## **Beneficiary Management App Documentation**

### Overview

The Beneficiary Management App is designed to help Saylani Welfare efficiently manage and track beneficiaries seeking help. This CNIC-based system ensures that beneficiaries' information is recorded, tracked, and updated across departments while providing seamless user management for all stakeholders.

### **Stakeholders**

### 1. Admin:

- Full access to the system.
- Manage users, departments, and reports.
- Configure dashboard metrics and system settings.
- o Generate reports for operational insights.

## 2. Receptionist:

- Registers beneficiaries, capturing CNIC, name, contact details, address, and purpose.
- Assigns tokens based on the purpose and department.
- Manages initial data entry and verification.

#### 3. Department Staff:

- Scans tokens to retrieve detailed beneficiary information.
- Updates assistance status (e.g., In Progress, Completed).
- Notes remarks or actions taken during assistance.

## 4. Beneficiary (Seeker):

- Provides CNIC and purpose of visit.
- Uses tokens to access relevant departments.
- o Receives status updates on their requests.

## **User Flow**

## 1. Registration at Reception

- **Arrival**: Beneficiary arrives at the reception desk.
- Information Collection: Receptionist collects details including:
  - CNIC (unique identifier).
  - o Name, phone number, address.
  - Purpose of visit (e.g., financial aid, medical assistance).
- **Token Assignment**: A unique token is generated for the specific department.
- Confirmation: Token details are printed or sent via SMS.

### 2. Department Interaction

- **Token Presentation**: Beneficiary presents their token at the assigned department.
- Scan and Retrieve: Department staff scans the token to view:
  - Beneficiary's details.
  - Purpose of visit and history.
- **Assistance Provided**: Staff provides the required help and updates the system with actions taken and remarks.

## 3. Admin Dashboard

- Daily Insights:
  - Total visitors categorized by new and returning beneficiaries.
  - Department-wise activity statistics.
- Search Records:
  - Search by CNIC, phone number, or name.
- Reports and Logs:
  - Access detailed logs for operational audits and efficiency tracking.

### 4. Completion of Help

- Status Update: Once the assistance is complete, the status is updated in the system.
- History Logging: All actions are recorded against the beneficiary's CNIC for future reference.

#### **Core Features**

## 1. User Management

- Role-Based Access:
  - o Admin: Full permissions.
  - o Receptionist: Limited to beneficiary registration and token assignment.
  - Department Staff: Limited to viewing and updating status.
- Add/Edit/Delete Users: Admin can manage system users and roles.

### 2. Token System

- **Unique Token Generation**: Every token is unique and tied to the beneficiary's request and department.
- **Token Scanning**: Department staff scans tokens to instantly retrieve beneficiary details.

#### 3. Dashboard

- Metrics:
  - Daily visitor count.
  - New vs. returning beneficiaries.
  - Department-wise activity.
- Visualizations:
  - Bar charts for daily activity.
  - o Pie charts for department contributions.

## 4. Search Functionality

- Search Criteria:
  - CNIC (primary identifier).
  - Phone number.
  - Name.
- Instant Results: Filters return precise data with minimal delay.

## 5. History Tracking

- Comprehensive Logs:
  - Every interaction recorded with timestamps.
  - Details of purpose, departments visited, and status.
- Easy Access: Searchable history for audits and reporting.

## **Tech Stack**

- **Frontend**: React.js with Material UI or Tailwind CSS for responsive and interactive user interfaces.
- Backend: Node.js with Express for scalable API development.
- **Database**: MongoDB for flexible and efficient data storage.
- Authentication: JWT for secure, role-based access control.
- Deployment:
  - Vercel for the frontend.
  - Render or Heroku for the backend.

# **Example Data Flow**

## Registration:

- Input:
  - o CNIC, Name, Phone, Address, Purpose.
- Process:
  - Data saved in the database.
  - o Unique token generated and assigned.
- Output:
  - o Token printed or sent to the beneficiary.

## **Token Scanning:**

- Input: Token ID.
- **Process**: Retrieve data tied to the token.
- Output: Display beneficiary details, purpose, and history.

#### **Dashboard Metrics:**

- Input: Date range or department filter.
- **Process**: Fetch relevant data from the database.
- Output: Display statistics via visual charts and tables.

This document provides a comprehensive guide to the Beneficiary Management App, ensuring clarity for all participants and enabling a streamlined workflow.