| Proposed Title | Barangay Waste Management with Mobile App |
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| Proponents | **Jomarie E. Pendon** |
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| Project Description | Needs/Problem   1. Improper waste segregation and collection in barangays. 2. Residents lack timely information about garbage collection schedules. 3. Waste management inefficiencies affect cleanliness and public health.   Proposed Solution  Design and develop a Barangay Waste Management Mobile App. The system can be used for:   1. Notify residents of timely garbage collection schedules. 2. Encourage proper waste segregation. 3. Provide reports to barangay officials on waste compliance.   Differentiation or Novelty   1. No existing mobile app system for barangay waste management in local communities. 2. Focused on timely notifications and resident participation, not just monitoring.   Benefits and Significance   1. Improves cleanliness and sanitation in the barangay. 2. Encourages residents to follow proper waste segregation. 3. Provides a dataset for future local waste management research. 4. Enhances the efficiency and planning of garbage collection. |
| Objectives | General Objectives  To design and develop a mobile app that supports timely and efficient waste management in barangays.  Specific   1. Assess current challenges in barangay waste management. 2. Design a mobile app for timely collection notifications. 3. Test and evaluate app effectiveness in selected barangays. 4. Deploy the system and provide a user manual for barangay officials and residents. |
|  | General Methods   * Survey barangays to gather waste management data. * System design and mobile app development (Android/iOS). * Develop notification features for timely updates. * Pilot testing in one or two barangays. * Training sessions for residents and officials. |
| Expected Outputs | Expected Outputs   * Fully functional mobile app for waste management. * Manual for residents and barangay officials. * Partnership with barangay offices for deployment.   Economic and Social Impact   * Reduces improper waste disposal and related health risks. * Improves the efficiency of barangay waste collection. * Promotes community participation and environmental awareness. |