**OSP360: Development of One-Stop Portal with Enrollment system for Sta. Juliana High School**

A Capstone Project

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**RECOMMENDATION FOR ORAL EXAMINATION**

This capstone project titled “**OSP360: One Stop Portal with Enrollment System for Sta. Juliana High School”,** prepared and submitted by **Shen Danielle H. Villoso, Jhersell R. Bactol, Lenard V. Mendoza and Daryl John Mananghaya** in partial fulfillment of the requirements for the degree of Bachelor of Science in Information Technology has been examined and is recommended for acceptance and approval for ORAL EXAMINATION on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

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# CHAPTER 1

**INTRODUCTION**

In today's digital age, technology has revolutionized many aspects of our lives, including education. With the rise of online learning and remote teaching, the use of digital tools and platforms has become increasingly essential in facilitating effective education. One of the most valuable technological tools for educational institutions is the school portal. A school portal is an online platform that serves as a centralized hub for communication, collaboration, and organization within a school community. It provides students, teachers, and administrators with access to a wide range of services, and information, including class schedules, grades, and school news.

School portals have become ubiquitous in modern education, as they offer a plethora of benefits for both educators and learners. For example, they facilitate effective communication and collaboration between teachers, students, and parents. By providing a centralized location for accessing information and resources, school portals can help reduce confusion and increase efficiency, making it easier for students to stay organized and on track. Moreover, school portals can help teachers track student progress, identify areas of weakness, and adjust their teaching methods, accordingly, leading to improved learning outcomes.

The benefits of school portals extend beyond the classroom as well. Administrators can use them to streamline administrative processes, such as managing student records and scheduling events, which can help reduce administrative workload and increase efficiency. Additionally, school portals can help promote a sense of community and engagement among students, parents, and staff, by providing a platform for social interaction and collaboration.

Despite the many benefits of school portals, there are also potential challenges and concerns. For example, ensuring the privacy of sensitive information is of utmost importance when using school portals. Furthermore, school portals may exacerbate existing disparities in access to technology and digital literacy, which could lead to inequalities in education.

In this paper, we will explore the significance of school portals in public schools, examining their benefits, challenges, and implications for education in the digital era. By understanding the potential of school portals, we can better harness the power of technology to enhance the educational experience and prepare students for success in the modern world.

### **1.1 PROJECT CONTEXT**

The School Portal serves as an inventive web-based system tailored to meet the specific needs of Sta. Juliana High School, a public educational institution aiming to enhance accessibility and user experience. Its primary focus lies in providing a user-friendly platform for students and teachers, streamlining essential administrative tasks such as grade checks, enrollment facilitation, and other school-related activities. By implementing this system, the school aims to ease the burden of manual paperwork and establish a more efficient workflow for all parties involved.

It is essential to acknowledge that many schools, particularly those situated in rural areas of the Philippines, lack advanced web-based systems. Consequently, students and teachers often endure the challenging task of commuting to the school premises for administrative work, sacrificing valuable time that could be better spent with their families.

In response to this challenge, the school Portal offers an optimal solution by allowing individuals to conveniently access and manage their school-related tasks from the comfort of their homes. This newfound flexibility empowers both students and teachers to allocate more time towards personal commitments, fostering a healthier work-life balance.

**1.2 PURPOSE AND DESCRIPTION**

The purpose of the web-based school portal for Sta. Juliana High School extends beyond being a mere online platform. It serves as a centralized hub, access to information and updates for all stakeholders involved in the educational journey. By providing a user-friendly interface, the portal aims to enhance the educational experience for students, parents, teachers, and administrators, fostering interaction, and keeping everyone informed about crucial school-related matters.

Among the key features being developed for the school portal is an Online Enrollment Module, which will significantly streamline the school's administrative workflow. Recognizing the substantial paperwork often associated with public schools, particularly in the Philippines, this module aims to simplify the enrollment process for students and parents.

The web-based school portal is designed with the primary objective of assisting the unique community of Sta. Juliana High School, which predominantly comprises students from the Aetas tribe. To cater to their specific needs and cultural context, the system features different modules, including home, module, about, offices, forms, and contact us. These modules encompass all the essential information and resources related to Sta. Juliana High School, ensuring that the needs of the students and the community are met.

Particular attention has been given to designing the system with a simple and intuitive interface to cater to the diverse user base. Valuable insights from a faculty member at Sta. Juliana High School, have emphasized the importance of creating a user-friendly experience, especially for the Aeta students. The aim is to ensure that all users, regardless of their technical background, can easily navigate and comprehend the various modules and functionalities offered by the web-based system.

Through the implementation of the Online Enrollment Module and other essential features, the web-based school portal empowers Sta. Juliana High School to foster productivity, accessibility, and empowerment among its stakeholders. By simplifying administrative processes and enriching the overall educational experience, the school portal facilitates interaction and resource sharing within the school community, contributing to a thriving educational environment for all involved.

In conclusion, the integration of the School Portal at Sta. Juliana High School not only aims to enhance overall administrative efficiency but also seeks to empower individuals by granting them greater control over their time and commitments. By transitioning from conventional paper-based methods to a digital platform, the school endeavors to create an environment that promotes productivity, convenience, and a profound sense of empowerment for all stakeholders involved in the educational journey.

An essential extension to the school Portal is the incorporation of an Online Enrollment Module, revolutionizing the traditional enrollment process. This module will provide secure user accounts, streamlined digital enrollment forms, document upload, and real-time application status tracking. The addition of the Online Enrollment Module will significantly reduce administrative inefficiencies, eliminate geographical barriers, and enhance accessibility for students and parents, particularly those residing in rural areas. This digital solution will empower individuals to conveniently manage their enrollment process, leading to a more efficient and gratifying educational journeys for all stakeholders involved.

**OBJECTIVES**

**GENERAL OBJECTIVES**

The general objective of the study is to develop OSP360: Development of One-Stop Portal with Enrollment system for Sta. Juliana High School.

**SPECIFIC OBJECTIVES**

Here are the specific objectives of the school poral:

1. To develop a web-based system that can be accessible and convenient for all users.
2. To provide a streamlined enrollment process for students, teachers and administrators.
3. To provide a secured database that will protect and store user’s private information.
4. To develop a mobile application that can be access school website and students portal.

**SCOPE AND DELIMITATION**

**SCOPE**

This thesis project aims to develop a web-based school portal for a public school in the Philippines, which provides a platform for students, teachers, and the admin to manage academic and administrative information easily and effectively. The system allows students to log in and access their academic information such as their profile, schedules, grades and enroll through the portal. Teachers can view the list of students in their class, encode grades, and download forms. The admin has the ability to enroll students, approve student’s enrollment, manage accounts, download form, grant forms for students and create schedules and section for student.

**DELIMITATION**

The delimitation of the project are the system will only be developed for a specific public school in the Philippines, and not for any other schools, the system will only provide functionalities for students, teachers, and admin, and will not include the roles of other school staff members, the scope of the thesis project is limited to the development of a web-based school portal with the functionalities mentioned, some of the feature in web system will not be the same in the mobile application development for a more comfortable way of exploring the portal and the testing and evaluation of the system will be based on its usability, reliability, and security, and will not consider any external factors that may affect the usage of the system in the school or in other schools.

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# CHAPTER 2

# REVIEW OF RELATED LITERATURE AND SYSTEMS

This chapter extensively reviews and integrates prior research related to the approved capstone topic. The purpose is to establish a basis for the study, as the chapter identifies the gaps in previous studies and the frameworks that can or cannot be utilized in the current capstone project. The objective is to provide a contextual background for the current study and emphasize its originality in the field.

### **2.1 RELATED LITERATURE/STUDIES**

Today's education system has made enormous strides, with technology playing a major part in enhancing the learning environment. Schools, colleges, and universities work to raise education standards and give students access to cutting-edge facilities as the population grows. Educational institutions use a variety of strategies and tactics to create the perfect learning environment, with the student portal being a key component.

With the use of a student portal, teachers and students can access relevant information via a specific website. Maintaining current student records using this platform has shown to be more efficient than doing so using conventional paper-based techniques. Utilizing websites and access rights greatly increases the usability and accessibility of critical data in a time when data is digitized and stored in cloud-based systems.

