

B.1 PROPOSAL FORMAT/TEMPLATE FOR EXTENSION PROJECT

PART I
PROJECT SUMMARY

A. **Title:** DIGI-BARANGAY: Technology Transfer and Capacity Building for Digital Complaint Management in Barangay Lower Landing

B. **Implementer:** J.H. Cerilles State College – Dumingag Campus
School of Computing Studies

C. **Project Team:**

Project Personnel	Designation/Role	Area of Contribution
Vincent John L. Chatto	Project Leader	Project management and technology transfer
Meliza J. Chatto	Assistant Project Leader	Extension coordination and evaluation
Ninobel G. Canencia	Member	Community coordination and training
Vicpher D. Garnada	Member	System training and technical support
Precious V. Gitalan	Member	Training and documentation
Eric G. Lauron	Member	Data analysis and evaluation
Richard P. Lumocas	Member	Training and monitoring
Zenon A. Matos, Jr.	Member	Technical support and training
Nelson V. Idias	Member	Technical support and documentation

D. **Target Group**

The primary beneficiaries of the project will be the Barangay Officials and designated personnel of Barangay Lower Landing, Dumingag, Zamboanga del Sur, particularly those who will be responsible for receiving, managing, updating, monitoring, and reporting complaints through the transferred system.

The project will also involve selected residents and community/purok representatives who will be introduced to and assisted in using the digital complaint-reporting and tracking mechanism. Their participation will focus on appropriate account use, complaint submission, and monitoring of complaint status within the operational scope of the system.

The project will involve up to 80 participants across the various implementation activities, including project proponents, barangay officials and personnel, designated system users, and selected community/purok representatives. Participation will vary according to the activity, with designated barangay personnel serving as the primary institutional users of the system.

E. **Cooperating Agencies:** Barangay Local Government Unit - Barangay Lower Landing, Dumingag, Zamboanga del Sur

F. **Timeframe:** 12 Months, January 2027 to December 2027

G. **Financial Requirement:** ₱129,400.00

H. **Impact Statement:**

DIGI-BARANGAY will benefit Barangay Lower Landing by providing a digital mechanism for residents to report and track barangay concerns and for designated barangay personnel to record, manage, update, and monitor complaints. The project will also strengthen the capacity of barangay personnel to use and sustain the transferred technology within their existing complaint-management process.

The project will contribute to the wider community by demonstrating the practical use of student-developed technology in addressing identified community needs. It provides a mechanism for relevant and appropriate student outputs to move beyond academic requirements and be utilized for actual community benefit.

The project directly supports the College-Wide Extension Agenda, particularly Technology and Literacy Initiatives through technology transfer and capacity building, and

Barangay Empowerment and Good Governance through improved digital complaint-management processes. It also supports the College's thrusts on effective and efficient public service, technology integration, and community empowerment.

I. Summary

DIGI-BARANGAY will transfer and adapt the existing student-developed Barangay Complaint App for use in Barangay Lower Landing. The project will be managed by the JHCSC–Dumingag Campus School of Computing Studies in coordination with the Barangay Local Government Unit. Its operation will involve validation of the existing complaint-management process, necessary system customization and configuration, deployment, user training, and community orientation. Designated barangay personnel will manage the day-to-day use of the system, while the project team will provide technical assistance during the implementation period.

The project will benefit barangay personnel by providing a more systematic means of recording, tracking, updating, and monitoring complaints, while residents will have a digital option for submitting and tracking complaints within the system's scope. Its feasibility is supported by the availability of an existing student-developed application, an identified community need, and the partnership with the beneficiary barangay. Its necessity lies in providing a mechanism to move an appropriate academic technology output into actual community use and to strengthen the barangay's existing complaint-management process.

Project implementation will be evaluated through system-use monitoring, user competency assessment, review of complaint records, and user feedback. The results will be used to determine the initial effectiveness and usability of the transferred technology and to document lessons for possible future capstone-to-community technology transfer initiatives.

