WORK INTEGRATED LEARNING
XBCAD7311
CODEVERSE SOLUTIONS
GROUP 2

INTRODUCTION TO PROJECT

Group Members:

Devania Chetty

Shayur Maharaj

Ashlin Govender

Sadhil Imrith

Yashwin Reddi

INTRODUCTION

This project document outlines the essential elements and guidelines for the successful execution of the SA Outreach Live Website and App project. This project requires adherence to certain criteria and fundamental aspects, which are outlined in this project document. It contains essential elements including work agreements, definitions of ready and done, ethical and privacy concerns, a roadmap with roles and duties, and a summary of possible project hazards and mitigation techniques. To ensure a common understanding and commitment to the project's goals, procedures, and expectations, each team member must read, comprehend, and sign this agreement.

PROJECT OVERVIEW

The goal of the SA Outreach project is to create contemporary, easily navigable digital platforms that will enhance community participation and support initiatives by utilising technology. To enable SA Outreach to increase its influence and reach a larger audience, the website and mobile app will function as key hubs for coordination, communication, volunteer management, processing donations, event planning, and resource distribution.

PROJECT OBJECTIVES

Enhanced Communication: Provide channels for efficient communication between donors, volunteers, beneficiaries, and SA Outreach.

Simplified Volunteer Management: To maximise volunteer participation, incorporate tools for scheduling, coordination, and registration.

Transparent Donation Processing: With a range of payment methods and fundraising initiatives, facilitate safe and transparent online donation processing.

Effective Event Management: To encourage community involvement, offer resources for planning and overseeing workshops, events, and outreach initiatives.

Easy Access and Dissemination of Resources: Create a central resource library containing guides and material pertinent to SA Outreach's emphasis areas.

Timely News & Updates: Provide regular updates on SA Outreach's accomplishments and activities to stakeholders by sending out impact reports, success stories, and news pieces.

SCOPE OF WORK

The creation, testing, and implementation of a mobile application and responsive website that are specifically suited to SA Outreach's requirements are all included in the project's scope. To guarantee a flawless user experience, the platforms will have secure payment processing systems, robust backend functionalities, and user-friendly interfaces.

TARGET AUDIENCE

The primary target audience for the website and mobile app includes:

- Staff and Volunteers: To facilitate volunteer management, communication, and engagement.
- Beneficiaries: To access resources, information, and updates relevant to their needs.
- Donors: To make secure and convenient donations to support SA Outreach's initiatives.

KEY FEATURES

The following are the main elements that the SA Outreach website and mobile app will have:

User Registration & Authentication: Safe login and registration features catered to various user roles (e.g., employees, volunteers, donors).

Volunteer Management System: Resources for registering, planning, assigning, and communicating with volunteers.

Processing Donations: Easy online donation processing with choices for one-time and ongoing contributions.

Event management includes an RSVP system, a calendar for the event, and information for attendees and organisers.

Resource Library: A central location for manuals, guides, and instructional materials that are organised for convenience of use.

News and Updates: Continually updated impact reports, success stories, and news pieces to keep stakeholders interested.

Tools for Communication: Real-time messaging, chat, and notification services.

DELIVERABLES

The key deliverables for the SA Outreach's website and mobile app project include the following:

1. Completely functional and responsive Web Page:
    o A mobile- and desktop-friendly responsive website.
    o The website will have visually appealing design, easy navigation, and user-friendly interfaces.

    o Completely Functional and Responsive Website: Completely functional and responsive features include volunteer management tools, event calendars, donation processing, resource libraries, news updates, and communication tools a mobile- and desktop-friendly responsive website.

- o The website will have visually appealing design, easy navigation, and user-friendly interfaces.
- o We'll be implementing features including news updates, event calendars, volunteer management tools, donation processing, user registration, and communication tools

2. Comprehensive documentation:
    - o User manuals: Detailed guides on how to use the mobile app and website.
    - o Technical details: thorough explanations of the development processes, technology employed, and system architecture.
    - o Guides for deployment: Detailed instructions for putting the mobile app and website into production settings.