Any educational institution can organize student and teacher records by using the student portal as a single hub. The variety of advantages it provides explains its significance. First off, by login into the site and entering attendance data after each lesson, it enables teachers to regularly update student attendance. Processes for keeping records and tracking attendance are streamlined as a result. Additionally, the student portal acts as a channel for communicating significant announcements and news from the school or college. Through the site, students can quickly access important information like holiday announcements or emergency notifications. The portal also offers details about timetables, activities, and events including student weeks, sporting events, and exams. Furthermore, all course lecture materials are uploaded to the web so that students can download them for independent study. Additionally, students can upload digital work directly for teachers to review online and change grades on the portal.

Workflows for both students and professors are greatly streamlined when student portals are used in educational institutions, leading to quicker and more effective procedures. Student portals contribute to better educational experiences by offering a consolidated platform for coordinating academic activities and information access. [1]

The benefits of having a student portal are numerous and varied. A student portal is an

online platform designed to provide students with easy access to a range of academic and administrative resources. Here are some of the key advantages of having a student portal:

* Improved communication: With a student portal, communication between students and faculty members can be streamlined. Students can receive announcements, notifications, and updates about their classes and assignments in real-time. They can also communicate with their instructors and classmates through forums, chat rooms, and email.
* Increased engagement: A student portal can be a valuable tool for promoting student engagement and involvement. By providing access to resources like online discussion forums, blogs, and wikis, students can collaborate with their peers and take an active role in their own learning.
* Easy access to information: A student portal can serve as a one-stop-shop for all the information students need about their classes, schedules, grades, and more. This can save time and reduce confusion, as students no longer have to navigate multiple websites or systems to find the information they need.
* Personalization: A student portal can be customized to meet the individual needs of each student. By providing personalized recommendations and resources based on their academic goals, interests, and learning styles, students can receive a more tailored educational experience.
* Convenience: With a student portal, students can access their academic information from anywhere at any time. This can be especially helpful for students who are working or have other responsibilities outside of school.

In conclusion, a student portal can provide a range of benefits to students, faculty.

members, and institutions. By improving communication, increasing engagement, providing easy access to information, offering personalization, and enhancing convenience, a student portal can help students achieve their academic goals and succeed in their studies. [2]

Online enrollment programs have long offered convenience and effectiveness to

administrators, parents, and students alike. The advantages of these devices have emerged as the pandemic continues to affect the world in 2020, particularly in reducing contact and exposure to the virus. The benefits of online enrollment, however, go beyond the epidemic because they can lessen the anxiety and irritation associated with enrolling youngsters in a new school or facility, raise parent and student satisfaction levels, and streamline the marketing and monitoring procedures.

Any system created to gather data on kids before they enroll at a facility or school is

considered an online enrollment system. These solutions do away with the requirement to mail forms or for families to pick them up in person by enabling administrators to transmit forms to parents via email or an internet portal. Using a unique login for each parent, website portals or online enrollment management systems provide parents and children access to a website where they may fill out their personal information and submit it to the school.

Depending on the demands of the facility, the process of gathering information can follow a predetermined order or parents can supply each piece of information in the order that is most comfortable for them. Online platforms for enrollment then input the data directly into the school's management system, allowing enrollment decisions to be made there. This guarantees that all data is immediately incorporated into the student profiles prior to the start of the new school year, especially during periods of high enrollment.

Administrators can gain from using online enrollment systems in a number of ways, such

as preventing lost papers, splitting up scanning duties, staff monitoring, decreasing redundant work, tracking deadlines, and doing yearly adjustments. Online enrollment processes also help parents save time, eliminate duplicate data, fill out forms that are missing, and complete information for numerous children. [3]

An online enrollment system is a valuable tool for educational institutions as it simplifies the process of enrolling students and parents in classes and school services. In contrast to traditional methods, such as sending forms via email or requiring parents to visit the school in person, an online enrollment system utilizes web portals or mobile apps to facilitate the process.

The key benefits of a cloud-based enrollment system are:

* Time and cost savings: The automation provided by the website and mobile apps significantly reduces the time and cost associated with enrollment. Students can register for multiple classes simultaneously, eliminating the need for filling out separate forms for each course. Parents no longer must physically retrieve and return paper forms, saving them time and travel expenses. Moreover, schools can save on human resources by eliminating the need for manual form processing and data entry.
* Accurate information: Online enrollment platforms minimize the risk of missing or duplicate data, which can cause issues for both schools and learners. By allowing parents to submit applications only once and facilitating updates, if necessary, an online system ensures the accuracy and integrity of enrollment information. Additionally, the elimination of manual data entry reduces the chances of errors.
* Real-time tracking: Traditional enrollment methods require substantial time and effort to track and manage data, with no real-time updates available. In contrast, an online enrollment system enables school staff to monitor the progress of all registrations in real time, facilitating prompt actions and issue resolution. This eliminates the need for manual record reviews and ensures a smooth enrollment process.
* Boost in re-enrollment rate: Online enrollment systems can generate reports and provide insights that help schools make informed decisions to increase re-enrollment rates. By analyzing data collected through the system, administrators can gain customer insights, identify popular courses or activities, and make improvements accordingly. This contributes to an enhanced re-enrollment rate and overall school performance.

In conclusion, implementing an online enrollment system brings benefits to all stakeholders involved in the enrollment process. It streamlines procedures, saves time and costs, enables accurate and real-time tracking, and ultimately contributes to higher enrollment and re-enrollment rates. [4]

Through the Teachmint Student Portal, students can access educational resources,

participate in live classes and communicate with other students and teachers online. A customizable dashboard, class schedules, attendance monitoring, and performance metrics are just a few of the features available on the platform. The Teachmint Student Portal's user-friendly interface, which makes it simple for students to explore and obtain the information they need, is one of its main advantages. The schedule tool enables students to examine their class schedule and plan their study routine appropriately, while the dashboard provides a rapid overview of forthcoming classes, assignments, and other crucial information. The portal offers several communication tools, such as chat and video conferencing, in addition to these capabilities, enabling students to communicate with their instructors and classmates in real-time. As it fosters a sense of community and connection, this can be especially beneficial for students who are taking classes online.

The Teachmint Student Portal's emphasis on student engagement and participation is

another benefit. Teachers can design interactive tests and polls on the site, as well as give students individualized feedback and help. This can result in better learning results by keeping pupils interested and motivated. Overall, the Teachmint Student Portal offers a variety of features and capabilities to enhance online learning and student engagement, making it an effective tool for both teachers and students. It can change how students learn and participate with their education thanks to its user-friendly interface and emphasis on personalization and interactivity. [5]

The increasing reliance on online services has led to higher expectations for colleges and universities in terms of what they offer and how they deliver their services. Portals have become a crucial technology for providing students with the necessary content, applications, and services to succeed. In recent years, portal strategies have evolved, employing web content management software to create better online experiences, integrate with existing systems more effectively, and provide more engaging content.

Launching a new portal or improving existing online services can bring several benefits. Students, whether new or returning, have a lot to do before the school year begins, including selecting courses, familiarizing themselves with the campus, locating classrooms, meeting areas, living facilities, the library, bookstore, department offices, and more. A student portal, also known as a Digital Experience Portal, aims to make this adjustment process easier by providing tools that allow students to find information quickly.

Supporting students is not limited to the beginning of the school year; it is an ongoing process. Students require access to financial services, learning management systems for submitting assignments and checking grades, collaboration platforms for group projects, and the ability to update their student profiles. While students could navigate multiple systems, contact various individuals, or search through numerous applications to find the information they need, a student portal offers a better solution. It provides an engaging student experience by serving as a central access point for all applications, information, and content.

