**GO-YDD ORMIN: Youth Management System**

A Capstone Project

Presented to the Faculty of the

Polytechnic University of the Philippines

Bansud, Branch

Bansud, Oriental Mindoro

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**Chapter 1**

**THE PROBLEM AND ITS BACKGROUND**

**Introduction**

With the use of technology, rapid improvement in the field of youth development by using new methods, tools, and system that improve the efficiency, and relevance of programs intended for youth. Technology guides and support the different needs of the youth individuals. Youth development gives community leaders access to the knowledge and collaboration of young people, allowing adults to better grasp what it’s like to grow up in a quickly changing environment. Youth profiling aims to gather information and data of the youth members. This allows development of plans, programs, and policies intended for the youth.

Office of the Governor - Youth Development Division (GO-YDD) aims to advance the general development of young people in the province of Oriental Mindoro. It provides an environment for which includes and strengthening young people in a variety of initiatives, plans, and policies that cater to their needs and issues. The organization collaborates and organizes efforts to create favorable growth and youth development.

In Accordance to the Republic Act No. 10742, often known as the Sangguniang Kabataan (SK) Reform Act of 2015, aims youth involvement in local government and community development is facilitated by the Sangguniang Kabataan. It Identifies all youth ages fifteen (15) to (30) years which primary details serves as basis in crafting relevant programs and policies.Youth profiling aims to gather information and data of the youth members. The information that will be gathered in the youth profiling will be stored to the upcoming portal and will only be used for the purpose of database management

**Project Context**

The GO-YDD ORMIN: Youth Management System aims to develop a system that monitors youth profiling in different municipalities of Oriental Mindoro. Moreover, this system will also include registration of youth organization in different municipalities of Oriental Mindoro.

The system starts with the registration of an account. There are three users for this system: Super Admin, Municipal Admin, and Youth Individual. The user needs to enter their email and password. Once logged in, the user will then proceed to the dashboard based on his/her role. Super Admin can view registered profiles, view pending, approved, and expired organization lists, view events, view reports submitted by different youth organizations, and lastly, add provincial youth organizations and Municipal Admin. On the other hand, Municipal Admin can view registered profiles, view pending, approved, and expired organization lists, approve, disapprove and add municipal youth organizations, and lastly, add upcoming events, accomplishment reports and monitoring reports. Meanwhile, youth individuals can discover announcements, view events and register for youth profiling or youth organization.

The main feature of GO-YDD ORMIN: Youth Management System is to provide admin panel that can view and monitor registered profile and registered youth organizations and create events that will cater the needs of the youth in different municipalities. This system was created by the proponents to help Office of the Governor - Youth Development Division (GO-YDD) to have an online youth profiling system and registration of youth organization in different municipalities in Oriental Mindoro.

**Purpose and Description**

The purpose of the system is to help the Office of the Governor- Youth Development Division (GO-YDD) have a system that will help in youth profiling and registration of youth organizations in different municipalities of Oriental Mindoro. The proposed system can speed up the work efficiently by using it. The advantage of using the system is that it has a process that will streamline youth profiling and registration for

youth organizations. Thus, the Office of the Governor- Youth Development Division (GO-YDD) can create programs and projects aligned to the needs of the youth.

Office of the Governor - Youth Development Division (GO-YDD) Super Admin has access to view youth profiles and view registered youth organizations, events, and reports submitted by the admins from different municipalities in Oriental Mindoro. This system will help GO-YDD and municipalities in Oriental Mindoro create plans, programs, and policies that will benefit the youth.

This is a web-based system that will help GO-YDD to have a system that will help in youth profiling and registration of youth organizations. There are three (3) users of this system. First is the Super Admin, who can view registered profiles of youth and organizations, events, and reports, and can add another user or admin to this system. The second user is the Municipal Admin, which can add events, approve or disapprove youth organization, view youth organization lists, and view reports. The third user is the youth individual, who can register for youth profiling or register organization and view updates and upcoming events.

**Objectives**

The general objective of this project is to develop a system for the Office of the Governor - Youth Development Division (GO-YDD) which can help streamline youth

profiling in different municipalities of Oriental Mindoro and create a system that can accommodate the registration of youth organizations.

