Project Scope Document

Title: Polangui Resident Records Management System

Brief Descriptions: The Polangui Resident Records Management System (PRRMS) is a centralized digital platform designed to manage and organize information about the residents of Polangui. It securely stores essential data such as personal details, household information, and official documents, ensuring accuracy and easy access for authorized personnel. By digitizing records, the system reduces paperwork, minimizes errors, and enhances administrative efficiency. With its user-friendly interface and advanced search capabilities, the PRRMS enables local government officials to quickly retrieve resident information, issue certificates, and generate reports for planning and decision-making. It also supports population monitoring, aids in the implementation of social programs, and ensures transparency in public service delivery.

Key functionalities:

1. Centralized Resident Data Management
   - Securely stores personal details, household information, and official documents. Ensures data accuracy and easy access for authorized personnel.
2. Digital Record-Keeping & Paperless Administration
   - Reduces paperwork and minimizes errors. Enhances administrative efficiency through digitized record

Stakeholders: Residents of Polangui

- Provide personal information for registration and updates.
- Request services such as residency certificates and other official documents.

Core Data Processes

1. Resident Registration and Profile Creation

- Entities Involved: RESIDENT, ADDRESS, BARANGAY
- Input: Resident's personal details, address, and barangay information.

- Process:
    - Validate and insert data into RESIDENT and link it with ADDRESS and BARANGAY.
    - Assign resident_id and address_id for record tracking.
- Output: Resident profile created with accurate address and barangay linkage.

2. Data Update and Modification

- Entities Involved: RESIDENT, ADDRESS
- Input: Updated personal, address, or barangay information.
- Process:
    - Authenticate request and verify the resident.
    - Modify relevant records in RESIDENT or ADDRESS.
- Output: Updated resident data with version control for changes.

3. Certificate/Document Request and Issuance

- Entities Involved: RESIDENT, ADDRESS, BARANGAY
- Input: Request for certificates or documents.
- Process:
    - Authenticate resident identity using resident_id.
    - Retrieve necessary data from RESIDENT and ADDRESS.
    - Generate and issue requested document.
- Output: Official document issued with request logged.

4. Data Search and Retrieval

- Entities Involved: RESIDENT, ADDRESS, BARANGAY
- Input: Search queries based on resident name, barangay, or address.
- Process:

    - Perform search across tables to locate resident records.
    - Join data from related tables to provide complete information.
- Output: Retrieved resident profile with address and barangay details.

5. Population Monitoring and Data Analytics

- Entities Involved: RESIDENT, ADDRESS, BARANGAY
- Input: Aggregated resident and address data.
- Process:
    - Analyze population distribution based on barangay and town.
    - Generate statistical reports for demographic analysis.
- Output: Reports for planning and policy implementation.

6. Security and Data Access Control

- Entities Involved: RESIDENT, ADDRESS
- Input: Authorized user credentials.
- Process:
    - Authenticate and grant access based on roles.
    - Monitor and log user actions.
- Output: Controlled data access to protect sensitive information.

7. Audit Trail and Version Control

- Entities Involved: RESIDENT, ADDRESS, BARANGAY
- Input: System logs and modification records.
- Process:
    - Track changes made to resident and address records.
    - Maintain version history to ensure data integrity.
- Output: Comprehensive audit logs for system transparency.

8. Backup and Disaster Recovery

- Entities Involved: All entities (RESIDENT, ADDRESS, BARANGAY)
- Input: System data backups.
- Process:
    - Perform regular backups of resident records and related data.
    - Enable quick data restoration in case of system failure.
- Output: Secure data recovery and business continuity.

Group Member List with Assigned Roles

Project Lead: Queenie Sanico

Database Architect: Chariz Abanel

SQL Developer: Allanah Janelle Benisano

Back-End Developer: Eleana Mae Esparagoza

Q.A Tester: May Abaño