The term "portal" often carries a negative connotation due to outdated versions that were merely link holders. However, a modern Student Portal surpasses its legacy counterparts by offering not only single sign-on access to essential systems but also a content-driven experience within the portal itself. [6]

The enrollment procedure of an educational institution becomes significantly complicated as the waiting time extends and crowd’s form. Employing technological tools emerges as the most efficient solution to address this challenge. This study aims to enhance the efficiency of enrollment management processes in an educational institution by introducing a digital enrollment system. According to the American Community Survey (ACS), There is about 26% of the population of US over the age of 3 enrolled in school in 2018. This report consolidates the most recent data sourced from both the ACS and the current population survey (CPS). Which are two complementary surveys conducted by the U.S Census Bureau. These surveys offer insight into school enrollment trends in the United States. The aim is to present a thorough, complete overview of the state of school enrollment. More precisely, the report presents the current educational landscape in America and examines how present figures stack up against historical data. [7]

The enrollment procedure at this university is managed manually, involving significant human involvement. Students are given paper forms to input their enrollment details, which are then manually entered into the computer by student administrators (SAs). Following data entry, Sas meticulously review business rules and authenticate and confirm the enrollment status. Compliance with various requirements is necessary for enrollment to be considered valid and authorized. In addition to streamlining the enrollment process, the online enrollment system allows international students to register for courses without the need to physically visit the university and complete paper-based enrollment forms or proxy enrollment forms. [8]

Universities and colleges are seeking ways to expedite transactions and enhance efficiency, with registration being a key process. Enrollment systems are crucial in educational settings, as they oversee student data, course tracking, and enrollment roster creation. These systems facilitate efficient data storage and retrieval through a database structure. The widespread adoption of web-based applications is primarily attributed to their prevalence. With the Internet’s current and potential expansion, it has a pivotal avenue for enhancing and integrating e-commerce processes utilizing available technology. Some educational institution, following this trend, have embraced online registration systems, enabling students to enroll in courses remotely, eliminating the need for physical campus visit. Drawing inspiration from these online services, the development and deployment of an admissions system for higher education institutions in Zamboanga Peninsula is deemed a pragmatic measure amid the pandemic. This research delves into conventional school procedures, aiming to refine them into a more efficient web-based application system. [9]

The fast-approaching growth internet technology enables the utilization of diverse methods for browsing the web. Among the excess number of devices employed to access the internet are desktop computers with varying screen sizes, tablets, smartphones, and television.

The system allows students to register online without the need to physically visit the campus, integrating the school’s administrative procedures such as enrollment, registration, and grading. The design and development of the system were tailored to facilitate access and usability on mobile devices. [10]

A web-based enrollment system was created for Veritas Parochial School (VPS) in Manila to streamline the enrollment process for its students. This system eliminates the inconvenience of lengthy form-filling and waiting in lines to pay at the cashier. Through the Web-based Enrollment System for VPS, students can enroll more than efficiently, offering them alternative enrollment methods for VPS. [11]

## 2.2 RELATED SYSTEMS

Table 1. Summary Table of Related System Applications

Table 1 shows the features of the related systems and Sta. Juliana High School! It also illustrates some of the great attributes of the proposed system/application.

**St. Paul University – Quezon City**

St. Paul University Quezon City (SPUC) is one of the 36 schools of Sisters of St. Paul of Charters that caters from Pre-School to Graduate programs. They used to be an exclusive school for girls until 2004 where they started to accept male students. Due to the volume of students that this University has, their school portal is making life of the students and faculty easier. You can immediately see the latest news and events of the campus. There is also a drop-down list for admission to their Basic Education (Pe-School to Senior High School), undergraduate courses they offer and graduate study programs [7].

**De La Salle University**

De La Salle University (DLSU) is one of the prestigious schools in the Philippines. With over thousands of students enrolled in the University, they created a portal hat will be convenient to the students and faculty. Through their site, students can request for documents, view their grades, schedule, and even donate and support DLSU’s several projects and campaign. These things can be found in the quick links on the left side of school portal and can redirect them to the student portal. For aspiring La Sallians, they can choose from the different courses offered and start their application online immediately. DLSU also share the news, events, and stories of their students here in their website [8].

**APEC School**

A network of private schools in the Philippines that focuses on providing affordable and quality education for students. The acronym APEC stands for “Affordable Private Education Center. The enrollment system for new students required to fill up the inquiry form from their website while the returning inactive students need to fill up or submit the google form. [9]

**Pasig Catholic College**

Pasig Catholic College (PCC) is an educational institution located in Pasig City, Philippines. It is a private Catholic school that offers primary, secondary, and tertiary education. They have an online enrollment system wherein the students or applicants can apply or enroll for the upcoming school year or semester. [10]

**2.3 SYNTHESIS**

To provide some context about the study, Sta. Juliana Highschool is a public school,

located in Capiz, Tarlac City that offers free education for both Junior and Senior Highschool levels. However, their current system is manual, which causes inconvenience for the school community. The aim of the study is to replace this outdated system with a more user-friendly one, which has different categories such as Admin, Students, Teachers, and Registrar.

The admin portal has the ability to handle the entire website, while the student portal

allows students to access their profile, view their schedules, obtain clearance information, and view their grades. The Teacher portal allows teachers to access the list and number of students, the grading system, edit website content such as honors and testimonials, and download forms. Lastly, the Registrar Portal provides the Registrar office with access to release forms such as form 137 and good moral, keep student records, manage enrollment and registration, and create accounts for students and teachers.

The project aims to provide a convenient system for the school's faculty and students to

meet their academic needs and requirements. The system will have various tabs such as home, which will provide the latest updates about enrollment and upcoming school events. The about tab will feature the history of Sta. Juliana High School as well as its vision and mission. The offices tab will contain information about different departments such as accounting, registrar, and faculty. The forms tab will offer paperwork that students or teachers may need, which will now be easily accessible through the online portal. Lastly, the contact us tab will include the necessary information about Sta. Juliana High School, including its contact number, email address, physical address, and social media.

# CHAPTER 3 TECHNICAL BACKGROUND

Within this chapter, a thorough examination of the technical background of the study is presented. The focus is on discussing the technology employed in the development and implementation of the system, encompassing hardware, software, peopleware, and network components. Furthermore, the chapter provides an in-depth analysis of the system's architecture and its various modules, offering comprehensive insights into their functionalities and interconnections.

### **3.1 DETAILS OF THE TECHNOLOGY TO BE USED**

This section discusses about the Hardware, Software, and Peopleware specification in the web application system. The developers create a system to a public school in Capas, Tarlac which is the Sta. Juliana High School. To help the students as well as the teachers to lessen the paperwork they encounter every school year.

**SOFTWARE**

Table 2. Software Requirements

|  |  |
| --- | --- |
| **Software** | **Specification** |
| **Windows Operating System** | Windows 10 is the minimum specs requirement for all the languages to be installed in the PC. |
| **Mobile Application** | |
| **Android Studio** | At least 2.0GHz processor with at least 5GB of RAM and at least have 2GB of available disk space to install. |
| **Flutter** | 4 GB RAM minimum, 8 GB RAM recommended. 5 GB of available disk space minimum, 4 GB Recommended (500 MB for IDE + 1.5 GB for Android SDK and emulator system image) 1280 x 800 minimum screen resolution. |
| **Web Application** | |
| **Web Browser** | An updated version of Google Chrome, Internet Explorer version 11, an updated version of Mozilla Firefox, and others that are running in Windows 10 OS. |
| **PhpMyAdmin** | At least 2GB RAM and at least have 2GB of available disk space with running windows 10 Operating System |
| **MongoDB** | Version 1.16.2 x86 |
| **HTML (Hyper Text Markup Language)** | Requires text editor or an IDE (Integrated Development Environment) and a web browser such as Google Chrome. |
| **CSS (Cascading Style Sheets)** | Requires text editor or an IDE (Integrated Development Environment) and a web browser for viewing the CSS style. |
| **Bootstrap** | The Bootstrap framework is built on Hypertext Markup Language (HTML), cascading style sheet (CSS) and JavaScript. |
| **JavaScript** | 1 GHZ or faster, 32 bit or 64-bit processor. 256 MB RAM for 32 bit or 512MB RAM for 64bits. |

Table 2 lists the software requirements in developing the mobile application were used: Android Studio and Flutter and SQLite for the database.

In developing the web system, the languages used are as follows:

**HTML (Hypertext Markup Language)**

The front-end of the system was developed using HTML, CSS, BOOTSTRAP and JavaScript, while the back end was implemented using MongoDB and PHP.