PART II PROJECT DETAILS

A. Background and Justification

The School of Computing Studies produces technology-based solutions through its student capstone projects. One such output is the Barangay Complaint App: A Mobile System for Reporting and Tracking Barangay Issues, developed to address difficulties encountered by residents and barangay personnel in reporting and managing community complaints. The capstone identified that complaints were commonly reported in person or verbally, which could cause delays, particularly when residents had difficulty reaching the barangay hall. The student developers also identified concerns related to complaint documentation and tracking of complaint status.

The system was developed based on requirements gathered through interviews with barangay officials, observation of the existing complaint-management process, and review of complaint records. These activities identified delays in complaint handling, inadequate documentation, difficulty tracking complaint status, and the lack of a systematic mechanism for providing updates to complainants. These findings informed the development of functions for complaint submission, status monitoring, complaint management, and report generation.

The proposed DIGI-BARANGAY project builds on this existing student output by transferring it from the academic setting to the beneficiary community. However, the completion of the capstone does not automatically establish the system's suitability for sustained community implementation. The project will therefore assess the existing complaint-management process and review the application against the actual needs, workflow, user roles, and available resources of Barangay Lower Landing. Necessary customization, configuration, testing, and capacity building will be undertaken before and during implementation.

The project was also conceptualized in response to the recommendation of the accrediting body for the School of Computing Studies to strengthen technology transfer in its extension initiatives. It addresses this direction by providing a concrete mechanism for utilizing an appropriate student-developed technology to respond to an identified community need. Rather than developing another system, the project will focus on technology transfer, contextual adaptation, capacity building, implementation, and evaluation.

The intervention is necessary because the existing complaint-management concerns identified during the capstone require not only a technological solution but also the transfer of knowledge and capability to the intended users. Through DIGI-BARANGAY, the project will support the barangay in adopting the transferred technology while generating documented experience that may guide the future utilization of other appropriate student-developed technologies for community extension.

A.1 Alignment to Global, National and Institutional Frameworks

A.1.1 S.D.G. (Sustainable Development Goal)

The DIGI-BARANGAY project primarily supports SDG 16: Peace, Justice and Strong Institutions, particularly the promotion of effective and accountable institutions, by establishing a more systematic digital mechanism for recording, tracking, and monitoring barangay complaints. It also aligns with SDG 9: Industry, Innovation and Infrastructure by transferring and adapting a student-developed digital innovation for actual community use, and SDG 17: Partnerships for the Goals through the collaboration between J.H. Cerilles State College–Dumingag Campus and the Barangay Local Government Unit of Lower Landing in implementing the technology-transfer initiative.

A.1.2 A.C.H.I.E.V.E.

The DIGI-BARANGAY project aligns primarily with Integrated Real-Time Data and Analytics and Effective and Efficient Public Service by introducing a digital mechanism for recording, tracking, updating, and monitoring barangay complaints, enabling authorized personnel to maintain organized complaint information for service monitoring and follow-up. It also supports Centralized Human Capital Development through hands-on training of designated barangay personnel in system operation, complaint data management, and basic system administration. In addition, the project contributes to Harmonized SDG-Based Research and Innovation by transferring and adapting a student-developed BSIT capstone technology for actual community use and demonstrating the application of academic innovation to an identified barangay need.

A.1.3 R.E.S.I.L.I.E.N.T.

The DIGI-BARANGAY project aligns with the RESILIENT Framework by promoting Research-driven, SDG-based, and industry-responsive education through the transfer of a student-developed technology to address an identified barangay need. It empowers communities and supports effective public service by strengthening the capacity of barangay personnel to manage complaints systematically. It also enhances research and innovation impact by translating a BSIT capstone output into practical community application. The project further supports Technology Integration and Infrastructure Development for Advancement and Real-time Analytics through the use of a digital complaint management system for organized recording, tracking, and monitoring of community concerns.

A.1.4 T.A.B.A.N.G.E.

