

WORK INTEGRATED LEARNING

XBCAD7311

CODEVERSE SOLUTIONS

GROUP 2

PROJECT CHARTER

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A. GENERAL INFORMATION

Project Title:	SA Outreach and Emergency Services Website and Mobile App Development
Brief project Description:	The aim for this project is to construct a site and a mobile app for the SA Outreach that can help the staff, volunteers, and inmates to quickly get information, resources, and tools for effective communications. It aligns with SA Outreach's strategic objectives of enhancing outreach efforts and improving engagement with the public.
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B. PROJECT PURPOSE

The primary purpose of this project is to design and develop a comprehensive web-based solution that serves as a primary communication and management tool for SA Outreach. The website and mobile app will:

1. **Facilitate Information Sharing:** Enable SA Outreach to disseminate information about its mission, ongoing projects, impact reports, and upcoming events to a broader audience, fostering transparency and community engagement.
2. **Enhance Volunteer Management:** Provide volunteers with a user-friendly interface to view available opportunities, sign up for events, track their involvement, and communicate with the organization seamlessly.
3. **Streamline Donation Processes:** Enable secure online donations through multiple payment methods, showcase fundraising campaigns, and provide transparency in financial transactions to build trust with donors.
4. **Improve Stakeholder Communication:** Implement features like chat, notifications, and contact forms to enhance communication between SA Outreach and its stakeholders, fostering collaboration and responsiveness.
5. **Increase Outreach and Impact:** By leveraging digital platforms, SA Outreach can expand its reach, engage new audiences, and increase support for its initiatives, ultimately amplifying its impact on the community.

C. PROJECT DELIVERABLES

1. Project Charter: Document outlining project objectives, scope, roles, and responsibilities.
2. Software Requirements Specification (SRS) Document: Detailed requirements document outlining functional and non-functional specifications.
3. Detailed Design (DD) Document: Detailed technical design specifications for website and mobile app components.
4. User Interface (UI) Design Mockups: Visual representations of website and mobile app screens.
5. Database Schema Design: Database structure and relationships for storing project data.
6. Website Frontend Development: Implementation of frontend components using HTML, CSS, JavaScript, and frameworks like Bootstrap.
7. Mobile App Development: Development of mobile app components using Xamarin, React Native, or other suitable frameworks.
8. Backend Development: Implementation of server-side logic, APIs, and database integration using ASP.NET MVC or similar technologies.
9. User Authentication and Authorization: Implementation of secure user authentication and role-based access control.
10. Volunteer Management Module: Module for volunteer registration, management, and communication.
11. Donation Processing Module: Integration of secure payment gateways and donation management features.
12. Event Management Module: Module for creating, managing, and promoting events.
13. Content Management System (CMS): Implementation of a CMS for managing website content.
14. Testing and Quality Assurance: Comprehensive testing of website and mobile app functionalities, including unit testing, integration testing, and user acceptance testing.
15. Documentation: User manuals, developer guides, and API documentation.
16. Deployment and Hosting: Deployment of website and mobile app to production servers or cloud platforms.
17. Training Materials: Training materials for users, administrators, and support personnel.
18. Support and Maintenance Plan: Plan for ongoing maintenance, updates, and support after project completion.
19. Project Closure Report: Summary of project achievements, lessons learned, and recommendations for future enhancements.