**Android Studio**

Android Studio is used for the mobile application development. Because of its different features, the app can run into different versions from Lollipop to the latest versions. To execute the study, smartphones with Android OS version 6.0 (“Marshmallow”) up to the latest is needed to run the mobile application.

**Web browsers**

The web system, once developed, can access on any web browsers such as Google Chrome, Mozilla Firefox, and among others. Once the web system application system is developed, these browsers can be used for the implementation.

**HARDWARE**

Table 3. Hardware Specifications

|  |  |
| --- | --- |
| **Hardware** | **Specification** |
| **Personal Computer** | Both desktop and laptop at least 4GB RAM and with at least 2GB of the available disk and running windows 10 OS.  At least Intel Core 3 processor or with like processor specs |
| **Smartphone** | Android smart phone with Android OS version 9.0 (“Pie”) up to OS version 13.0 (“Tiramisu”) |

As **table 3** indicates, these are the hardware specifications to be used in the development as well as the implementation and testing of the proposed system.

**Personal Computer**

A desktop or laptop with 4GB RAM with available hard disk space of 2GB was used to develop the system. This specification is perfect fit for the development of mobile application and web system. The android studio requires 4GB RAM to use for testing mobile app and running emulators.

**Android Smartphone**

Android smart phone with Android OS version 9.0 (“Pie”) up to OS version 13.0 (“Tiramisu”)

**PEOPLEWARE**

For the development of the mobile application and web system, these are the technical personnel who mainly involved in the formation of Sta. Juliana High School System are the following:

**Project Manager**

has the overall duty concern in study of a successful planning, programming, designing, execution, monitoring, and closing of the said project. It is a must to have an ability to resolve a problem and have a management skill as well. The project manager is also responsible to know how to handle his/her team properly and has an open mind regarding the ideas and solutions his/her team might suggest in the said project. The project manager communicates with the capstone instructor and the group adviser about the deadlines and gives tasks to the members and managing them at a given time.

**Web Developer/Mobile Application Developer**

must have a high comprehension when it comes to modern programming and has the knowledge in different programming languages. The developer should also be able to think relevant, analytically, and have the ability to design. The programmer is responsible for the front end and back-end codes of the system.

**System Analyst**

is the one who needs to have a great defining and analyzation skills, especially when it comes to some issue their system might encounter soon. Also, the System Analyst must solve and be able to come up with the right solutions for the issues and errors the system might encounter. That is why his role is very important in every team.

**Documenter/Technical Writer**

is the one who is responsible of all the documentation work regarding all the revisions and suggestions they encounter. The Technical Writer’s task is to monitor all the documents that is needed and checking it if it has grammatical errors or any typographical errors within the document.

**NETWORKS**

Both mobile application and web system require an internet connection to run.

**Wi-Fi (Wireless Fidelity) / Wired Connection**

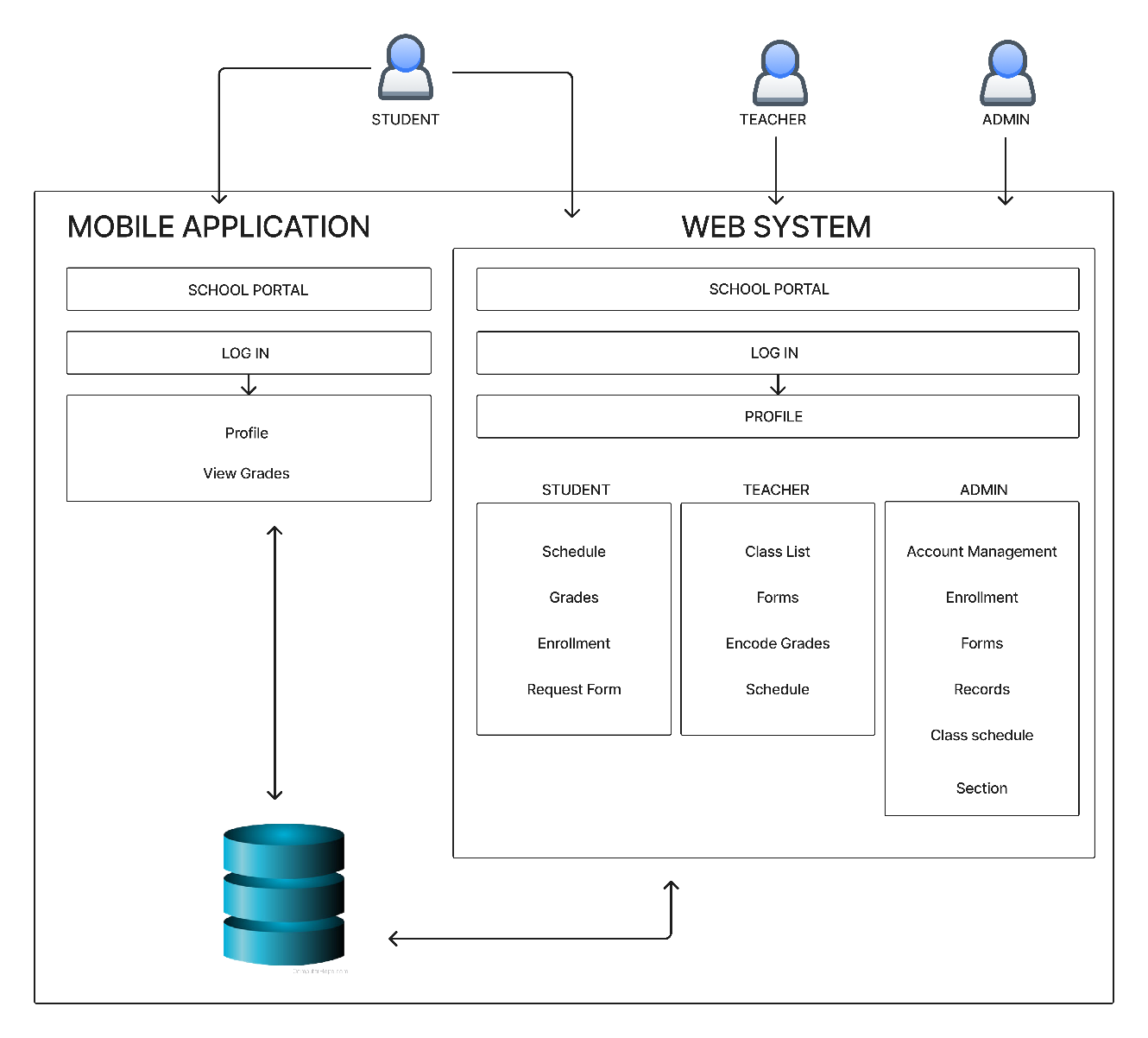
To run the system, an internet speed of at least 6MBPS can help to view images, and access the modules.

**Mobile Data**

At least 2gb of data is needed to access the system and its modules.

## 3.2 PROJECT TECHNICAL DESCRIPTION

Figure 1. System Architecture



**Figure 1.** The system administrator has been granted a range of abilities, which include the power to generate, modify, and delete accounts integrated into the system. Beyond these account management functions, this module also widens its capacities to cover tasks such as enrolling students and editing different sections of the website. These sections encompass news and events, the school year calendar, testimonials, outstanding students, meet our faculty, department directory, and the contact us page. Furthermore, the module enables offices to securely oversee student records and facilitate the issuance of required student forms. Through this school portal, the teacher can view its class list, download forms, encode the grade of its students and see the schedule on its own convenience. The students can use this portal to enroll, check their schedule, view their grades, and request forms. While mobile application can be use by the students to view their profile and check their grades.

**Web System Modules**

**Admin Dashboard**

Within this module, the system administrator is empowered with various functionalities, including the capability to add, edit, and delete accounts that are incorporated into the system. In addition to these account management features, this module extends its capabilities to encompass the enrollment of students and the ability to approve the enrollment and edit various sections of the website, they can also create schedules and section for students, they grant requested forms form student and can download their own forms.

These sections include news and events, the school year calendar, testimonials, outstanding students, meet our faculty, department directory, and the contact us page. Furthermore, the module allows offices to securely maintain student records and facilitate the release of necessary student forms.