3. Quality Assurance and Testing Reports:
    - o QA reports that include information on the testing procedure, test cases, test outcomes, and problems or defects found.
    - o Make sure that every functionality has been thoroughly tested to confirm performance, security, and dependability.
    - a. Deployment and Launch of Website and App:
    - o Deployment of the website and app to the App Store

ETHICAL AND PRIVACY CONCERNS

The project team understands the value of moral behavior in software development, particularly when working with private information and conducting business. Our team is dedicated to maintaining the highest ethical standards in software development by ensuring that all facets of the platforms' conception, execution, and management are open, equitable, and accountable. By relevant laws and regulations, steps will be taken to protect user data, financial information, and communications.

ETHICAL CONCERNS

1. Transparency and Accountability
   - Ensure transparency about the openness about the gathering, sharing and usage of user data.
   - Give detailed information regarding the company's data retention policy, privacy policies, and use of tracking or cookies.
2. Accessibility
   - All people should be able to access websites and applications, regardless of their level of physical or mental ability.
   - In order to foster an inclusive online community, ethical developers make sure that their works are compatible with keyboard navigation, screen readers, and other assistive technology.
3. Informed Consent

   Before collecting any sensitive or personally identifiable information from users, we need to get their consent.

   When collecting data, be sure to specify its intended use and obtain consent before proceeding (examples: for volunteer registration, donation processing).

4. Data Security
   - Implement security measures to safeguard user information from hacking, breaches, and illegal access.
   - To guarantee the security and integrity of data, encryption techniques during transmission and storage will be used.

PRIVACY CONCERNS

1. User Data Collections

   Restrict the amount of personal data that is gathered to that which is absolutely required for the website and app to function.

2. Use of Third Party Servers

   The other security concern refers to the application of third-party services and API's. These are one kind of security concern that if ignored can lead to a potential security risk. When using third-party services, it is important to ensure that they are secure and reliable. This includes conducting thorough background checks, monitoring their activity regularly, and implementing proper security protocols.

3. User Consent and Control

   Give people the ability to edit or remove their information and control over their privacy so they may take control of their data.

WEBSITE AND APP WORK AGREEMENT

The work agreement, which all project participants must sign, reflects their dedication to efficient teamwork, prompt communication, and mutual support throughout the project's lifespan. Team members acknowledge their roles, duties, and expectations within the project team by signing this agreement.

TEAM MEMBERS

Devania Chetty

Shayur Maharaj

Ashlin Govender

Sadhil Imrith

Yashwin Reddi

ROLES AND RESPONSIBILITIES

Devania Chetty	- Team Leader - Project Manager - UI/UX Design - Backend Development - Testing and Quality Assurance - Documentation

Shayur Maharaj	- Documentation and Reporting - Diagrams - Testing and Quality Assurance - Deployment - GitHub

Ashlin Govender	- Website frontend - App frontend

Sadhil Imrith	1. Website Backend

Yashwin Reddi	- Application Development backend (Android) - User Authentication and authorisation

EXPECTATIONS AND COMMITMENTS

Collaboration: Team members will collaborate effectively, communicate honestly and contribute to a positive team environment

Timelines: All team members must commit to completeing work and meeting the WIL project deadlines and all milestones.

Quality of Work produced: Team members must deliver high-quality work that must align with the project requirements and design standards.

Communication. team members must maintain regular communication via team meetings and progress updates.

PROJECT DELIVERABLES AND MILESTONES

Weekly Progress Reports: Every team member will submit a weekly progress report detailing work accomplished, obstacles faced, and the next course of action.

Testing & QA: To guarantee functionality, performance, and security, every deliverable will go through a thorough testing and quality assurance process.

Documentation: For future reference and scalability, keep thorough documentation of all code, procedures, and configurations.

TEAM SIGNATURES

We, the undersigned team members, agree to follow the guidelines and obligations specified in it for the SA Outreach Website and Mobile App project.

