**NUEVA VIZCAYA STATE UNIVERSITY**



Bambang, Nueva Vizcaya 3702

**COLLEGE OF INDUSTRIAL TECHNOLOGY**

Information Technology Department

**Dormitory Information and Monitoring System**

A Capstone Project Proposal

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|  |  |  |  |
| --- | --- | --- | --- |
| **Title**  **Dormitory Information and Monitoring System** | | | |
| **Type**  Web Application | | | |
| **Proponents**   1. Dan Vincent Angelo L. Necosia 2. Beth A. Matis 3. Beverly C. Orencia | | | |
| **Rationale**  Web-based systems are commonly used by many organizations to reach their users and make transactions as easy as possible. Nowadays organizations should have an automated system that can accommodate the needs of every user.  Nueva Vizcaya State University’s Dormitory is one of the few organizations that still uses the old manual process. The problem of sticking to manual processes is that the transactions are very slow, time consuming and often prone to human error. Managing the activities inside of the dormitory is very challenging because of the large number of tenants.  The main purpose of this project is to develop a web-based Dormitory Information and Monitoring System that will replace the manual monitoring system. This project will be more effective in managing all the transactions and activities inside the organization. Also, there are different bodies that will be benefited from this system. The main beneficiary of this system is the Dormitory Management in which, first, the environment is changed to a computerized environment, which improves the quality of internal operations as well as services given to students. Secondly the problem associated with manual processing is minimized and the quality of work and services became improved.  Once the new system is implemented the dormitory manager will be benefited from the system in such a way that the quality and performance of his/her work is improved, the time they spent for manual operation is significantly reduced and their management and control of their job is improved. Secondly students are not expected to be in campus to know about their dormitory information. That is, once the allocation report is generated by the system, the system provides an interface which enables the students to know about their dormitory information, about academic colander and some academic announcements and finally they submit their personal information through the Internet. | | | |
| **Functionality** | | | |
| **ID** | **Type** | **Function** | **Priority** |
|  | FR | Admin must have login and logout functionality | M |
|  | FR | Admin can manage all users (CRUD) |  |
|  | FR | Admin can approve the applications for tenants |  |
|  | FR | Admin can view the tenant’s profile |  |
|  | FR | Admin can view the inventory of the tenants’ belongings |  |
|  | FR | Admin can print all the forms |  |
|  | FR | Admin can post meeting for the organization |  |
|  | FR |  |  |
|  | FR | Tenants can login to their account |  |
|  | FR | Tenants can submit a leave pass (curfew overnight) |  |
|  | FR | Tenants are required to submit an evaluation form before the end of semester |  |
|  | FR | Tenants can send a picture of the receipt from the cashier to the admin |  |
|  | FR |  |  |
|  | FR |  |  |
|  | FR | Visitors should apply for visit |  |
|  | FR |  |  |
|  | FR |  |  |
|  | FR |  |  |
|  | FR | Visitors can submit an evaluation form |  |
|  | FR |  |  |
|  | FR | Parents |  |
|  | FR |  |  |
|  | FR | Applicants can submit an application form to be evaluated by the admin |  |
| Legend: M – Must Have, S – Should Have, C – Could Have, W – Won’t Have | | | |
| **Expected Value**   1. **Tangible Value** 2. 15% increase in the number of domestic tourists 3. 5% increase in the number of international tourists 4. **Intangible Value**   1.Increase Employee Morale  2.Reduce Resource Consumption  3.Increase Management flexibility  4.Provides More timely information | | | |
| **Feasibility**   1. **Operational**   The project will require at least three people to use the management dashboard and these users have displayed interest to be trained. The web application can be easily integrated in the normal operation of the organization.   1. **Technical**   The project can be pursued given the current technical resources of the organization. However, new hardware is required for the full operation of the project.   1. **Economic**   The project will require the acquisition of additional hardware that are not readily available in the organization and the operation of the project will need web hosting with domain name subscription. Regarding these matters, the client will look for funding as they are very much willing to invest on this project.   1. **Schedule**   The project will start on the first week of March and end on the second week of December with a total of 38 weeks. | | | |
| **Development Plan**   1. **Methodology**   The project team will make use of different **Agile Software Development**methodologies.   1. Extreme Programming 2. Test-Driven Development 3. **Target Platform** 4. Web Browser Access, Chromium-Based preferred 5. **Software Architecture** 6. Web Application 7. Client-Server Application 8. Model-View-Controller 9. **Development Software** 10. Programming Language: HTML, CSS, JavaScript, PHP, SQL 11. Development Environment: Visual Studio Code, Laragon 12. Other Technologies: 13. **Development Hardware** 14. Development Machines (Laptop) 15. **Expected Deliverables** 16. Front-End Application 17. Back-End Application 18. User Manual | | | |

**APPENDIX A**

**Client Profile**

<Place History, Vision, Mission, Photo of the Client / Organization>

**APPENDIX B**

**Business Process Model / Current System**

<Place the Business Process Model of the Client>