# Bandile Mabele ST10487923 GR03

Introduction to Web Development WEDE5020

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# Project Proposal: Redesign & Improvement of the Department of Home Affairs Website

## **Organisation Overview**

The Department of Home Affairs was established during the early years of South Africa existing throughout the Apartheid period changing names multiple time until the mid-20<sup>th</sup> century where it was widely known as the Department of Home Affairs (DHA) to the current Republic of South Africa.

#### Vision

The vision of the DHA is a South Africa where identity, status and citizenship are key enablers of citizen empowerment and inclusivity, economic development and national security.

#### Mission

The DHA carries out its mission in line with its commitment to citizen empowerment and inclusivity, economic development and national security, by:

- Being an efficient and secure custodian of citizenship and civil registration.
- Securely and strategically managing international migration.
- Efficiently managing asylum seekers and refugees.
- Efficiently determining and safeguarding the official identity and status of persons.

#### **Target Audience**

The citizens of South Africa, as well as foreigners who wish to visit, work or stay in South Africa. Essentially providing accessible civic, immigration, and refugee services to the public of South Africa.

# Website Goals and Objectives

The goal of the website is to provide a secure and modern gateway to the services managed by the DHA so essentially it is to provide valuable information to the public. The objective was to basically reduce the need for citizens to physically go to their offices.

# **Current Website Analysis**

#### Weaknesses

- 1. Homepage is text-heavy, basically a lot of text against a white space
- 2. Poor mobile experience for booking and applications.
- 3. Outdated look small fonts, inconsistent random colours, crowded layouts (very blocky).
- 4. There are no clear points of focus for a person going through the website.
- 5. Not screen-reader friendly poor heading structure.

#### Strengths

- 1. Though hard to navigate everything you could need from the DHA can be found on the website.
- 2. It is an instrumental tool in digitizing the processes of the DHA.

## **Proposed Website Features and Functionality**

- Though they have a contacts page the office contacts for all the provinces can be found on the homepage, so I propose a more centralized contact point.
- Information about their ministers will be on their about us page instead of the home page.
- Include white space for improved readability as everything feels too crammed.

# Design and User Experience

The overall design will focus on a sleek modern design with focus on simplicity and functionality matching modern day web browsing design.

#### Colour Scheme

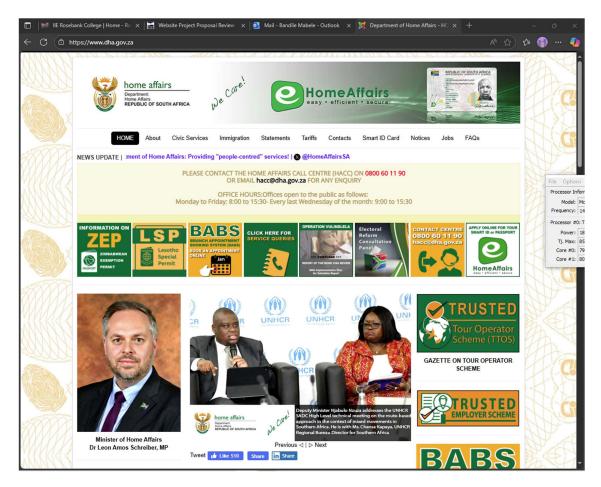
I will focus on the departments colours which will be the signature green, white, yellow, and beige to enhance the overall pleasantness to the eye.

#### **Typography**

The website will be utilizing one of the best globally excepted and widely used font in web design which is Helvetica. It is known for its clean, modern, and highly readable design.

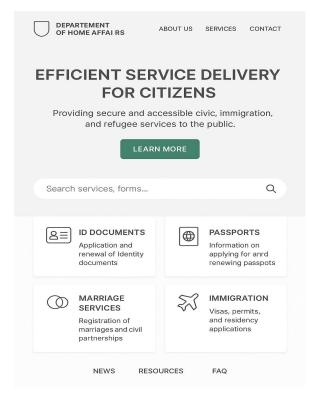
#### Layout and design

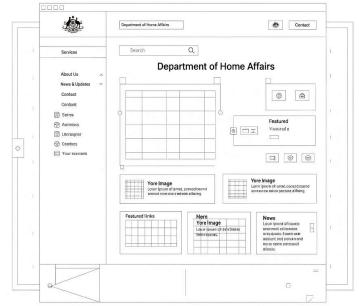
A website with a proper grid-based design that ensures clear distinction between different areas of the website with proper utilisation of white space. The page will utilise the whole screen instead of being a segmented section as seen on this screen shot:



#### Wireframes

Here are examples of the wireframes I will be taking into consideration when designing the website:





#### **Technical Requirements**

This will be a government website so there will be high traffic the website needs to have high availability and be scalable. It will be cloud hosted so it will be using Amazon Web Services. The website already has a domain name. I will be using HTML5, CSS3, and JavaScript.

#### Timeline and Milestones

#### Part 1(27 August 2025)

By this point the website have the basic HTML structure with the header, navigation, main content, and a footer. A well-organised file and folder structure to manage my project efficiently.

#### Part 2 (26 September 2025)

At this point I will use CSS to deck out the layout, typography, and colour scheme. I will be ensuring that the website adapts seamlessly to different screen sizes and devices and lastly, I will improve readability, navigation, and accessibility.

#### Part 3 (October)

This will be the last phase of the project here I will implement JavaScript by adding dynamic elements like animation, and interactive forms. I will optimize for Search Engine Optimization and implement the best practices of such. There will be forms with client-side validation.

# **Budget**

These estimations were made with the help of Al

#### 1. Initial Development Costs (One-Time)

| Item                       | Estimated Cost (ZAR)     | Notes   |
|----------------------------|--------------------------|---|
| UI/UX Design               | R300,000 –<br>R800,000   | Research, mock-ups, prototypes, accessibility compliance      |
| Frontend<br>Development    | R500,000 –<br>R1,200,000 | React/Vue + responsive design                                 |
| Backend<br>Development     | R800,000 –<br>R2,000,000 | API, database, security, integrations with government systems |
| Database Setup             | R150,000 –<br>R400,000   | PostgreSQL/MySQL cluster with replication                     |
| Security<br>Implementation | R200,000 –<br>R600,000   | SSL, firewalls, encryption, penetration testing               |

| Item                      | Estimated Cost (ZAR)   | Notes   |
|---------------------------|------------------------|---|
| Testing & QA              | R150,000 –<br>R400,000 | Load testing, cross-browser testing, bug fixing |
| Project Management        | R200,000 –<br>R500,000 | Coordination, sprints, documentation            |
| Training &  Documentation | R100,000 –<br>R250,000 | Staff training, manuals                         |

Subtotal (Development Phase): R2.4 million - R6.15 million

### 2. Hosting & Infrastructure (Annual)

| Item                                     | Annual Cost (ZAR)        | Notes                                 |
|--|--------------------------|---------------------------------------|
| Cloud Hosting (AWS/Azure/GCP)            | R400,000 –<br>R1,200,000 | High-availability, multiple regions   |
| Content Delivery Network (CDN)           | R50,000 –<br>R150,000    | Cloudflare/AWS CloudFront             |
| Domain Management (.gov.za)              | R5,000 – R10,000         | Managed by SITA                       |
| Daily Backups                            | R30,000 –<br>R100,000    | Secure offsite backups                |
| DDoS Protection & Security<br>Monitoring | R100,000 –<br>R300,000   | 24/7 monitoring                       |
| Support & Maintenance                    | R300,000 –<br>R800,000   | Bug fixes, updates, server monitoring |

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