Once the administrator successfully completes the registration process, they gain exclusive privileges to edit specific sections of the website that require regular updates to reflect the most current news and events transpiring within the school. These areas serve as key focal points for keeping the website dynamic and up to date. The following system components are available for the administrator to modify and customize within the website:

* **Homepage**

The admin has the ability to update and manage the content displayed on the homepage, focusing specifically on the sections dedicated to showcasing the latest news and events. This ensures that visitors to the website are promptly informed about noteworthy developments within the school.

* **About Section**

The admin can make changes to the "About" section, enabling them to highlight outstanding students and provide up-to-date information about the esteemed faculty members associated with the institution. This allows the website to showcase the achievements and expertise of the school's community.

* **Offices**

The administrator has the authority to edit the content pertaining to various offices within the school. This includes updating contact information, office hours, and any other relevant details to facilitate effective communication between the school and its stakeholders.

* **Form Request**

The admin possesses the capability to manage and update the forms available on the website. This ensures that students, parents, or any other relevant parties can access and complete the necessary forms conveniently, streamlining administrative processes.

* **Contact Us**

The administrator can modify the contact information displayed on the "Contact Us" page. This includes updating contact numbers and names of the offices, enabling website visitors to easily reach out to the respective departments or personnel for inquiries or assistance.

**Teachers Dashboard**

Within this module, teachers are provided with a range of capabilities to facilitate their daily tasks and responsibilities. Firstly, teachers have the privilege to access and view their class lists, allowing them to conveniently keep track of their students' information. Additionally, teachers are empowered to download necessary files. These forms include leave forms, certificates of appearance, home visitation forms, attendance sheets, minutes of meetings, and donation forms. Furthermore, teachers are equipped with the functionality to submit and finalize grades for their students.

**Students Dashboard**

Within this module, students are provided with convenient access to various features that enhance their academic experience. They can easily view essential information such as their profile details, class schedules, and grades. Additionally, students have the capability to enroll in their school, and fulfill any missing requirements in their clearance information.

# CHAPTER 4

# METHODOLOGY, RESULTS AND DISCUSSION

In this chapter, the researchers will take some time to talk about crucial aspects of their project. First, they will go over how they figured out what their project needed to accomplish and how they documented those needs. Then, they will explain how they planned and shaped the software using different methods. They'll also describe how they checked to ensure the software works correctly and does what it's supposed to do. Moreover, they will discuss the steps they took to actually build the software. Finally, they'll provide a detailed overview of what their finished system can do, giving you a clear picture of its features and functions.

## 4.1 REQUIREMENTS ANALYSIS AND DOCUMENTATION

**Project Design Methodology**

The project will utilize both descriptive and developmental methodologies. The descriptive method [1] is employed to describe a phenomenon, population, or situation. On the other hand, the developmental method [2] involves a systematic approach to creating, designing, and evaluating programs to ensure they meet the standards of effectiveness and consistency.

The research employed a descriptive method to assess the proposed system's effectiveness for the client. This study also sought to assess the system's functionality, usability, reliability, performance, and security once it was developed. Additionally, the study utilized a developmental method, focusing on creating web and mobile applications tailored specifically for administrators, teachers, and students. To enhance the efficiency of the development process and improve system output, the Agile Model will be adopted during the web and mobile application development phases.

Specifically, the formal and logical steps of the entire process of the development of the web and mobile application are acquire from the Agile Model.

**Figure 2** Illustrates the project methodology employed during the web and mobile application development process. Agile development encompasses project planning, requirement definition, software design, project development, integration testing, and operation and maintenance. Each phase will be subjected to thorough research to ensure that all essential information and data are in place for the development of the web and mobile application. This methodology was selected because it follows a continuous cycle, making the development process more adaptable and convenient.

A diagram of a project

Description automatically generated

source: <http://xcelcorp.com/blog/2017/05/31/major-advantages-disadvantages-agile-methodology/>

Figure 2. The Agile Development

Here are the phases of the Agile Development Model:

**Project Planning**

Project Planning plays a pivotal role in this project, serving as a guiding framework throughout its lifecycle. It acts as a map for researchers, enabling them to optimize their efforts and ensure project success. Project Planning serves as a valuable tool for managing tasks and maintaining a smooth workflow. During a meeting with the client, the researchers identified the client's needs and preferences. Subsequently, both parties deliberated on various aspects, including the project's objectives, scope, and limitations, as well as the functional and non-functional requirements for the software and hardware involved. This comprehensive discussion serves as a means of assurance, ensuring that both the researchers and the client have a clear understanding of the project and its execution. Importantly, it allows for the resolution of any potential issues or challenges before the project officially commences.

**Requirements Definition**

In software development, the crucial process of requirement definition involves gathering input from stakeholders, scrutinizing it, and confirming it to establish the functionalities users can utilize within the software and its expected behavior. To prevent the creation of superfluous functionalities, it is common for the development team to later realize that they’re built features that users neither desire nor require once the product is released. To prevent the squandering of time and resources, it is imperative for the development team to establish clear development priorities and validate them with users. The concept of the “cone of uncertainty,” estimation gains substantial accuracy following the requirement definition phase. In simpler terms, precision in estimation relies heavily on well-defined requirements, which is crucial for aiding stakeholders in making informed decisions. The requirements serve as the foundation for shaping subsequent processes like technical design, coding, and testing. When the requirements lack clarity, it can lead to subpar quality in these subsequent phases, potentially necessitating rework.

**Software design**

The initial and arguably the most crucial stage involves recognizing that design isn’t merely a brief task preceding development. It’s an ongoing process that accompanies that product throughout its entire lifespan. If developers are necessary, so too will be designers. It may sound like a cliché, but it holds true, we can create design more quickly than we can write code. This implies that a product’s features or functions can be designed and conceptualized at a faster pace than developers can fully implement them. This discrepancy is particularly evident when we consider tasks related to bug fixes and back-end work. Consequently, design members typically consist of fewer members than development teams. Because design tasks are generally shorter in duration compared to development tasks, design sprints also tend to be shorter. While it might seem unconventional to have design and development sprints of differing lengths, effective coordination between the two departments can make this approach work seamlessly.

**Project Development**

This phase stands out as the most extensive, handling most of the workload. The development team will now commence the process of merging all the product requirements collected during the concept and inception phases. It will undergo multiple reviews and revisions to enhance it until it reaches its final form.

**Integration Testing**

Testing phase in Agile methodology is a continuous and integral part of the development process, with a focus on early and frequent testing to ensure high-quality software. Agile aim to detect and address issues as soon as they arise, allowing for greater flexibility, faster delivery, and improved product quality. The agile life cycle incorporates various types of testing, including:  
Unit Testing: At this stage, The QA separately evaluates each front-end and back-end component’s performance and functionality. Integration Testing: This phase merges different product parts to verify their compatibility. Acceptance Testing: Upon completing this phase, quality assurance specialists assess the digital solution’s adherence to end-user requirements. System Testing: The entire system is evaluated to ensure all components function properly. The QA approves the next deployment phase if the tests are successful.

**Operation and Maintenance**

Within the agile methodology, the phase commonly referred to as “sustain” or “support” is the Operation and Maintenance (O&M) phase. Although Agile places a primary emphasis on iterative development and frequent releases, it remains imperative to oversee and uphold the software product once it has been deployed to production. The O&M phase plays a pivotal role in guaranteeing that the software sustains its expected functionality and aligns with the requirements of its user base.

**Table 4. Agile Development Phases, Activities, and List of Deliverables**

|  |  |  |
| --- | --- | --- |
| AGILE DEVELOPMENT PHASES | ACTIVITIES | DELIVERABLE |
| Project Planning | * List the scope and limitation of the project * Look for client that needed this project | * Discussed the project * Scope and limitations of the system |
| Requirements Definition | * Requirement for the project are identified * Software and hardware requirements are defined | * Initial system requirements * Applied the needed requirement in the project. |
| Software Design | * Designing the UI for mobile and web application. * Identify the Roles needed in the system * Present the final design to client. * Identify the needed color scheme and design. | * UI of the mobile and web * Roles are added * Discussed the UI with the client. |
| Project Development | * Finalized the design for mobile and web application. * Functionalities of the system are identified * Finalize the documents of the system * Upgrading the security of the system | * Finalized and proof read the documents of the paper * The whole function of the system being processed. |
| Integration Testing | * Test the whole system. * Fixed the errors * Test the security of the system * Inform the Client about the system | * Tested the system * No errors * System testing |
| Operation and Maintenance | * Functionality of the system is complete | * Executed the functions of the complete system. |

Table 4 shows the different phases of the Agile Development approach. Each phase consists of various exercises and has a yield expected to achieve for each stage.