D. PROJECT BENEFITS

1. Improved access to information and resources. The website and mobile app will act as centralized platforms where beneficiaries, volunteers, donors, and staff, can easily access comprehensive information about SA Outreach's mission, projects, and services. Information will be organized and readily available, providing clarity on programs, events, impact stories, and resources offered by the organization.
2. Enhanced volunteer management and engagement. By making it simple for volunteers to register, sign up for opportunities, measure their participation, and get in touch with coordinators, the website and app will simplify volunteer management procedures. Interactive elements like event calendars, task assignments, and feedback systems will promote volunteer involvement.
3. Increased donation and fundraising capabilities. Donors will have easy and safe ways to make contributions through the digital platforms, whether they are one-time gifts or ongoing commitments. Donor participation will be encouraged via fundraising campaigns that are exhibited with measurable objectives, impact data, and progress monitors.
4. Strengthen communication channels. The mobile app and website will make it easier for recipients, donors, volunteers, and staff of SA Outreach to communicate with one other. Improvements in collaboration, feedback, and interaction among stakeholders will result from this improved communication.
5. Expanded reach and Impact. With the help of an easily navigable platform, SA Outreach can increase its community influence and reach. The organization's outreach activities will be boosted by the new volunteers, contributors, and beneficiaries drawn in by the website and mobile app.
6. Streamlined operations. Streamlining organisational processes can be achieved by implementing digital solutions for event coordination, donation processing, and volunteer administration. Due to its increased efficiency, SA Outreach will be able to allocate more funds to its main goals and initiatives.
7. Data Driven Descision Making. The mobile app and website will produce insightful data by means of volunteer participation, donation patterns, and user interactions. Utilising this data can help you make wise decisions, maximise your programmes, and strengthen your organisational tactics.
8. Usability and Scalability. SA Outreach will be able to develop and expand over time because to the digital platforms' flexible and scalable design. It is simple to incorporate new features, applications, and services to adapt to shifting requirements.

E. PROJECT RISKS

1. Technical Challenges

- Integration Issues: Difficulty in integrating different modules and components of the website and app.
- Compatibility Problems: Compatibility issues across various devices, browsers, and operating systems.
- Performance Concerns: Challenges related to website and app performance under varying traffic loads.

2. Resource Constraints

- Budget Limitations: Insufficient funds for hiring specialized resources or acquiring necessary tools.
- Time Constraints: Limited time frame impacting project milestones and deliverables.

3. Security Concerns

- Data Breaches: Risks of unauthorized access or data breaches due to inadequate security measures.
- Privacy Vulnerabilities: Potential privacy issues related to user data handling and storage.
- Regulatory Compliance: Challenges in adhering to data protection regulations and standards.

F. PROJECT MILESTONES

1. Website Development Start:

- Establish project requirements and objectives.
- Set up project management tools and version control systems.
- Begin wireframing and prototyping for website design.
- Assign roles and responsibilities to team members.

2. Website Design Completion:

- Finalize website design including UI/UX elements and visual components.
- Review and approve website design with stakeholders.
- Obtain design sign-off and proceed to development.

3. Website Development and Backend Setup:

- Implement backend infrastructure including databases, APIs, and server configurations. Develop core functionalities such as user authentication, content management, and donation processing.

- Integrate frontend designs with backend services.
- 4. Website Testing and Quality Assurance:
 - Conduct unit testing for individual components and features.
 - Perform integration testing to ensure seamless functionality across modules.
 - Conduct performance testing to optimize website speed and responsiveness.
- 5. Website Launch Preparation:
 - Prepare for website deployment to production environment.
 - Conduct final security audits and address any last-minute issues.
- 6. Website Launch:
 - Deploy the website to the live production environment.
 - Monitor website performance post-launch and address any immediate issues.
 - Notify stakeholders and users about the website launch.
- 7. Mobile App Development Start:
 - Initiate mobile app requirements gathering and analysis.
 - Design mobile app wireframes and user interface layouts.
 - Set up development environment for mobile app development.
- 8. Mobile App Design and Prototyping:
 - Create high-fidelity mobile app prototypes for user testing.
 - Review and iterate on mobile app designs based on feedback.
 - Finalize mobile app design and obtain stakeholder approval.
- 9. Mobile App Development and Integration:
 - Develop mobile app features based on approved designs and requirements.
 - Integrate mobile app with backend services and APIs.
 - Implement mobile app functionalities including user authentication and event management.
- 10. Mobile App Testing and Quality Assurance:
 - Conduct mobile app testing across multiple devices and platforms.
 - Ensure mobile app performance, security, and usability meet quality standards.
- 11. Mobile App Launch Preparation:
 - Prepare mobile app submission for app stores (e.g., Google Play Store)
 - Obtain necessary approvals and certificates for app distribution.
 - Conduct final app testing and resolve any issues prior to launch.
- 12. Mobile App Launch:
 - Release the mobile app to app stores and make it available for download.
 - Promote the mobile app to stakeholders, volunteers, donors, and beneficiaries.
 - Monitor app performance and user feedback post-launch.