The following are the specific objectives that the system must accomplish:

1. Provide feature that monitors, maintains, and views the youth profiles in different municipalities in Oriental Mindoro;
2. Provide a feature for the admin to approve or disapprove youth organizations;
3. Allows admin to add events that are aligned with the needs of the youth;
4. Allows admin to view the pending, approved, and expired organization lists;
5. Generate accomplishment and monitoring reports of admin that can be easily exported in Word formats; and
6. Evaluate the profiling system if it complies with ISO/IEC 25010 software quality standard, which include: Functionality, Efficiency, Usability, Security, Portability and Maintainability.

**Scope and Limitations of the Study**

This project is intended for the Office of the Governor- Youth Development Division, in the Province of Oriental Mindoro. Its primary function is youth profiling and registration of youth organizations in different municipalities of Oriental Mindoro. The system can view registered lists of youth and youth organizations, add events, and generate accomplishment and monitoring reports. The project will cover the following main function: (a) Youth Profiling. The system can view and record youth profiles. (b) Generation of

reports. The system can generate accomplishment and monitoring reports submitted by the admins from different municipalities in Oriental Mindoro. (c) Approve Youth Organization Request. The Municipal Admin can approve/disapprove youth organizations; it can also view and record lists of existing youth organizations. (d) Add User. Super Admin can add admin for each municipality. Super Admin can also create and set up accounts for municipal admins.

However, it is important that the system may have some limitations. The system is limited to youth profiling and registration of youth organizations in the province of Oriental Mindoro. Moreover, the system may not replace the need for physical records entirely and may still require occasional manual data entry and management. In addition, since the system is web-based, it will only be accessible through the use of the internet.

#### **Significance of the Study**

The outcome of the study will be beneficial to the following:

**GO-YDD Office.** The system will help the GO-YDD Office create a system that can be used for youth profiling and monitoring and viewing lists of registered youth organizations.

**Youth.** The system will be a platform for individual youth to easily view upcoming events created by the organization. It will also be easier for youth individuals to register for profiling.

**Youth Organization.** The system provides an easier process of registration for youth organizations. They can register through the system and submit reports such as accomplishment and monitoring reports.

**Local Youth Development Office.** The system will help the local youth development office to create plans and programs for their youth population. Moreover, the system will help in providing updates and disseminating upcoming plans and events for the youth.

**Proponents.** This system enables the proponents to gain practical experience in designing, implementing, and optimizing software for real-world applications.

### **Future Proponents.** This proposed system will be a great help to them as a basis or reference if they wish to continue this study, and future proponents will gain more knowledge and enhance their skills in terms of system development and programming.

### **Definition of Terms**

The following term used by the proponents is operationally defined for understanding the project.

**Dashboard.** This refers to an interface through which users can access and view their data. This also refers to the page where users can get an overview of the data in the system.

**Email Registration.** This refers to collecting email addresses from young individuals as part of a process to create profiles or gather information.

**GO-YDD.** This is an acronym for the Office of the Governor- Youth Development Division (GO-YDD) which is a governmental or organizational body at the provincial level that is responsible for the development of profiles of youth in the province, aiming to inform programs, services, and interventions tailored to the youth populations.

**Municipal Admin.** Person who is in charge of managing the system. This refers to the person who can approve or decline youth organizations, add events, and generate reports in their respective municipality.

**Profiling.**  This refers to the systematic collection and analysis of data related to young individuals to understand their characteristics, behaviors, preferences, and interests. This also refers to recording information about youth individuals that can be view and monitored in the system.

**Record Management.** This refers to collecting, storing, and managing various types of records, such as demographic information, behavioral patterns, preferences, and interactions with services or programs.

**Security.** This term was used in our project to protect youth’s records from unauthorized individuals viewing, modifying, or stealing youth information.

**Super Admin.** This refers to the person who has the highest authority in the system. Super admin can add, edit, and delete users (municipal admin).

**XAMPP.** Is a popular free database system used for administration and querying. It is also one of the tools used by the proponents for the database management of the system.

**Youth.** Refers to the period between childhood and adulthood. Youth also refers to someone who’s between 15 and 30 years old.

**Chapter 2**

**REVIEW OF RELATED LITERATURE AND STUDIES**

This chapter presents literature and studies done by experts that have significant bearing to this project.