OSP360 consists of several modules to showcase its functionalities for the system. See Table 3 to explore the functional requirement of the OSP360 Mobile Application.

Table 5. Functional Requirements for OSP360 Mobile Application

|  |  |  |
| --- | --- | --- |
| Functional Requirement  ID | Function | Description |
| FR ID #1 | **Login** | This module allows users to access their accounts according to their roles:  Input :  Email and Password  Output  Student: Student’s Page |
| FR ID #2 | **School Poral** | This module can be accessed by everyone this following:   * Home Page * About Page * Offices Page * Contact us Page |
| FR ID #3 | **Student Portal** | This module is the students account where they can see the following:   * Profile * Grades |

Table 6. Functional Requirements for OSP360 Web System

|  |  |  |
| --- | --- | --- |
| Functional Requirement  ID | Function | Description |
| FR ID #1 | **Login** | This module allows users to access their accounts according to their roles:  Input :  Email and Password  Output  Student: Student’s Page  Admin: Admin’s Page  Teacher: Teacher’s Page |
| FR ID #2 | **Request form (School Portal)** | This module can be accessed by everyone in the school portal and can request student forms:  Input: Student request Form  Output: Requested form will notify the records office (admin) |
| FR ID #3 | **Forms**  Continuation of Table 6. Functional Requirements for OSP360 Web System | This module is for teachers and admin, all of the teacher and admin files needed is in here, choose form to download form. |
| FR ID #4 | **Encode Grades** | This module can be accessed only by teachers in their portal.  Input:  Input students grades and post.  Output:  Grades will show up in students portal grades page |
| FR ID 5 | **Manage Account** | This Module can be accessed by admin in their portal. Admin managing account for student  Input:  Name  Address  Email  Age  Grade Level  LRN  Password  Emergency Contact  Output:  Student can activate their account. |
| FR ID 6 | **Manage Account** | This module can be accessed by the admin by making teachers account.  Input:  Name  Employee ID  Password  Address  Gender  Subject  Department  Position  Contact Number  Age  Emergency Contact  Output:  Continuation of Table 6. Functional Requirements for OSP360 Web System  Teachers can activate/login their account |
| FR ID 7 | **Enroll Students** | This module allows admin to enroll student in the school at the enroll students page.  Input:  Name  Address  Email  Age  Sex  Grade Level  Password  Emergency Contact Name and Number  Relationship to the student  IP’s 4P’s  Form 137 and Form 138  Good moral  Birth certificate  Output:  Student will be enrolled and will have access to their student portal |
| FR ID 8 | **Create Section** | This module can be accessed by admin in making sections for students.  Input:  Select Grade level  Input Section Name  Assign Teacher  Output:  Section can be selected |
| FR ID 9 | **Create Schedule** | This module can be accessed by admin in creating schedules for students.  Input:  Select Grade Level  Select Section  Create schedule for one week  Output:  Once up the schedule will appear on students schedule. |

Continuation of Table 6. Functional Requirements for OSP360 Web System

Table 7. Non-Functional Requirements

|  |  |
| --- | --- |
| Criteria | Requirement Description |
| Functionality | The system should   * Provides updated news and events in the school * Allows the student to enroll online * Stores the past record of the users |
| Reliability | The system should   * System ability to consistently perform its functions without errors or failures |
| Usability | The system should   * User friendly interface * Clear navigation * Straight forward processes that enables teachers, students and parents to access and utilize the system’s features |
| Efficiency | The system should   * Provide a paperless manual work for all users. |
| Portability | The system should   * Run-on Android smartphones with OS version 6.0 (Marshmallow) up to Android OS version 9.0 (PIE) * The system is available for Chrome Browser. |

Table 7 demonstrates the criteria and their description of the non-functional requirement of the system. The application is tried dependent on every paradigm. These criteria have a different definition of what the application can achieve.

## 4.2 DESIGN OF SOFTWARE, SYSTEMS, PRODUCT, AND/OR PROCESSES

**USE CASE DIAGRAM**

A diagram of a student application

Description automatically generated

Figure 3: Use Case Diagram for OSP360 Mobile

The figure above shows student can only view and visit the school portal after logging in into his account. After that student have now access to view grade and profile.

Table 8. Use Case Narratives for OSP360 mobile

|  |  |
| --- | --- |
| Use Case Name | Student Log in |
| Actor | Student |
| Description | Students can access their portal using their mobile application. |
| Successful Completion | 1. Open mobile portal. 2. Click log in to access account. 3. Input email and password to successfully log in to account. |
| Alternative | 1. Log in to student portal. 2. Incorrect password and email 3. User will not be logged in |
| Pre-condition | Open the OSP360 application to display the main screen |
| Post-condition | The student will have access to their account. |

|  |  |
| --- | --- |
| Use Case Name | Student Form Request |
| Actor | Student portal (mobile) |
| Description | Students can access and request forms. |
| Successful Completion | 1. Log in to students mobile application to access forms. 2. Click forms to request desired forms. 3. Fill-up forms to be requested. 4. Click request to be directed to the admin. |
| Alternative | 1. Log in to students mobile application. 2. Click forms to request. 3. Fill-up form to be requested 4. Click request to direct to admin. |
| Pre-condition | Log in to students mobile application. |
| Post-condition | Forms will be successfully directed to admin. |

|  |  |
| --- | --- |
| Use Case Name | Student grades |
| Actor | Student portal (mobile) |
| Description | Students can access their grades using their mobile application. |
| Successful Completion | 1. Log in to students mobile application to access grades. 2. Click grades to view students grades. |
| Alternative |  |
| Pre-condition | Log in to students mobile application. |
| Post-condition | Grades can be successfully viewed. |

|  |  |
| --- | --- |
| Use Case Name | Student profile |
| Actor | Student portal (mobile) |
| Description | Students can edit their profile photo using their mobile application. |
| Successful Completion | 1. Log in to students mobile application to access profile. 2. Click profile to access and view students profile. |
| Alternative |  |
| Pre-condition | Log in to students mobile application. |
| Post-condition | Students profile can be successfully viewed. |

A diagram of a diagram

Description automatically generated with medium confidence

Figure 4: Use Case Diagram for OSP360 Web

**Figure 4** illustrates the use case diagram of the system. The user of the system are the student, teacher, and system administrator. The student can access the Enroll, log in and School Portal. After logging into the website student now have the access to their account. Student can also enroll by inputting the details required by the school and attach required files. The teacher meanwhile has the access to the website after putting his username and password. Teacher can edit their profile, view schedule, encode students grades and download teachers forms. The administrator side access the school portal after logging into the website. Admin can add, edit, and delete accounts. Admins also have the authority to grant student requested forms, approve student enrollment and assign section, create schedules for students, create section to grade level and assign advisers, and download administrative forms

