**W04 Project: Website Proposal Planning Document** 

**Date:** July 24, 2025

Prepared by: Diogo Rangel Dos Santos

**To:** BYU I - WDD231

# My Web Portfolio

[Logo Placeholder: Diogo Rangel Logo - images/ds.jpeg]

Site Name: Diogo Rangel's Personal Website

**Description**: This site name directly reflects its purpose: to serve as a personal portfolio and professional hub for Diogo Rangel. It is clear, concise, and immediately communicates that the site is about me, Diogo Rangel, making it highly relevant and easily recognizable for potential employers, collaborators, or anyone interested in my professional profile.

Optional Domain Availability: diogorangel.dev (or similar, depending on availability)

## **Site Purpose**

This website serves as my online professional portfolio and personal brand hub. Its primary purpose is to showcase my skills, projects, and professional background as a Systems Analyst (QA) with experience in test automation, quality assurance, software development, and cybersecurity. It will provide detailed information about my work experience, technical proficiencies, and educational achievements, serving as a comprehensive digital resume.

# Specifically, the site will:

- \* \*\*Present my professional experience and skills:\*\* Highlight my expertise in Java, Python, Selenium, Cucumber, SQL, HTML, CSS, and other tools/frameworks.
- \* \*\*Exhibit key projects:\*\* Detail my contributions to various projects, particularly those related to test automation and cybersecurity.
- \* \*\*Provide contact information:\*\* Offer clear channels for potential employers or collaborators to reach me.
- \* \*\*Share insights through a blog:\*\* Link to my "Technology on my Vision" newsletter/blog to demonstrate my thought leadership and continuous learning.
- \* \*\*Reflect my professional values:\*\* Communicate my commitment to obedience, integrity, confidentiality, and diligence in my work.

\* \*\*Demonstrate dynamic web development:\*\* Showcase the use of external APIs for real-time data, like weather information.

#### Scenarios:

These questions represent typical visitor inquiries, guiding the website's content and functionality:

- 1. \*\*"I am a hiring manager looking for a QA Automation Engineer. Can I quickly see Diogo Rangel's relevant experience and projects?"\*\*
- \*(This drives the need for clear project sections, a concise resume/about me section, and prominent skill highlights on the homepage and a dedicated "Projects" or "Portfolio" page.)\*
- 2. \*\*"I'm interested in Diogo Rangel's views on cybersecurity. Where can I find his articles or insights?"\*\*
- \*(This highlights the importance of a well-linked and easily discoverable "Blog" or "Insights" section, with a direct link to the LinkedIn newsletter.)\*
- 3. \*\*"How can I get in touch with Diogo Rangel for a potential collaboration or job opportunity?"\*\*
- \*(This emphasizes the need for a clear, accessible "Contact" page with multiple contact methods, and potentially calls-to-action on other pages.)\*
- 4. \*\*"What are Diogo Rangel's core values and professional philosophy?"\*\*
- \*(This indicates the importance of an "About Me" section that goes beyond skills to include personal and professional values.)\*
- 5. \*\*"I want to see an example of Diogo Rangel's ability to integrate external data into a dynamic web page. Is there a live demonstration?"\*\*
- \*(This highlights the need for a dedicated "Weather API" page that fetches and displays real-time weather data.)\*

#### **Color Scheme**

The chosen color scheme aims for a professional, modern, and clean aesthetic, consistent with my existing brand and the dark mode suggested by the provided HTML code. It prioritizes readability and a sense of sophistication.

\* \*\*Background Color:\*\* #1A1A1A (Very Dark Gray/Black) - Used for the main body background, creating a sleek and modern look.

- \* \*\*Primary Text Color:\*\* #F8F8F8 (Light Gray/Off-White) Used for general paragraph text and primary content, ensuring high contrast and readability against the dark background.
- \* \*\*Secondary Text/Accent Color:\*\* #AAAAAA (Medium Gray) Used for less prominent text, subtitles, borders, and subtle details to add depth without distracting.
- \* \*\*Heading Color:\*\* #FFFFF (White) Used for main headings (h1, h2, h3) to give them prominence and a crisp appearance.
- \* \*\*Link/Interactive Element Color:\*\* #007bff (Standard Blue) Used for clickable links and interactive elements to indicate functionality and provide a touch of color contrast.

# **Typography**

The typographical choices aim for readability, professionalism, and a modern appeal, aligning with my professional brand. The fonts are imported via Google Fonts, as per the CSS you provided.

\* \*\*Headings (H1, H2, H3, H4):\*\*

**Barlow Condensed Bold** 

Used for main titles and subtitles, providing a striking and modern look.

\* \*\*Body Text (Paragraphs, Lists):\*\*

Hanken Grotesk Regular

A modern and highly readable sans-serif font, ideal for body text and general content, ensuring clarity.

---

## Wireframe: Home Page Layout

Below are simple wireframe sketches for the homepage, illustrating the basic layout and content blocks for mobile and desktop views.