G. ASSUMPTIONS, CONSTRAINTS AND DEPENDENCIES

ASSUMPTIONS

1. Users have access to modern web browsers and Android devices: It is assumed that the target audience for the website and mobile app can access modern web browsers on their desktops or laptops. Additionally, users should have access to Android devices with compatible operating systems to download and use the mobile app.
2. Internet connectivity is available for accessing online features: Users are expected to have a stable and reliable internet connection to access online features and functionalities provided by the website and mobile app. This assumption ensures that users can interact with the platforms seamlessly without connectivity issues.

CONSTRAINTS

1. Budget constraints limit the scope of the project: The project's scope may be restricted by financial limitations: The project must stay within set cost constraints, which may have an effect on the range of features, resources, and development schedules that are available. Maintaining financial restrictions requires prioritising features and allocating resources as efficiently as possible.
2. Technical challenges may arise in integrating with existing databases and systems: There might be technical difficulties when integrating the website and mobile app with the databases and systems that SA Outreach already has in place. These difficulties could include issues with data migration, synchronisation, and compatibility. To overcome these obstacles, close coordination with database administrators and IT teams is necessary.
3. Compatibility issues may occur with various devices and operating systems: During development, thorough testing and optimisation are necessary to ensure interoperability across various platforms (desktops, laptops, smartphones, tablets) and operating systems (Windows, macOS, Android). In order to overcome compatibility difficulties, responsive design methodologies and cross-platform testing will be necessary.

DEPENDENCIES

1. Data consistency, accessibility, and operational efficiency all depend on the website and mobile app's successful connection with the databases and systems already in place at SA Outreach. The smooth transfer of data and synchronisation between the new digital platforms and the current infrastructure are essential to the project's success.
2. Compliance with web and mobile app development standards is essential: Robust security, performance, and user experience can only be guaranteed by adhering to

industry norms, best practices, and established standards for developing mobile and web apps. Standards compliance also helps the digital platforms' future scalability and interoperability.

H. TEAM MEMBERS

NAME	ROLE
Devania Chetty	<ul style="list-style-type: none">- Team Leader- Project Management- UI/UX Design- Backend Development (Website and App)- Frontend Development (Website and App)- Testing and Quality Assurance- Documentation
Shayur Maharaj	<ul style="list-style-type: none">- Documentation- Diagrams- Deployment- GitHub (Website, App, Documentation)
Sadhil Imirth	<ul style="list-style-type: none">- Backend Development (Website)
Yashwin Reddi	<ul style="list-style-type: none">- Backend Development (Application)

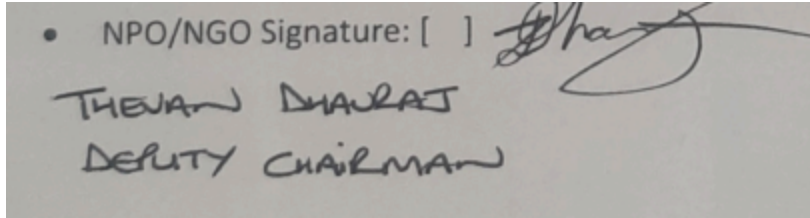
I. PROJECT AUTHORISATION

Devania Chetty:

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NPO/NGO: **

*NPO signed printed pdf of project charter and sent pictures of it***



J. REFERENCES

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