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Software Engineering Software Requirements Specification (SRS) Document

WIL - SA Outreach Live Website and App 04/03/2024

Codeverse Solutions

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1. INTRODUCTION

1.1 Purpose

The aim of this document is to present requirements and specifications as the basis for the development of SA Outreach's website and mobile app. It establishes the goals, objectives, describes the target audience, defines the limits of the project, describes references and gives the general description of the project.

1.2 Document Conventions

This document adheres to standard typographical conventions, ensuring clarity and consistency in presentation.

1.3 Intended Audience

Stakeholders: SA Outreach team, developers, project managers, testers.

Project Managers: Overall project understanding.

<u>Developers:</u> Technical requirements.

Testers: Validation criteria.

1.4 Scope

The website and mobile app aim to enhance SA Outreach's efforts by providing easy access to information, resources, and communication tools for staff, volunteers, and beneficiaries, thereby enhancing the organization's efforts.

1.5 References

Scaled Agile Framework. (n.d.). Nonfunctional Requirements. [online] Available at: https://scaledagileframework.com/nonfunctional-requirements/.

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Anastasia, D. (2023). All about Software Requirements Specification (SRS) + Bonus Template. [online] Cadabra Studio. Available at: https://cadabra.studio/what-is-software-requirements-specification-and-how-to-write-it-with-example/.

2. General Description

2.1 Product Perspective

The website and mobile app will serve as essential platforms for SA Outreach's operations, providing essential functionalities tailored for both desktop and mobile users. These platforms will complement existing outreach initiatives and serve as primary channels for engagement.

2.2 Product Features

The website and mobile app will include features such as:

- Information about SA Outreach's mission, projects, and impact.
- Volunteer registration and management.
- Donation and fundraising capabilities.
- Event management and RSVP.
- News and updates.
- Communication tools (e.g., chat, notifications).

2.3 User Class and Characteristics

Users will include:

Staff: Admin access for managing content and activities.

Volunteers: Access to volunteer opportunities, schedules, and communication channels.

Beneficiaries: Access to relevant resources and updates.

<u>Donors:</u> Access to donation options and fundraising campaigns.

2.4 Operating Environment

The website will be accessible via standard web browsers, while the mobile app will be available for Android platforms.

2.5 Constraints

Constraints for this project may include:

- Limited budget, requiring careful resource allocation and prioritization of features.
- Time constraints, necessitating efficient project management and development processes.
- Compatibility with various devices and operating systems

2.6 Assumptions and Dependencies

Assumptions:

- Users have access to modern web browsers and mobile devices with internet connectivity.
- Stable internet connection is available for accessing online features and functionalities.

Dependencies:

- Integration with existing SA Outreach databases and systems, ensuring seamless data flow and consistency.
- Compliance with web and mobile app development standards, adhering to best practices and industry guidelines.

3. System Requirements

3.1 Functional Requirements

User Authentication and Authorization:

- Users should be able to create accounts, log in securely, and access personalized features based on their roles such as staff, volunteer, donor.
- Administrators should have the ability to manage features, user roles and permissions.

Information Pages:

- Provide comprehensive information about SA Outreach's mission, vision, values, and history, emphasizing its impact on the community it serves.
- Include detailed descriptions of ongoing programs, projects, and initiatives, along with updates on the progress and outcomes.

Donation and Fundraising:

- Enable secure online donations through various payment methods, ensuring transparency and accountability in financial transactions.
- Highlight specific fundraising campaigns and projects, detailing their objectives, progress, and impact, to inspire and encourage donations.
- Provide options for donors to make one-time donations or set up recurring donations, allowing them to support SA Outreach's initiatives on an ongoing basis.

Volunteer Management:

• Facilitate volunteer engagement by offering a platform for volunteers to explore and sign up for available opportunities, such as events, projects, and community outreach activities.

Event Management:

• Showcase upcoming events, workshops, and outreach programs organized by SA Outreach, providing detailed information and registration options for participants.

Resource Library:

- Establish a centralized repository of resources and guides relevant to SA Outreach's focus areas.
- Organize resources into categories and tags for easy navigation and accessibility, enabling users to find relevant information efficiently.

News and Updates:

- Publish regular news articles, success stories, and impact reports to keep stakeholders informed about SA Outreach's latest achievements, initiatives, and challenges.
- Leverage social media integration to amplify the reach of news and updates, encouraging followers to share and engage with SA Outreach's content across various platforms.

Contact and Support:

- Provide multiple channels for contacting SA Outreach, including email, phone, and online contact forms, ensuring accessibility and responsiveness to user inquiries and feedback.
- Maintain a physical address for SA Outreach's headquarters or regional offices.

4. External Interface Requirements

4.1 User Interfaces

The user interface will be simple to operate and will apply responsive design to enable optimal viewing on different screen sizes.

4.2 Hardware Interfaces

Ensure compatibility with standard hardware configurations for desktop computers, laptops, smartphones, and tablets, allowing users to access the website and mobile app on a wide range of devices. Optimize performance and usability for different device specifications, screen sizes, and input methods to provide a consistent experience across platforms.

4.3 Communications Interfaces

Communication standards will include such secure protocols used for data transmission through users and the server.

4.4 Software Interfaces

Integration of this cloud-based solution with the other existing software components will be without a doubt seamless, which includes backend databases and third-party services.

5. Non-Functional Requirements

5.1 Performance Requirements

The performance constraints will guarantee the smooth loading speeds, and proper functioning of the website inside various smart devices and networks. Optimize performance for high traffic periods, such as during fundraising campaigns or major events, to maintain stability and reliability.

5.2 Safety Requirements

Privacy measures are going to be enforced to ensure that users data remains secure and transparent in the field of donating and paying. Adhere to data protection regulations to safeguard user privacy and ensure compliance with legal requirements.

5.3 Security Requirements

The observance of privacy and data protection policies will remain our top priority. Implement secure coding practices and software development methodologies to minimize security risks in the website and mobile app.

5.4 Software Quality Attributes

Usability:

Design intuitive user interfaces and navigation paths, with clear labelling, consistent layouts, to enhance usability and accessibility for users of all skill levels.

Reliability:

Ensure high availability and uptime of the website and mobile app.

Accessibility:

Adhere to accessibility standards to ensure that the website and mobile app are accessible to users with disabilities.

Responsiveness:

Optimize the website and mobile app for responsiveness and performance across different devices, screen sizes, and operating systems, ensuring a consistent user experience on desktops, laptops, tablets, and smartphones.

5.5 Other Requirements

Legal regulation, resource usage, and future updates will be considered when the development process is being prepared, with modification possibilities at later stages if required. The website and mobile app will be designed with scalability in mind, allowing for future growth and expansion of SA Outreach's programs and services. Ensure that the website and mobile app can easily adapt to changing user needs and technological advancements.