The DIGI-BARANGAY project aligns with the JHCSC TABANGE Extension Framework, particularly under Barangay Empowerment and Good Governance and Technology and Literacy Initiatives. By transferring and adapting a student-developed Barangay Complaint App and building the capacity of designated barangay personnel to operate it, the project supports the adoption of appropriate digital technology in local service processes. It also strengthens the barangay's capacity to systematically record, track, and monitor community complaints while fostering collaboration between JHCSC and the local community through technology transfer.

B. Specific Objectives

The project specifically aims to:

1. Document and validate the existing complaint receiving, recording, tracking, and monitoring procedures of Barangay Lower Landing through consultation and process mapping with barangay officials and designated personnel.
2. Identify and document the operational and user requirements of the beneficiary barangay, including complaint categories, required data fields, user roles, status classifications, and reporting requirements.
3. Customize and configure the existing student-developed Barangay Complaint App based on the validated operational and user requirements of Barangay Lower Landing.
4. Deploy and operationalize one functional Barangay Complaint App for authorized use by designated barangay personnel and selected community users.
5. Develop the competency of designated barangay personnel in using the system for complaint recording, categorization, status updating, record retrieval, monitoring, user access management, and basic troubleshooting.
6. Establish documented procedures and user guidance for the operation and continued use of the transferred technology.

7. Orient selected residents and purok representatives on the available digital complaint-reporting mechanism and the basic procedures for submitting and tracking community concerns.
8. Monitor the initial implementation of the transferred technology through system records, user feedback, and documented operational issues.
9. Evaluate the technology-transfer intervention based on system operational status, training results, completeness of encoded records, personnel performance of assigned system tasks, and user feedback.
10. Document the technology-transfer process and lessons learned as a reference for the possible identification and community deployment of other appropriate BSIT capstone technologies.

C. Logical Framework

Particular	Indicators	Means of Verification	Assumptions
GOAL: Strengthened capacity of Barangay Lower Landing to manage and monitor community complaints through an appropriate digital technology.	• A functional digital complaint-management mechanism is in use during the implementation period. • Complaint records are more systematically recorded, tracked, and monitored through the system.	• System records • Monitoring reports • Evaluation report	Barangay officials support the continued use of the transferred technology.
PURPOSE: To transfer, contextually adapt, and institutionalize the student-developed Barangay Complaint App and develop the capability of designated barangay personnel to operate and manage it.	• One adapted and functional system deployed • Designated personnel trained and able to perform assigned system functions • Documented workflow and user guide established • Responsible personnel designated for system operation	• Deployment report • Training records and assessment results • User guide and workflow • Barangay designation/turnover document	Designated personnel remain available and willing to use the system.
OUTPUT 1: Existing complaint-management process and community requirements documented and validated.	• Existing complaint workflow mapped • Operational and user requirements identified and documented • Complaint categories, user roles, status classifications, data fields, and reporting requirements identified	• Consultation records • Process map • Requirements document • Validation report	Barangay officials and personnel provide accurate information and participate in consultation.
OUTPUT 2: Student-developed Barangay Complaint App customized, configured, tested, and deployed.	• System adjustments based on validated requirements completed • Authorized user accounts configured • System passes agreed functional testing • One functional system deployed for pilot use	• Customization/ configuration record • Testing checklist/report • Deployment report • System screenshots/records	Required hardware, electricity, internet connectivity, and system access are available.
OUTPUT 3: Designated barangay personnel capacitated in system	• Designated personnel complete assigned training sessions	• Attendance sheets • Training assessment results	Designated personnel attend training and participate in