Devania Chetty	D.C

Shayur Maharaj	S.M
Ashlin Govender	
Sadhil Imrith	S.I
Yashwin Govender	

SA OUTREACH WEBSITE AND MOBILE APP - DEFINITION OF READY (DOR)

Project Name: SA Outreach and Emergency Services Website and Mobile App

TEAM MEMBERS

Devania Chetty

Shayur Maharaj

Sadhil Imrith

Ashlin Govender

Yashwin Reddi

DEFINITION OF READY CRITERIA

1. Clear User Story Description
   - The description is in line with the SRS document's project goals and objectives.
   - Specifications are provided in detail, covering both functional and non-functional elements.

2. Acceptance Criteria Defined

   There are explicit acceptance criteria that specify what needs to be done in order for the user narrative to be deemed finished and functioning as intended. The SRS document's functional and non-functional requirements serve as the basis for the acceptance criteria. Clear expectations for completion are ensured by the quantitative and verifiable nature of acceptance criteria.

3. Identified Dependencies
   - Prior to execution, all dependencies—such as external services or third-party integrations—are recognised and taken care of.
   - Stakeholder input and data from the SRS document are used to document dependencies.
   - To avoid delays or problems, mitigation measures are described for essential dependencies.

4. Design Specifications
   - Design specifications, wireframes, or mockups are attached to guide implementation and ensure consistency with project requirements.
   - The SRS document's visual and UI/UX criteria are cited in the design elements.
   - Layout, navigation, branding, and accessibility considerations are all part of the design specifications.

Based on the Software Requirements Specification (SRS) document provided earlier for the SA
Outreach Website and Mobile App project, here are the clear requirements identified for the
website and app:

1. User Authentication and Authorisation
    o   Users can register, securely log in, and access services that are specific to their
        roles (donor, staff, or volunteer).
    o   Roles and permissions for users should be manageable by administrators.

2. Donation Page
    Credit/debit cards, PayPal, and other payment methods are just a few of the safe online
    donation options available to users. There are calls for urgent donations, efforts to raise
    money, and initiatives targeted. Acceptance Criteria: Donation transactions are handled in
    a transparent and safe manner. Receipts and acknowledgements for their contributions are
    sent to donors. On the platform, the advancement of projects and fundraising campaigns
    is monitored and shown.

3. Volunteer Management

    Events, projects, and community outreach initiatives are just a few of the opportunities
    that volunteers can peruse and register for. To match talents, interests, and availability
    with appropriate opportunities, volunteer profiles are created. Acceptance Requirements:
    Volunteers have access to thorough definitions of their roles and duties. Volunteer
    opportunity registration is simple. Coordinators of volunteer efforts can interact and
    oversee participants with efficiency.

4. Event Management

    Featured are upcoming workshops, outreach initiatives, and events coordinated by SA
    Outreach. Date, time, place, schedule, and registration options are all included in the
    event specifics. The website and app both prominently display events. RSVPs are
    available for events, and users can get reminders or confirmations. Event planners can
    control registrations and inform attendees of event specifics.

5. Resource Library

    A comprehensive collection for materials on the priority areas of SA Outreach, including
    articles, manuals, reports, and multimedia content. For ease of use and accessibility,
    resources are classified and organised into categories. The resource library allows for
    subject, keyword, and format-based searches and filtering. Logically arranged content

features descriptive and descriptive metadata. Resources are instantly downloadable and shareable from the platform.

RISKS

Technological Restrictions: User experience may be impacted by compatibility problems with various web browsers and mobile devices. Reliance on external APIs or services can lead to problems with dependability or integration. Risks to Data Security and Privacy: Robust security measures are necessary when handling sensitive user data (personal information, contribution transactions, etc.) to prevent data breaches. Maintaining user privacy requires adherence to industry standards and data protection laws (such as the CCPA and GDPR). Restrictions on Resources: The scalability and performance of the website and app may be impacted by a lack of funding and resources. The availability of qualified development resources may impact the deliverables and schedules of projects.

SIGNTAURES

We, the undersigned team members, agree to follow the guidelines and obligations specified in it for the SA Outreach Website and Mobile App project and this DOR form.