**RELATED LITERATURE**

According to Zeynep Tufekci (2014) Digital technologies have given rise to a new combination practices which allow for massive, latent data collection which allow for massive, latent data collection and sophisticated computational modeling, increasing the capacity of those with resource and access to use these tools to carry out highly effective and unaccountable campaigns of persuasion. This article examines the implications of big data and surveillance technologies for youth participation in public life and the role of digital profiling in shaping political engagement.

According to LJ McElravy, Lindsay J Hastings (2014) the transfer of leadership to younger generations is an important factor in agricultural communities and is likely one reason developing leaders is a central mission of many youth organizations, including 4-H and FFA. This profile could help in planning for and developing the next generation of community leaders. This profile could help in planning for and developing the next generation of community leaders. In this study, we explored the relationship between traits, including the Big-Five model of personality and emotional intelligence, and self-perceived leadership skills in youth participating in summer leadership conferences Emotional intelligence and age predicted the youths’ self-perceived leadership skills. The potential need for youth leadership development programming to include, and perhaps even focus on, emotional intelligence is outlined.

According to Gareth J Jones et al. (2020) Positive youth development (PYD) is the most popular framework guiding sport-for-development (SFD) research. To date, much of this work has focused on how sports programs are purposefully designed to promote PYD outcomes. However, the youth-context interactions that form the theoretical basis of PYD occur across all aspects of youth ecologies, meaning youth SFD organizations are most effective when they enhance the capacity of communities as well.

According to Sam J. Cooley et al (2019) Individuals, particularly those considered “hard-to-reach,” often engage well with assessment tools that involve active dialogue and the co-construction of knowledge. Strengths profiling is one such tool that enables a person-centered and autonomy supportive approach to the identification of character strengths. Strength profiling is an adaptation of performance profiling used in sport psychology, which has not yet been utilized in broader psychological research or clinical practice. Supporting an individual by raising awareness of their personal character strengths is an effective and growing mechanism for promoting psychological well-being. Strengths profiling involves several stages of exploring, defining, and assessing character strengths, leading to the identification of signature strengths and goals for future development.

**RELATED STUDIES**

According to Ana Burmakina (2023) Network capital provides leaders of youth organizations with mobility network capital develops and maintains social relations without reference to geographical location, which makes it a source of emotional, financial or practical benefits. Network capital is supplemented and enhanced by digital capital, digital skills, online activities, membership in virtual communities etc. Youth organization leaders accumulate network and digital capital at different stages of their career in youth

\organization: before joining as a member and after leaving.In general, network interactions manifested at different stages of leader’s life path, contributing to their mobility.

According to the study of Ahmad Zaharuddin Sani Ahmad Sabri, Fatinah Mangsor (2017) Youth assumes as the part as the most key resource for a country. Therefore, the researcher has chosen to study the profile of youth leaders in Malaysia Youth Council. The instrument used for this study is done through the quantitative findings by using questionnaires that have been distributed around to the youth association though out Malaysia under Malaysia Youth Association. The samples in this research are done based on random stratification. The data of the study had been analyse by using the description statistics of three chosen elements from the research questionnaires which are the leaders’ ethnicity, highest academic qualification and the residents of the leaders. So as to guarantee the manageability and the accomplishment of country building, they ought to be sustain to embellish their leadership since youth are the critical resource of our nation.

According to Nicholas L Holt et al. (2017) the overall purpose of this study was to create a model of positive youth development (PYD) through sport grounded in the extant qualitative literature. More specifically, the first objective was to review and evaluate qualitative studies of PYD in sport. The second objective was to analyze and synthesize findings from these studies. Following record identification and screening, 63

articles were retained for analysis. Meta-method analysis revealed strengths of studies were the use of multiple data collection and validity techniques, which produced high-quality data. Weaknesses were limited use of ‘named’ methodologies and inadequate reporting of sampling procedures. Philosophical perspectives were rarely reported, and theory was used sparingly. Results of an inductive meta-data analysis produced three categories: PYD climate (adult relationships, peer relationships, and parental involvement), life skills program focus (life skill building activities and transfer activities), and PYD outcomes (in personal, social, and physical domains). A model that distinguishes between implicit and explicit processes to PYD is presented.