Particular	Indicators	Means of Verification	Assumptions
operation and management.	At least 80% of trained personnel demonstrate competency in their assigned system functions based on the competency checklist	Skills demonstration checklist	hands-on activities.
OUTPUT 4: Digital complaint-management procedures and user guidance established.	- Complaint-management workflow documented and approved - User guide completed and turned over - Responsible personnel identified for system operation	- Approved workflow - User guide - Turnover documentation - Barangay designation/order	Barangay adopts the agreed workflow and assigns responsible personnel.
OUTPUT 5: Selected community representatives oriented on digital complaint reporting.	- Selected residents/purok representatives oriented on the available complaint-reporting mechanism - Participants demonstrate basic knowledge of complaint submission and tracking procedures	- Attendance sheets - Orientation report - Orientation materials - Brief post-orientation assessment, if used	Selected community representatives participate and are willing to use/share the reporting procedure.
OUTPUT 6: Initial implementation monitored and evaluated.	- System utilization monitored - Encoded records reviewed for completeness - User feedback collected - Operational issues documented - Technology-transfer evaluation completed	- System records - Monitoring reports - Feedback forms - Evaluation report	Users provide feedback and cooperate during monitoring and evaluation.
OUTCOME 1: Designated barangay personnel demonstrate capability to operate the transferred system.	At least 80% of trained personnel demonstrate the required functions for their assigned roles.	- Competency assessment - Skills demonstration checklist	Personnel remain assigned to the system during the pilot period.
OUTCOME 2: Residents have an available digital mechanism for submitting and tracking complaints within the system's scope.	- System is accessible to authorized community users during the pilot period. - Residents can submit and track complaints through the available functions.	- System records - User feedback - Monitoring reports	Residents have access to the required device and internet connectivity.
OUTCOME 3: Complaint information is more systematically recorded, tracked, updated, retrieved, and monitored during the pilot implementation.	- Complaints entered into the system contain the required information. - Status updates and records can be retrieved and monitored by authorized personnel.	- System records - Record-completeness review - Monitoring report	Complaints within the system's scope are encoded and managed by authorized users.
OUTCOME 4: Barangay has established personnel and procedures to support continued operation of the transferred technology.	- At least two designated personnel assigned responsibility for system operation. - Approved workflow and user guide available for reference.	- Designation/order - Approved workflow - User guide - Turnover documentation	Barangay leadership supports continued operation and assigns personnel as needed.

Particular	Indicators	Means of Verification	Assumptions
	• Turnover completed.		
ACTIVITIES:			
1. Project planning and coordination with the BLGU.	Approved implementation plan and coordination arrangements.	Project plan; meeting/coordination records	BLGU cooperates with the project team.
2. Consultation, process mapping, and validation of the existing complaint-management process.	Existing workflow and requirements documented and validated.	Consultation records; process map; requirements document	Officials and personnel provide relevant information.
3. Review, customization, configuration, and testing of the existing Barangay Complaint App.	Required adjustments completed and system passes agreed testing.	Customization record; testing checklist/report	Required technical resources are available.
4. Deployment and configuration of the system and authorized user accounts.	Functional system deployed for pilot use.	Deployment report; system records/screenshots	Internet, electricity, and required devices are available.
5. Role-based training of designated barangay personnel.	Personnel demonstrate assigned system functions.	Attendance; assessment; competency checklist	Personnel attend and participate in training.
6. Community orientation on digital complaint reporting and tracking.	Selected residents/purok representatives oriented.	Attendance; orientation report; materials	Community representatives participate.
7. Turnover, institutionalization, monitoring, technical assistance, and evaluation.	Responsible personnel designated; system use monitored; feedback and operational issues documented; final evaluation completed.	Turnover documents; monitoring reports; system records; feedback forms; evaluation report	Barangay continues to cooperate during the pilot period.

D. Methodology

The DIGI-BARANGAY project will use a participatory technology-transfer and capacity-building approach involving the project team, barangay officials and personnel, designated system users, and selected community representatives. The approach will begin with validation of the existing complaint-management process, followed by contextual adaptation and testing of the existing Barangay Complaint App. Training will be based on the roles of the intended users, while monitoring and technical assistance will support adoption during the initial implementation. Evaluation will focus on system operation, user competency, record completeness, operational issues, and user feedback.