\*\*Mobile View Wireframe\*\*

[Sketch Description:

```
Header: Logo | Menu Icon
Hero Section (Title, Subtitle, CTA)
"About Me" Summary
Profile Photo
Skills/Expertise Overview
Project 1 (Title, Brief Desc.)
Project 2 (Title, Brief Desc.)
View All Projects Button
WeatherAPI Link
Blog Teaser/Latest Post
Read Blog Button
Contact Info/Form Link
Social Media Icons
Footer (Copyright)
**Wide Desktop View Wireframe**
[Sketch Description:
Header: Logo | Navigation Menu (Home | About | Projects | API de Temperatura
| Blog | Contact) | Social Icons | Contact Button
Hero Section (Large Title, Professional Slogan, Intro Paragraph)
Detailed "About Me" Overview | Large Profile Photo (side-by-side)
"Let's Explore Some Projects" Title and Subtitle Section
Project Card 1 (Title, Tag, Link to View) | Project Card 2 (Title, Tag, Link to View)
(side-by-side)
Project Card 3 (Title, Tag, Link to View) | Project Card 4 (Title, Tag, Link to View)
(side-by-side)
View All Projects Button
Footer (Contact Info, Social Media, Copyright)
1
```

# New Page Proposal: Weather API

This page will serve as a live demonstration of my ability to interact with external APIs to fetch and display dynamic data. It will provide real-time temperature information for a specified location, demonstrating key web development skills.

### ### Purpose of the "Weather API" Page:

- \* \*\*Showcase dynamic web development:\*\* Directly fulfills the requirement to "Create dynamic web sites that leverage browser APIs, JSON, and remote APIs."
- \* \*\*Demonstrate API integration:\*\* Provides a concrete example of consuming a public API (e.g., OpenWeatherMap, WeatherAPI).
- \* \*\*Highlight front-end skills:\*\* Involves fetching data, parsing JSON, and dynamically updating the DOM.
- \* \*\*Exhibit UI/UX considerations:\*\* Will include input fields for location, clear display of temperature, and error handling messages.
- \* \*\*Address a common use case:\*\* Real-time weather data is a relatable and easily understandable demonstration of dynamic content.

### ### Key Functionalities and Requirements:

- 1. \*\*API Integration and Dynamic Content:\*\*
- \* \*\*Remote API Consumption:\*\* Utilize a public weather API (e.g., OpenWeatherMap, WeatherAPI) to fetch current temperature data.
- \* \*\*JSON Handling:\*\* Process the JSON response from the API to extract relevant temperature information.
- \* \*\*Dynamic UI Updates:\*\* Display the fetched temperature and related weather information (e.g., city, description, humidity) on the page dynamically without requiring a full page reload.
- \* \*\*Browser APIs:\*\* Leverage Fetch API or XMLHttpRequest for making asynchronous requests to the weather API.
- 2. \*\*Valid HTML and CSS with Best Practices:\*\*
- \* \*\*Semantic HTML5:\*\* Use appropriate HTML tags (e.g., `<section>`, `<main>`, `<input>`, `<div>`, ``) to structure the page content logically and semantically.

- \* \*\*Accessibility (A11y):\*\*
  - \* Provide meaningful `alt` text for any images (e.g., weather icons).
- \* Ensure proper focus management for interactive elements (input fields, buttons).
- \* Use ARIA attributes where necessary to enhance accessibility for screen readers (e.g., `aria-label`, `aria-describedby`).
  - \* Ensure sufficient color contrast for all text and UI elements.
  - \* Implement keyboard navigation for all interactive components.
  - \* \*\*Compliance (WCAG, W3C Standards):\*\*
- \* Adhere to WCAG guidelines (e.g., perceivable, operable, understandable, robust).
- \* Validate HTML and CSS against W3C standards to ensure correct syntax and structure.
- \* \*\*Responsive Design:\*\* Ensure the page layout and content adapt gracefully to various screen sizes (desktop, tablet, mobile) using CSS Media Queries.
- 3. \*\*Performance Monitoring and Optimization:\*\*
- \* \*\*Initial Page Load Performance:\*\* Optimize CSS and JavaScript delivery (e.g., minify, defer non-critical scripts).
- \* \*\*API Request Optimization:\*\* Implement efficient API calls, potentially caching results for short periods if the API allows and it improves user experience without sacrificing real-time data accuracy too much.
  - \* \*\*User Experience (UX) Considerations:\*\*
    - \* Provide clear loading indicators while fetching data.
- \* Implement robust error handling for API failures (e.g., display user-friendly messages if the API is down or the location is not found).
  - \* Ensure a smooth and responsive user interface during interactions.
- \* \*\*Tools for Monitoring:\*\* Mention the use of browser developer tools (e.g., Lighthouse, Network tab) to monitor loading times, API response times, and overall page performance.
- 4. \*\*Effective Team Member Traits (as applied to this project):\*\*
- \* \*\*Clear Communication:\*\* Clearly document the choice of API, any limitations, and the rationale behind design decisions.

- \* \*\*Collaboration (Self-imposed/Future Team):\*\* Structure the code in a modular and readable way for potential future collaboration or maintainability. Use clear commit messages if version control is applied.
- \* \*\*Fulfilling Assignments:\*\* Ensure all specified technical requirements (API integration, accessibility, performance) are met.
- \* \*\*Meeting Deadlines:\*\* Plan the development phases for this page to ensure timely completion within the project scope.
- \* \*\*Problem-Solving:\*\* Document any challenges encountered during API integration or UI development and the solutions implemented.

### Wireframe: WeatherAPI Layout
A simple wireframe for the WeatherAPI page.

\*\*Mobile/Desktop View Wireframe: WeatherAPI Page\*\*

Header (Logo | Nav Menu)

[Sketch Description:

API de Temperatura - Page Title

Input Field (e.g., "Enter city")

Consult Temperature Button

Temperature: --°C

Condition: --

City: --

Humidity: --%

Error Message (if any)

Footer (Copyright)

1