# **Documentation for Virtual CV Website**

#### 1. HTML Structure

• Purpose: Defines the semantic structure and content of the portfolio website.

# **Key Parts:**

#### <header>

Contains the fixed navigation bar with:

- Logo link (N<span>B Manganyi</span>)
- o Navigation links (Home, About, Experience, Skills, Education, Contact)
- Hamburger menu icon for mobile devices (toggles mobile nav)

## <section class="hero" id="home">

The landing section that introduces you:

- o Greeting headline with your name highlighted
- o Short description of yourself
- o Call-to-action button linking to Contact section
- Social media icons (LinkedIn, GitHub)
- Profile image with styling

## <section id="about">

Your personal profile and core competencies:

- Text description about you
- Visual skill bars showing percentages (Time Management, Communication, Collaboration)

# • <section id="experience">

Projects timeline:

- List of timeline items showing key projects with title, type, year, and description
- Alternating layout with a vertical center line

#### <section id="skills">

Technical skills displayed as cards:

o Each card has an icon, skill name, and description

## <section id="education">

Academic qualifications in cards:

Degree and school details with relevant coursework

#### <section id="contact">

Contact information and a contact form:

- Your location, phone, and email with icons
- o Form fields for visitor's name, email, subject, and message
- Submit button (form submission handled by JS)

#### <footer>

Footer with copyright, social icons, and design credit

# 2. CSS Styling

• **Purpose:** Provides visual appearance, layout, responsiveness, and animations.

## Highlights:

- **Color Theme:** Using CSS variables (--primary-color, --secondary-color, etc.) to keep consistent colors.
- **Global Reset:** Margin and padding set to zero, box-sizing set to border-box for consistent sizing, and a modern sans-serif font family.

# Navigation Bar:

- Fixed position with translucent white background and subtle shadow.
- Flex layout for logo and navigation links.
- Navigation links have hover underline animations.
- Hamburger icon appears only on smaller screens.

## • Hero Section:

o Full viewport height with dark gradient background.

- Flex layout to position text and image side-by-side.
- Smooth fade-in animations on load.
- Styled CTA button with hover effects.
- o Circular profile picture with border and shadow.

## About Section:

- Split into text and skill bars side-by-side.
- Skill bars animate width to visually represent skill levels.

## Projects Timeline:

- Vertical line in the center.
- o Items alternate left and right.
- o Each item animates into view on scroll.
- Small rotated squares connect the timeline content visually.

## • Skills Section:

- Grid layout with cards.
- o Cards fade in and lift slightly on hover.

#### Education Section:

- Flex layout with icons and content.
- Items animate into view as the user scrolls.

## Contact Section:

- Dark themed with white text.
- Two-column layout for contact details and form.
- Styled input fields and submit button with hover effects.

#### Footer:

- Dark background with centered text and social icons.
- Icon hover color changes.

# • Responsive Design:

- Navigation switches to mobile-friendly menu with toggle.
- Sections stack vertically on smaller screens.
- Text and images resize for readability on small devices.

## Animations:

- Fade-in from left/right/up effects using keyframes.
- o Triggered on page load and scroll for timeline, skills, education.

## 3. JavaScript Functionality

• **Purpose:** Adds interactivity and dynamic behavior to the webpage.

#### Features:

## Mobile Navigation Toggle:

- Clicking the hamburger icon toggles the .active class on the navigation links container.
- Changes the hamburger icon from bars (fa-bars) to close (fa-times) and vice versa.

#### Auto Close Mobile Menu:

- When a navigation link is clicked, the mobile menu closes automatically.
- Hamburger icon resets to bars.

## Scroll-triggered Animations:

- On scroll, the script checks position of timeline items, skill cards, and education items.
- Adds .visible class to elements as they enter the viewport to trigger CSS animations.

## • Smooth Scrolling for Anchor Links:

- o Intercepts clicks on all <a> tags with hrefs starting with #.
- Smoothly scrolls to the target section instead of jumping.

#### Header Background Effect on Scroll:

 Adjusts the header background color and shadow intensity depending on scroll position for a subtle effect.

## • Contact Form Submission:

- o Prevents default form submission.
- Displays a thank-you alert.
- o Resets the form fields.

# Summary

This Virtual CV website is a **modern, interactive, and responsive portfolio** that presents professional information clearly and attractively. The combination of semantic HTML, CSS variables and animations, and vanilla JavaScript delivers a user-friendly experience across devices.

If you want, I can also help you modularize or extend the functionality, or add backend support for the contact form