Phase	Activity	Method / Description	Target Participants	Timeframe	Responsible Person/Team	Expected Output
Phase 1: Project Preparation and Partnership	1. Project Planning and Coordination	Conduct project briefing and coordination with the BLGU; confirm implementation arrangements, participants, schedules, and counterpart responsibilities.	Project team; BLGU officials	January 2027	Project Leader; Assistant Project Leader	Approved implementation plan and coordination arrangements
	2. Preparation and Signing of MOA and Required Documents	Prepare and process the MOA and other necessary documents, including letters, participant lists, data/privacy-related documents, implementation agreements, and other JHCSC and BLGU requirements.	Project team; JHCSC authorized representatives; BLGU officials	January 2027	Project Leader; Assistant Project Leader; BLGU Representative	Signed MOA and completed required project documents
Phase 2: Community Consultation and Process Validation	3. Community Consultation and Process Mapping	Consult barangay officials and personnel to document the existing complaint receiving, recording, tracking, and monitoring process and identify operational issues.	BLGU officials and designated personnel	January–February 2027	Project Leader; Community Coordination Team	Documented and validated complaint-management workflow
	4. Requirements Validation	Review the existing system against the documented barangay process and validate complaint categories, data fields, user roles, status classifications, and reporting requirements.	Project team; designated barangay personnel	February 2027	Project Leader; Technical Team; Data Analyst	Validated system requirements
Phase 3: Technology Adaptation and Testing	5. System Demonstration and Adaptation Review	Demonstrate the existing Barangay Complaint App and identify functions requiring adjustment based on validated requirements and actual user roles.	Project team; BLGU officials; designated system users	February–March 2027	Technical Team; Project Leader	Documented adaptation requirements
	6. System Customization and Configuration	Apply approved adjustments to the existing application, configure user roles and accounts, and prepare the system for local implementation.	Project technical team	March–April 2027	Technical Team	Customized and configured application

Phase	Activity	Method / Description	Target Participants	Timeframe	Responsible Person/Team	Expected Output
	7. System Testing and Validation	Conduct functional testing and user validation using agreed complaint scenarios to verify system functions before deployment.	Technical team; designated system users	April 2027	Technical Team; Data Analyst	Testing and validation report
Phase 4: Deployment and Capacity Building	8. Deployment and Initial Setup	Deploy the adapted application, configure authorized accounts, and establish the initial operating environment.	Designated barangay personnel	May 2027	Technical Team; BLGU system users	Functional system available for pilot use
	9. Training 1: Digital Complaint Workflow and System Roles	Explain the agreed complaint workflow, user responsibilities, system roles, and proper handling of complaint information.	Designated barangay personnel	May 2027	Project Leader; Training Team	Participants understand assigned roles and workflow
	10. Training 2: System Navigation and User Accounts	Provide hands-on instruction on login, navigation, account management, and role-specific system functions.	Designated barangay personnel	May 2027	Technical Team	Users demonstrate basic system navigation
	11. Training 3: Complaint Recording and Categorization	Train users to encode complaint information and apply the agreed complaint categories and classifications.	Designated barangay personnel	June 2027	Training Team; Technical Team	Users demonstrate complaint recording and categorization
	12. Training 4: Status Updating, Referral, and Follow-up	Train authorized personnel to update complaint status and record appropriate follow-up or referral information within the system.	Designated barangay personnel; relevant Lupon personnel	June 2027	Technical Team; Training Team	Users demonstrate status updating and follow-up procedures
	13. Training 5: Record Retrieval, Monitoring, and Reports	Train users to retrieve records, monitor pending and completed complaints, and generate available reports.	Designated barangay personnel	July 2027	Technical Team; Data Analyst	Users demonstrate record retrieval and monitoring functions
	14. Training 6: Basic Administration and Troubleshooting	Provide basic guidance on authorized user management, routine system administration, backup	Designated system administrators/personnel	July 2027	Technical Team	Designated personnel demonstrate basic