Table 9. Use Case Narratives for OSP360 Web System

|  |  |
| --- | --- |
| Use Case Name | Student Form Request |
| Actor | Student |
| Description | Students can request forms |
| Successful Completion | 1. Log in to students portal to request forms. 2. Click forms to request desired forms. 3. Fill up required information. 4. Click request to be directed to the admin. |
| Alternative | 1. Log in student account. 2. Click forms to be able to request desired forms. 3. Fill up required information. 4. Click request to be directed to the admin side. |
| Pre-condition | Log in as student and select forms. |
| Post-condition | The students can access and request forms using their student portal, once they submitted the form the form will be successfully submitted to the admin. |

|  |  |
| --- | --- |
| Use Case Name | Student Access Grades |
| Actor | Student |
| Description | Student can access their grades. |
| Successful Completion | 1. Log in to students portal to access grades. 2. Click grades to view grades. |
| Alternative | 1. Log in student account. 2. Click grades to be able to access and view. |
| Pre-condition | Log in as student and select grades. |
| Post-condition | Students can view all their grades in every single subject they have, |

|  |  |
| --- | --- |
| Use Case Name | Student Invalid credentials |
| Actor | Student |
| Description | Students can’t access their portal due to invalid username/password. |
| Successful Completion | 1. Log in invalid username  2. input invalid password |
| Alternative | 1. Login valid email and password |
| Pre-condition | Login to student portal web system |
| Post-condition | Once students credentials are invalid it will automatically reject and won’t be able to continue their log in to portal on the other hand, once they have the right credentials they will proceed and can access their portal. |

|  |  |
| --- | --- |
| Use Case Name | Student Enrollment |
| Actor | Student |
| Description | Student can enroll themselves through enrollment system in their portal. |
| Successful Completion | 1. Click Enrollment |
| Alternative | 1. You can only enroll once |
| Pre-condition | Log in as student and select class enrollment. |
| Post-condition | Once they successfully submitted and attach all the required requirement and file, it will be directed to the admin for approval. |

|  |  |
| --- | --- |
| Use Case Name | Student Input details of student enrollment |
| Actor | Student |
| Description | Students can input their details through their class enrollment. |
| Successful Completion | 1. Click enrollment to access what are the required details included. 2. Select Grade level to enroll. |
| Alternative | 1. Access their portal and click class enrollment to access what are the required details included. 2. Select Grade level to enroll. |
| Pre-condition | Log in as student and select class enrollment. |
| Post-condition | Once they successfully submitted and attach all the required requirement and file, it will be directed to the admin for approval. |

|  |  |
| --- | --- |
| Use Case Name | Student Attach file of students enrollment |
| Actor | Student |
| Description | Students can attach their file using their account. |
| Successful Completion | 1. Click class enrollment to access and see what are the required files to be attached. 2. Click attach file to attach their desired file. 3. Attach file, students are able to attach their desired file(Form 137) |
| Alternative | 1. Access their portal and click class enrollment for student to access and see what are the required files to be attached. 2. Click attach file for the students to be able to attach their desired file. 3. Attach file, students are now able to attach their desired file (form 137) |
| Pre-condition | Log in as student and select class enrollment. |
| Post-condition | Once they successfully submitted and attach all the required requirement and file, it will be directed to the admin for approval. |

|  |  |
| --- | --- |
| Use Case Name | Student Edit profile of students |
| Actor | Student |
| Description | Students can update and edit their profile |
| Successful Completion | 1. Click Profile, to update and edit their profile. 2. Click the photo, to attach their desired file, 3. Attach photo to successfully attach their file., |
| Alternative | 1. Update and edit their picture to their portal. 2. Click Profile, for the students to be able to update and edit their profile. 3. Click the photo, for the students to be able to attach their desired file, 4. Attach photo, for the students to successfully attach their file. |
| Pre-condition | Log in as student must log in and select profile. |
| Post-condition | Students will successfully edit their profile. |

|  |  |
| --- | --- |
| Use Case Name | Student Access schedule |
| Actor | Student |
| Description | Students can access their schedule using their student portal |
| Successful Completion | 1. Click schedule viewer to view their schedule. 2. View students schedule, students can access their schedule from Monday to Friday. Including their school year. |
| Alternative |  |
| Pre-condition | Log in as student and select schedule. |
| Post-condition | Students can successfully view all their subjects and grades. |

|  |  |
| --- | --- |
| Use Case Name | Teachers log in web |
| Actor | Teacher |
| Description | For teacher to open their portal in web. |
| Successful Completion | 1. Select Role 2. Input valid username 3. Input valid password |
| Alternative | 1. Invalid role. 2. Incorrect password and email. 3. User will not be logged in. |
| Pre-condition | Open the OSP360 web system to display the main screen. |
| Post-condition | Have access to log in page and can access their account, |

|  |  |
| --- | --- |
| Use Case Name | Teachers Choose form |
| Actor | Teacher |
| Description | Teachers can choose forms using their portal. |
| Successful Completion | 1. Click forms 2. Choose the needed form 3. Download form |
| Alternative |  |
| Pre-condition | Log in as teacher and select forms. |
| Post-condition | Forms is successfully downloaded. |

|  |  |
| --- | --- |
| Use Case Name | Teachers Edit profile |
| Actor | Teacher |
| Description | Teachers are able to edit their profile. |
| Successful Completion | 1. Click profile to be able to edit profile. 2. Click desired file to be edited. |
| Alternative |  |
| Pre-condition | Log in as teacher and select profile. |
| Post-condition | Profile will be updated. |

|  |  |
| --- | --- |
| Use Case Name | Teachers Access Class List |
| Actor | Teacher |
| Description | Teachers are able to access and view their desired class list. |
| Successful Completion | 1. Click Schedule viewer, for the teachers to view their class schedule. |
| Alternative |  |
| Pre-condition | Log in as teacher, select schedule viewer. |
| Post-condition | Teacher class schedules can be viewed |

|  |  |
| --- | --- |
| Use Case Name | Teachers Encoding of grades |
| Actor | Teacher |
| Description | Teachers are able to encode and upload their students grades. |
| Successful Completion | 1. Click encode grades to have access of encoding students grades. 2. Click section to choose what are their desired section to encode grades. 3. Click subject to choose what are their desired subject to encode grades. 4. Click save to save the grades encoded. 5. Click post for the teachers to be able to post their encoded grades. |
| Alternative |  |
| Pre-condition | Log in as teacher, select grade encoding. |
| Post-condition | Students grades can be either post or saved. |

|  |  |
| --- | --- |
| Use Case Name | Admin log in web |
| Actor | Admin |
| Description | For admin to open their portal in web. |
| Successful Completion | 1. Select Role 2. Input Valid username 3. Input Valid Password |
| Alternative | 1. invalid role 2. Input invalid username 3. Input invaid password |
| Pre-condition | Open the web system to display the main screen |
| Post-condition | The admin will have access to their account |

|  |  |
| --- | --- |
| Use Case Name | Admin Choose form |
| Actor | Admin |
| Description | Admin can input their needed files in the portal |
| Successful Completion | 1. Click forms 2. Choose the needed form 3. Download form |
| Alternative |  |
| Pre-condition | Log in as admin, select forms. |
| Post-condition | Forms will be successfully downloaded. |

|  |  |
| --- | --- |
| Use Case Name | Admin Records |
| Actor | Admin |
| Description | Admin can view and access the record of students using admins portal. |
| Successful Completion | 1. Click records to view and access records. 2. View list of requested form of student 3. Validate Information sent to the records to be print out 4. Once student pick-up their requested form records admin can click “Received button” |
| Alternative | 1. Click records to view and access records. 2. View list of requested form of student 3. Validate Information sent to the records to be print out 4. Invalid fill-out will be deleted in the requests |
| Pre-condition | Log in as admin, select records. |
| Post-condition | Admin will be notified once students requested their files. |

|  |  |
| --- | --- |
| Use Case Name | Admin Enroll students |
| Actor | Admin |
| Description | Admin can input and view details of students, after encoding students profile admin can enroll students to their desired grade level and sections. |
| Successful Completion | 1. Click accounts to view and enroll students. 2. Click add to enroll a student. 3. Input student valid information and attach required files and enroll. 4. Student will move to approval and admin will validate again the files and assign their section once completed 5. Once enrolled, student can now have an access to student portal |
| Alternative |  |
| Pre-condition | Log in as admin, select enroll student |
| Post-condition | Once student details and files are inserted, students will be enrolled to their class. |

|  |  |
| --- | --- |
| Use Case Name | Admin Approve students |
| Actor | Admin |
| Description | Admin can approve students who enrolled through online using their portal. |
| Successful Completion | 1. Click enroll students, for the admin to be able to view and approve students online and admin enrollment. 2. Click need for approval, admin can validate legit enrollment due to the files submitted by students online/on-site. 3. Once all the details and files are complete, admin can assign student in a section. |
| Alternative | 1. Login admin account. 2. Input correct username and password. 3. Admin can now see and access enroll students. 4. Once enroll, admin can now approve student who enrolled online. 5. Once click need for approval, admin can now view and access students waiting for approval of enrollment. 6. Details are complete, admin can now manage to enroll students. |
| Pre-condition | Log in as admin, select enroll student and need approval |
| Post-condition | Admin can now assign sections and review the files submitted by the student. |