According to Dian Yu (2019) This study sought to identify profiles of positive youth development (PYD) integrating racial–ethnic factors, specifically racial–ethnic pride and perceived racial–ethnic barriers in a sample of African American (77%) and Latino (23%) children (*N* = 234, Mean age = 8). Using a latent profile analysis, we found three profiles: The High PYD, Proud, & Optimistic (High PYD, racial–ethnic pride, and low perceived racial–ethnic barriers), the High PYD, Proud, & Aware (high PYD, pride, and perceived barriers), and the Low PYD and Disconnected (low PYD, pride, and high barriers). The Optimistic profile exhibited fewer overall adjustment problems and higher

standardized achievement at Time 2 than both the Aware and the Disconnected profiles. The Aware and the Disconnected showed similar adjustments. This study highlights the critical role of helping youth to feel competent, caring, connected, and proud, which further supports the role of sociocultural factors in the PYD of African American and Latino children.

**Synthesis of Related Literature**

This Review of Related Literature and Studies provides examples cited in this chapter tackles youth development, emphasizing the interconnections of digital engagement, leadership,community empowerment, and sociocultural influences. The exploration of digital technologies underscores the impact of data collection and computational modeling on youth participation resonating with examination of network capital and its role in facilitating mobility and social relations among youth organization

leaders. The positive youth development (PYD) frameworks within sport-for-development programs echoing the exploration of PYD outcomes and program focus through qualitative analysis. The emphasis on strengths profiling for psychological well-being intersects with the study on profiles of positive youth development factors , both emphasizing the importance of fostering competencies and pride among youth.The literature herein provided adequate knowledge and background information to the proponents, enabling them to conceptualize the study. The proponents get and use other research in this chapter, which helps them because they gain knowledge while creating the systems.

The similarities between the proposed system and the previous research are the system seeks to equip youth with the resources and abilities needed for success. In this case, both systems aim to develop a crucial factor to fulfill the needs of society. Both prioritize using technology effectively and improving system security.

**Chapter 3**

**TECHNICAL BACKGROUND**

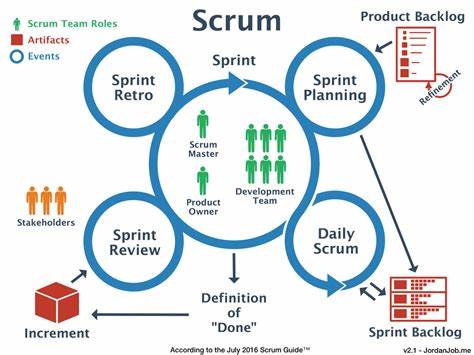
System design is the process of defining the architecture, components, modules, interfaces, and data for a system to satisfy specified requirements. This chapter discusses the research method used, software development methodology, different requirement analysis tools, and systems requirements of the software product.

**Methodology**

​ The proponents will utilize Scrum Methodology, a framework of Agile Methodology. This methodology involves providing solution for complex problems. Each member has a specific task based on their skill set and reviews each members performance for the next development phase of the project. Moreover, this methodology breaks the process into smaller phases and allows collaboration from the scrum team together with the project owner to finish the project.

According to Hayat et.al., (2019), agile methodology is the iterative way of for developing software projects for frequent changes, fast delivery and reduces risk. It involves four processes. The first phase is the Sprint planning. This phase is based on the product backlog where the scrum team discussed the system flow and assigned the task for every member of the team. Next phase is the Sprint, which refers to all events and development of the project. In this phase, the whole team will gather and discuss the progress and other matter in regarding to the project development. Thirdly, in the Sprint review, the system will be presented to the project stakeholders, to check if they needed a modification or not, and if there were feedback which can be added to the increments and backlog. And the fourth phase is the Sprint Retrospective. In this phase, reflections will be given by each member of the scrum team for what they’ve encountered such as issues and discoveries, to discuss what solution can be made to solve issues and how

this discovery can be implemented to the future sprint. And then proceed to again to planning for the next sprint.



**Figure 1. Scrum Model**

**Scrum Event.**

**Sprint Planning.** In this phase, the proponents conducted an interview to the Office of the Governor-Youth Development Division to gather information such as project

requirements and functionality of the system they want to achieve to enhance on their existing system. The information gathered will be use as a guide in the actual sprint.

**Sprint.** This is the actual development of the system. Each member has their assigned tasked. The Technical Writer makes documentation and manual of the system. System analyst makes flowchart and diagrams that has the flow of the system. Programmers makes the code of the system based on the flowchart and diagram made

by the system analyst. There will be daily scrum meeting that discusses the progress of the system facilitated by the project manager.