Phase	Activity	Method / Description	Target Participants	Timeframe	Responsible Person/Team	Expected Output
	15. Hands-on Simulation and Competency Assessment	procedures, and basic troubleshooting. Conduct simulated complaint cases and assess whether users can perform functions assigned to their respective roles.	Designated barangay personnel	August 2027	Training Team; Data Analyst	administration and troubleshooting Competency assessment results and identified training needs
Phase 5: Community Orientation	16. Community Orientation on Digital Complaint Reporting	Orient selected residents and purok representatives on the available digital complaint-reporting mechanism, submission procedure, and complaint-status tracking.	Selected residents; purok representatives	August 2027	Community Coordination Team; Training Team	Community representatives oriented on digital complaint reporting
Phase 6: Turnover and Sustainability	17. Turnover and Institutionalization	Turn over the system, user guide, documented workflow, and other agreed materials; formally identify personnel responsible for continued operation. Include orientation on basic administration, backup, troubleshooting, and system-use responsibilities.	BLGU officials; designated system personnel	September 2027	Project Leader; Assistant Project Leader	Turnover documents, user guide, workflow, and designated system personnel
Phase 7: Monitoring, Technical Assistance, and Evaluation	18. Monitoring and Technical Assistance	Monitor system use, encoded records, operational issues, and user concerns; provide technical assistance and corrective guidance when necessary.	Designated barangay personnel; selected users	October–November 2027	Project Team; Technical Team	Monitoring records, technical assistance reports, and documented issues
	19. Final Evaluation and Documentation	Assess system operation, user competency, record completeness, and user feedback; document lessons and recommendations for future technology-transfer initiatives.	Project team; BLGU personnel; selected users	December 2027	Project Leader; Data Analyst; Evaluation Team	Evaluation report and technology-transfer documentation

E. Line-Item Budget

Budget Item	Particulars	Quantity	Unit	Unit Cost (P)	Amount (P)
1. Operating Cost					
1.1 System Customization and Deployment					
	System customization and technical configuration	1	service	15,000	15,000
	Domain/hosting and system-related services	1	year	8,000	8,000
	System testing and deployment support	1	service	5,000	5,000
Subtotal – System					₱28,000
1.2 Training and Office Supplies					
	Bond paper	5	reams	300	1,500
	Special paper/cardstock	2	packs	300	600
	Ballpens	80	pcs	15	1,200
	Pencils	80	pcs	10	800
	Notepads/notebooks	80	pcs	30	2,400
	Folders/document envelopes	80	pcs	20	1,600
	Permanent markers	2	sets	300	600
	Whiteboard markers	2	sets	250	500
	Masking/adhesive tape	4	rolls	75	300
	Training handouts/activity sheets	80	sets	50	4,000
Subtotal – Supplies					₱13,500
1.3 Community Orientation and Documentation					
	Community orientation materials	80	sets	50	4,000
	User guide/SOP printing	20	copies	150	3,000
	Certificates	80	copies	30	2,400
	Documentation and reproduction materials	1	package	2,000	2,000
Subtotal – Documentation					₱11,400
1.4 Communication and Technical Support					
	Communication/load for coordination	1	package	3,000	3,000
	USB flash drives for system backup	2	pcs	500	1,000
	Printer ink/toner	2	sets	750	1,500
	Extension cords	2	pcs	500	1,000
Subtotal – Communication/Technical Support					₱6,500
2. Travel Costs and Food Expenses					
2.1 Field Monitoring/Travel					

Budget Item	Particulars	Quantity	Unit	Unit Cost (P)	Amount (P)
Subtotal – Travel	Field monitoring transportation/expenses	4	visits	2,000	8,000
					₱8,000
2.2 Food Expenses					
	Snacks	80 pax × 5 sessions	pax/session	100	40,000
	Meals	80 pax × 1 session	pax/session	250	20,000
Subtotal – Food					₱60,000
3. Evaluation					
	Evaluation forms and reproduction	1	package	2,000	2,000
TOTAL PROJECT COST					₱129,400

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