Devania Chetty	D.C
Shayur Maharaj	S.M
Ashlin Govender	
Sadhil Imrith	S.I
Yashwin Govender	

SA OUTREACH WEBSITE AND MOBILE APP - DEFINITION OF DONE (DOD)

Project Name: SA Outreach and Emergency Services Website and Mobile App

The "Definition of Ready" (DoR) lays forth requirements that need to be fulfilled in order for a task or feature to be accepted for development. This comprises:

- Clearly defined requirements: Specifications or user stories that are in-depth and outline the intended functionality.
- Acceptance Criteria: Requirements that must be fulfilled for a task to be deemed finished.
- Resource Allocation: Determining the instruments, resources, and dependencies needed for execution.

7. Functional Requirements Satisfied
    o Requirements Fulfilled: Tasks and features meets the functional requirements listed in the SRS Document.
    o User Story Completion: All of the task's user stories have been completely implemented and verified.
8. Code Review:
    o Coding Standards: The code complies with accepted best practices and coding standards.

- o Peer Review: To ensure accuracy and quality control, code modifications are examined by a minimum of one other team member.
9. Unit Testing:
    - o Test Coverage: Essential features and edge cases pertaining to the task or feature are covered by unit tests.
    - o Test findings: Before moving further, any bugs found are fixed and the findings of the unit tests are validated.
10. Integration Testing:
    - o Integration with Current System: The function or feature is easily incorporated into the current system.
    - o Testing for Compatibility: Integration tests verify that a component is compatible with other parts and external systems.
11. Documentation
    - o Technical Documentation: API specifications and inline comments are included in the well-documented code.
    - o End-user documentation includes release notes, assistance manuals, and user manuals.
12. Deployment Ready
    - o Deployment Scripts: Before being deployed in production, deployment scripts and configurations are completed and tested.
    - o Validation of Environment: To guarantee preparedness, deployment plans are verified in staging environments.
13. Product Owner Approval
    - o Stakeholder Review: The product owner or stakeholders evaluate and approve the task or feature.
    - o Acceptance requirements Satisfied: The SRS document's acceptance requirements are met.
14. Final Approval
    - o Formal Approval: The product owner or project manager formally signs off on the feature or task.
    - o Status of Completion: The team and stakeholders are informed of the current state of completion.

SIGNTAURES

We, the undersigned team members, agree to follow the guidelines and obligations specified in it for the SA Outreach Website and Mobile App project and this DOD form.

Devania Chetty	*D.C*
Shayur Maharaj	S.M
Ashlin Govender	
Sadhil Imrith	S.I
Yashwin Govender	

ROADMAP (HIGH-LEVEL PLAN)

PROJECT TIMELINE AND ROLES

- Phase 1: Project Initiation and Planning
  - Duration: 2 weeks
    - Task Name: Project Planning and Start
    - Responsibilities:
      - Project Manager (Devania Chetty) oversees kickoff meeting with NGO.
      - Define project scope, objectives, and success criteria.
      - Allocate resources and roles to team members.
      - Develop initial project timeline and milestone plan.
    - Roles:
      - Project Manager (Devania Chetty): Coordination of project planning and resource allocation.
      - Developers (Devania Chetty, Sadhil Imrith, Yashwin Reddi): Provide input on technical feasibility and requirements.
      - Designers (Devania Chetty, Ashlin Govender): Contribute to initial concept and user interface design discussions.
- Phase 2: Design and Prototyping
  - Duration: 4 weeks
    - Task Name: UI/UX Design and Prototyping
    - Responsibilities:

- Designers create wireframes, mockups, and visual assets for website and app.
- Technical input on design concepts and viability is given by developers.
  - Roles:
    - Designers (Ashlin Govender, Devania Chetty): Lead UI/UX design efforts, ensuring user-friendly interfaces.
    - Developers (Devania Chetty, Sadhil Imirth, Yashwin Reddi): Review design prototypes for technical considerations.
    - Documentation (Shayur Maharaj): Work on SRS Documentation as project proceeds
- Phase 3: Development and Implementation
  - Duration: 8 weeks
    - Task Name: Frontend and Backend Development
    - Responsibilities:
      - Developers implement frontend and backend functionalities based on design specifications.
      - Team conducts continuous testing and bug identification.
      - Document writers populate website content, ensure accuracy and upload to GitHub
    - Roles:
      - Developers (Devania Chetty, Sadhil Imirth, Yashwin Reddi): Code website features, integrate APIs, and optimize performance.
      - Team (Devania Chetty, Shayur Maharaj, Ashlin Govender, Sahdil Imrith and Yashwin Redd): Test functionality, identify and prioritize bugs for resolution.
      - Documentation Writers (Shayur Maharaj, Devania Chetty) : Publish content and review for quality assurance.
- Phase 4: Testing and Quality Assurance
  - Duration: 3 weeks
    - Task Name: QA Testing and User Acceptance Testing (UAT)
    - Responsibilities:
      - QA team conducts comprehensive testing across devices and platforms.
      - NGO participates in UAT sessions to provide feedback.
      - Bug fixes and editing based on testing results.
    - Roles:

- Team (Devania Chetty, Shayur Maharaj, Ashlin Govender, Sahdil Imrith and Yashwin Redd): Conduct rigorous testing, document issues, and collaborate on resolutions.
- Project Manager (Devania Chetty): Coordinate UAT sessions and manage NGO feedback.
- Phase 5: Deployment and Launch
  - Duration: 2 weeks
    - Task Name: Deployment and Launch Preparation
    - Responsibilities:
      - Complete deployment plans, which should include a rollout plan and backup plans.
      - Perform performance optimisation and pre-launch inspections.
      - The marketing staff creates communication plans and promotional materials.
    - Roles:
      - Project Manager (Devania Chetty): Oversee deployment readiness and final testing.
- Phase 6: Post-Launch Support and Maintenance
  - Duration: Ongoing
    - Task Name: Ongoing Maintenance and Support
    - Responsibilities:
      - Track app and website performance and resolve issues that arise after deployment.
      - Update features, content, and security patches frequently.
      - Get input from users and use that information to develop improvements going forward.
    - Roles:
      - Project Manager (Devania Chetty): Ensure ongoing support and coordination of maintenance tasks.
      - Developers (Devania Chetty, Sadhil Imrith, Yashwin Reddi): Implement updates and improvements based on feedback.

PROJECT RISKS AND MITIGATIONS

POTENTIAL RISKS OF THE PROJECT

1. TECHNICAL CHALLENGES

   Risk Description: The project might run into technical difficulties with backend and frontend system integration, as well as cross-platform and cross-browser compatibility. It can be challenging to guarantee flawless operation and a uniform user experience across many platforms.

   Impact: Extended development times, missed deadlines for projects, and, if left unattended, a deteriorated user experience.

2. RESOURCE CONSTRAINTS

   Risk description: The project's capacity to successfully reach milestones may be impacted by financial and scheduling restrictions. Project progress and scope may be hampered by a lack of resources, both financial and human.

Impact: Decreased feature set, lowered product quality, or missed deadlines.

3. SECURITY CONCERNS

Risk Description: The project is very vulnerable to data breaches, privacy vulnerabilities, and non-compliance with regulatory standards. Strict security protocols must be followed while collecting and processing user data in order to safeguard against online dangers and preserve user confidence.

Impact: Loss of user confidence in the platform, reputational harm, and legal repercussions.

POTENTIAL MITIGATION STRATEGIES OF THE PROJECT

1. CONDUCT TESTING AND VALIDATION

Strategy: Conduct thorough testing, including unit, integration, and user acceptability testing (UAT), at every stage of the development process. To guarantee compatibility and operation across devices and browsers, find and fix integration issues early.

2. MONITOR PROJECT PROGRESS

Strategy: Continue holding frequent project review and monitoring meetings to evaluate advancement towards goals and spot resource shortages early on. As necessary, modify schedules and resource allocations to reduce the risk of delays or scope creep.

3. IMPLEMENT SECURITY MEASURES

Strategy: Make use of strong security procedures, such as data access controls, secure authentication techniques, and encryption standards. Maintain adherence to data

protection laws (such as the CCPA and GDPR) to secure user information and reduce security threats.

REFERENCES

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