients to input a city and view UV index data for the previous five days and the upcoming five days, totaling ten days of UV index information. Data will be retrieved from openmeteo.com's API.

SYSTEM OVERVIEW AND OBJECTIVES

The objectives of the UV Index Chart Tool are to provide patients with a user-friendly tool to track their UV exposure and ideally integrate that information into their patient portal to complement their treatment plans.

The UV Index Chart Tool will be available on the Southern Skin Cancer Treatment Centers of America website. It will enable location-specific UV tracking to all patients with the input of a city or zip code by the user. The intention is to simplify patient tracking of UV exposure to improve patient outcomes.

SYSTEM REQUIREMENTS

Functional Requirements:

- The system will prompt the user to input a city name or zip code.
- The system will retrieve the UV index data for that location via the openmeteo.com API.
- The system will display the five previous days and five future days of UV indices.
- The system will be accessible from Southern Skin Cancer Treatment Centers of America's website and will be integrated into the patient portal.

Non-Functional Requirements:

- The tool should be intuitive and easy to use for patients.
- The tool should not store any patient information or records.
- The tool should function on various web browsers.
- The tool should perform efficiently to return UV indices (within three seconds).

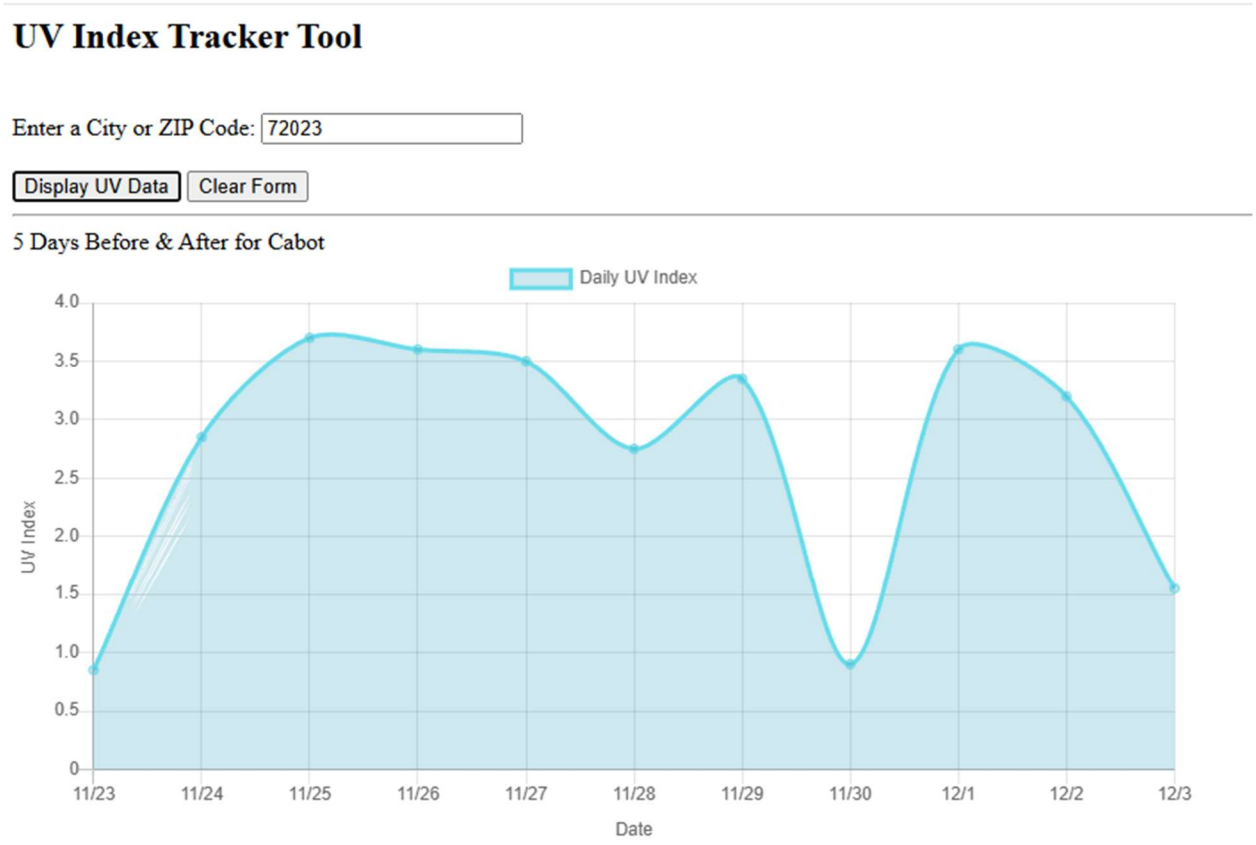
SYSTEM ARCHITECTURE AND DESIGN

The system architecture will be a client-side web application utilizing the following model:

- Frontend: HTML5, CSS, and JavaScript.
- API: openmeteo.com
- Chart Display: Chart.js.
- Deployment/Implementation: Integrated into patient portal on organization's website.

The system interface design will include:

- Box for city or zip code input.
- “Find UV Index” button.
- Line chart displaying UV indices output.



Testing Strategy

The testing strategy will include validating the JavaScript functions for the API calls and chart display. Ensure the data flows correctly from openmeteo.com to the chart and displays correctly. Confirm the tool is properly integrated and functioning within the host website and patient portal.

Deployment/Implementation Plan

- Design the user interface.
- Develop the code using HTML5, CSS, and JavaScript.
- Integrate the API (openmeteo.com).
- Conduct validation and testing for errors. Correct code if necessary.
- Train employees.
- Create tutorial for patients.
- Add UV Index Chart Tool to client’s website and integrate into the patient portal.

- Provide maintenance and support.

CONCLUSION

The UV Index Chart Tool project provides a patient-focused solution that supports Southern Skin Cancer Treatment Centers of America's mission to improve patient outcomes. Offering this simple and easy to use tool that tracks UV index information to complement patient treatment plans is an innovative way to keep patients actively involved and responsible for making better decisions about their skin health. This tool will support treatment compliance while also showcasing the Southern Skin Cancer Treatment Centers of America's commitment to evolve with technological advances for better patient outcomes.

APPROVAL

Approved by the Project Sponsor:

_____ Date: _____

<Project Sponsor>
<Project Sponsor Title>