**Sprint Review.** In this phase, the proponents will run a test on the system and also, checks if the projects meet the user’s expectation, check for any errors in the system, and for missing components and functions which were listed in the past phases.

**Sprint Retrospective.** The proponents will perform a meeting with all of the scrum members to discuss and reviews the sprint. The team makes a new list of priorities and updates for the next sprint and what they need to do in order to increase efficiency.

**Scrum Artifacts.**Thisis the key information needed during the development of the project. These are the information given by the project owner and will be used as a guide by the scrum team.

**Product Vision.**   It deals with the long-term direction of the project management. Each member of the team has its own task such as project manager, programmer, system analyst and technical writer to do they work together to achieve the project goal.

**Product Backlog.**  It is the list of all predetermined project requirements given by the product owner which is the admin of the system together with its staff; it is arranged accordingly by its level of priority. These were settled by the scrum master or the project manager.

**Sprint Backlog.** It is the sets of planned product backlog alongside with its time frame, to be implemented in the project to have the real-time visualization of the developer’s plan for the development, this was also these plans on how the increments were delivered.

**Increment.** It is all the completed or updated work or item during the sprint as well as the previous of it. The previous increment must be mark as done to start the initiation of the new updates or increment.

**System Requirements**

This phase is where the evaluative process employed by the proponents encompassed aspects such as security, functionality, reliability, efficiency, and usability. A variety of methods were utilized to ensure the consistency of the proposed system such as unit testing, and version control. Additionally, the design and development of the system will incorporate specific software and hardware components.

**Table 1**

**Software Specifications**

|  |  |
| --- | --- |
| **Software** | **Specification** |
| Operating System | Windows 11 Home Single Language 22HZ |
| Visual Studio Code | Version 1.80.1 |
| Composer | Version 2.6.5 |
| Xampp | MySQL |

**Software.** In the development phase, system software and application software will be used. In the system software, the system may run on Windows 11 operating system and higher system compatibility. The following software is the software application that will be used throughout the phases of the development, specified in version and uses. In terms of application software, the front-end are developed using Vanilla JavaScript and Bootstrap focusing on user interface and visual aspects, while the back-end is powered by Laravel, and MySQL/PHP, serving as the core for data management and processing within the system. The software specification is software used by the programmers in the development of the system.

**Table 2**

**Hardware Specifications**

|  |  |
| --- | --- |
| **Hardware** | **Specification** |
| Processor | 11th Gen Intel(R) Core (TM) i3-1115G4 @ 3.00GHz 3.00 GHz |
| RAM | 8.00 GB |
| Storage | 475 GB |

**Hardware.** The following are the hardware that will be used throughout the phases of development. The hardware utilized across the developmental stages includes laptops. These laptops served as the primary tools for the proponents throughout the creation of GO-YDD ORMIN: Youth Management System in different municipalities of province of Oriental Mindoro.

**GO-YDD ORMIN: YOUTH MANAGEMENT SYSTEM**

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Programmer

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Project Manager

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System Analyst

**Peopleware.** Figure 2 shows the organizational chart of the project. The project manager is responsible for developing, leading, and overseeing construction of the progress in project initiation and development during the design phase. System Analyst provide assistance to both scrum team and end users, also provide overview of the project development goals and makes flowchart and diagrams that will be used by the team during the development of the system. Programmer writes code for computer programs. They are also involved in maintaining, debugging, and testing of the system, they also ensure that the system is running smoothly. Lastly, the Technical Writers are responsible for producing documentation and manual of the system. They also work together with the scrum team for project requirements of the system.

**Figure.3 Context Flow Diagram**

Registration of profile/ youth organization

User Management

Youth/

Youth

Organization

Super Admin/

Municipal Admin

Updates/Announcement//Events

Generate Report

Figure 3. Context Flow Diagram provides the overview of the Youth Development Management System. The diagram shows the flow of the system's context. User management, includes other admin tasks and adding users to the system who can manage each municipality. Registration of profile and youth organization, includes inputting data on the system. Generation of Report, system can generate accomplishment and monitoring report, the data provided by the Youth and Youth Organization, and is used by the admins to create events. Lastly, updates, announcements, and events are generated by the system and can be accessed and viewed by end users.

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Study

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