|  |  |
| --- | --- |
| Use Case Name | Admin Manage account |
| Actor | Admin |
| Description | Admin can manage all the accounts. |
| Successful Completion | 1. Click manage account. 2. Admin can add, edit, and delete accounts. |
| Alternative |  |
| Pre-condition | Log in as admin, manage accounts. Add, edit, delete accounts. |
| Post-condition | Admin can successfully add, edit, or delete accounts. |

|  |  |
| --- | --- |
| Use Case Name | Admin Add user |
| Actor | Admin |
| Description | Admin can add user account. |
| Successful Completion | 1. Select add account 2. Select Role of the user (Student, Admin and Teacher) 3. Input Basic Information 4. Add account 5. User can now activate their portals. |
| Alternative |  |
| Pre-condition | manage accounts. Add user accounts. |
| Post-condition | Admin can now successfully add user accounts, and user can activate account. |

|  |  |
| --- | --- |
| Use Case Name | Admin edit user |
| Actor | Admin |
| Description | Admin can edit user account. |
| Successful Completion | 1. Account Management 2. Select User 3. Edit User’s Profile 4. Save |
| Alternative |  |
| Pre-condition | manage accounts. Edit user accounts. |
| Post-condition | Admin can now successfully edit user accounts. User account should be updated |

|  |  |
| --- | --- |
| Use Case Name | Admin Choose delete user |
| Actor | Admin |
| Description | Admin can delete user account. |
| Successful Completion | 1. Account Management 2. Click User 3. Delete account |
| Alternative |  |
| Pre-condition | Log in as admin, manage accounts. Delete user accounts. |
| Post-condition | Admin can now successfully delete user accounts. User cannot access their accounts. |

|  |  |
| --- | --- |
| Use Case Name | Admin Create Schedule |
| Actor | Admin |
| Description | Admin can create schedule for student |
| Successful Completion | 1. Click create schedule 2. Select Grade Level and Section 3. Select Date, Time and Section 4. Save |
| Alternative |  |
| Pre-condition | Create schedule for section |
| Post-condition | Admin can create schedule for student and upload it in students portal. |

|  |  |
| --- | --- |
| Use Case Name | Admin Assign section |
| Actor | Admin |
| Description | Admin can assign and create section. |
| Successful Completion | 1. Assign Section 2. Select Grade Level 3. Create Section 4. Assign created section to have an adviser 5. save |
| Alternative |  |
| Pre-condition | Adding and assigning section in grade levels |
| Post-condition | Created section is one of the choices when assigning student in a section in approval if enrollment. |

**FUNCTIONAL DECOMPOSITION DIAGRAM**

A functional decomposition diagram (FDD) represents the sequential progression of a system, presenting the fundamental functions and their respective sub-functions in a top-down manner. These diagrams provide a visual representation of how systems breakdown into their constituent functions and how each step links to the subsequent one.

A diagram of a process

Description automatically generated with medium confidence

Figure 5. OPS360 Mobile FDD

**Figure 5.** shows student mobile application can view only the application and main module of the system. Including profile and view grades

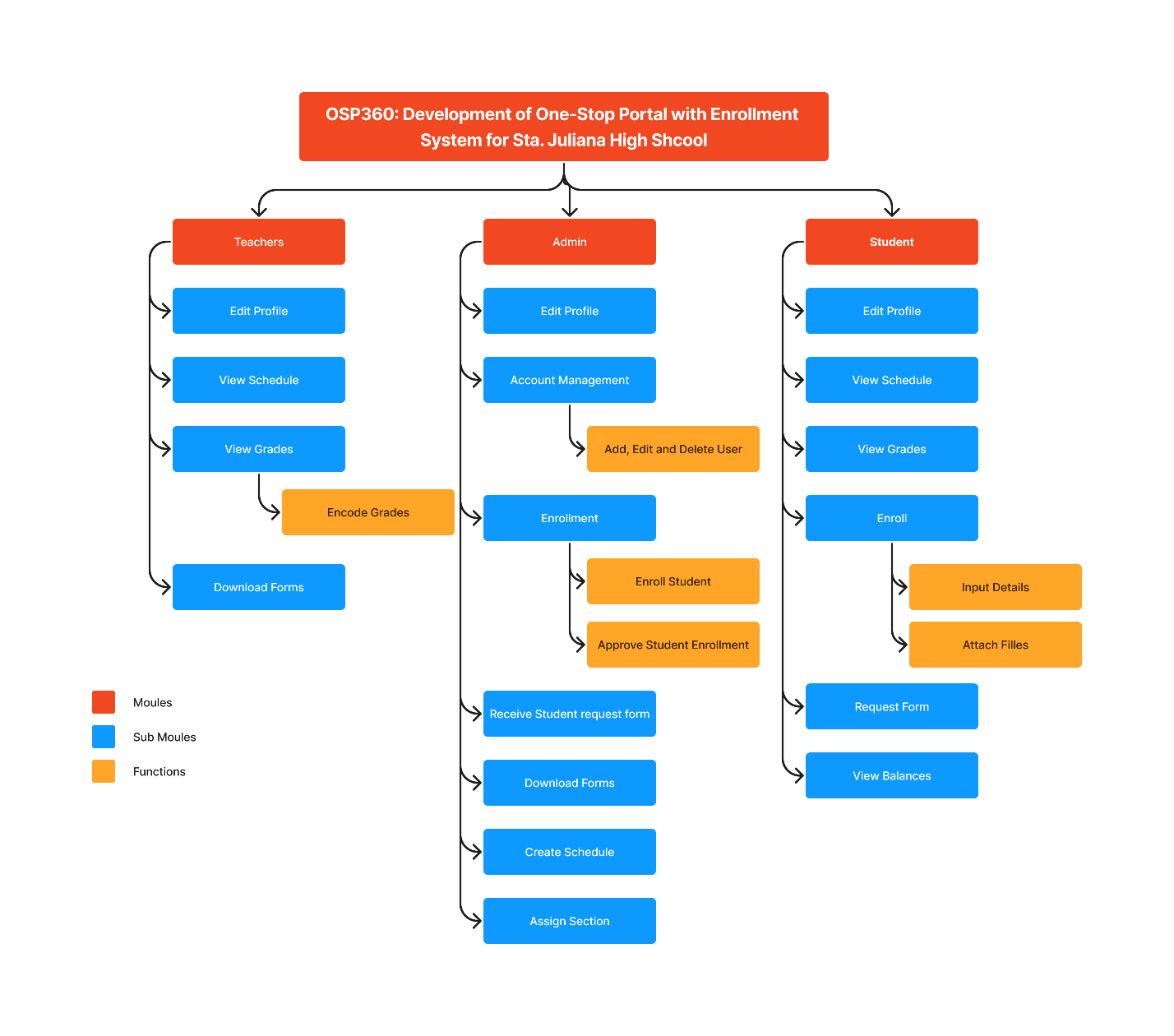


Figure 6. OPS360 Web System FDD

Figure 6 shows the OPS360 Web system. The teachers can edit their own profile, view schedule, encode student grades and download teachers form. The Admin can edit their profile, manage users account, enroll and approve student enrollment, download admin form, receive student request forms, create schedules for students and assign teachers to a section. Student can edit profile, view schedule, view grades, enroll to school by inputting details and attaching files and requesting records for forms.

**System Flowchart**

The OSP360 system flowchart provides a visual representation of the steps and actions taken when a user interacts with the system for different processes. The accompanying diagrams show the control flow from the beginning to the end, highlighting the decisions made at various stages during the application's execution.

A diagram of a flowchart

Description automatically generated

**Figure 7. System Flowchart of OSP360 Web School Portal**

**A diagram of a login

Description automatically generated**

**Figure 8. System Flowchart of OSP360 Mobile Application –**

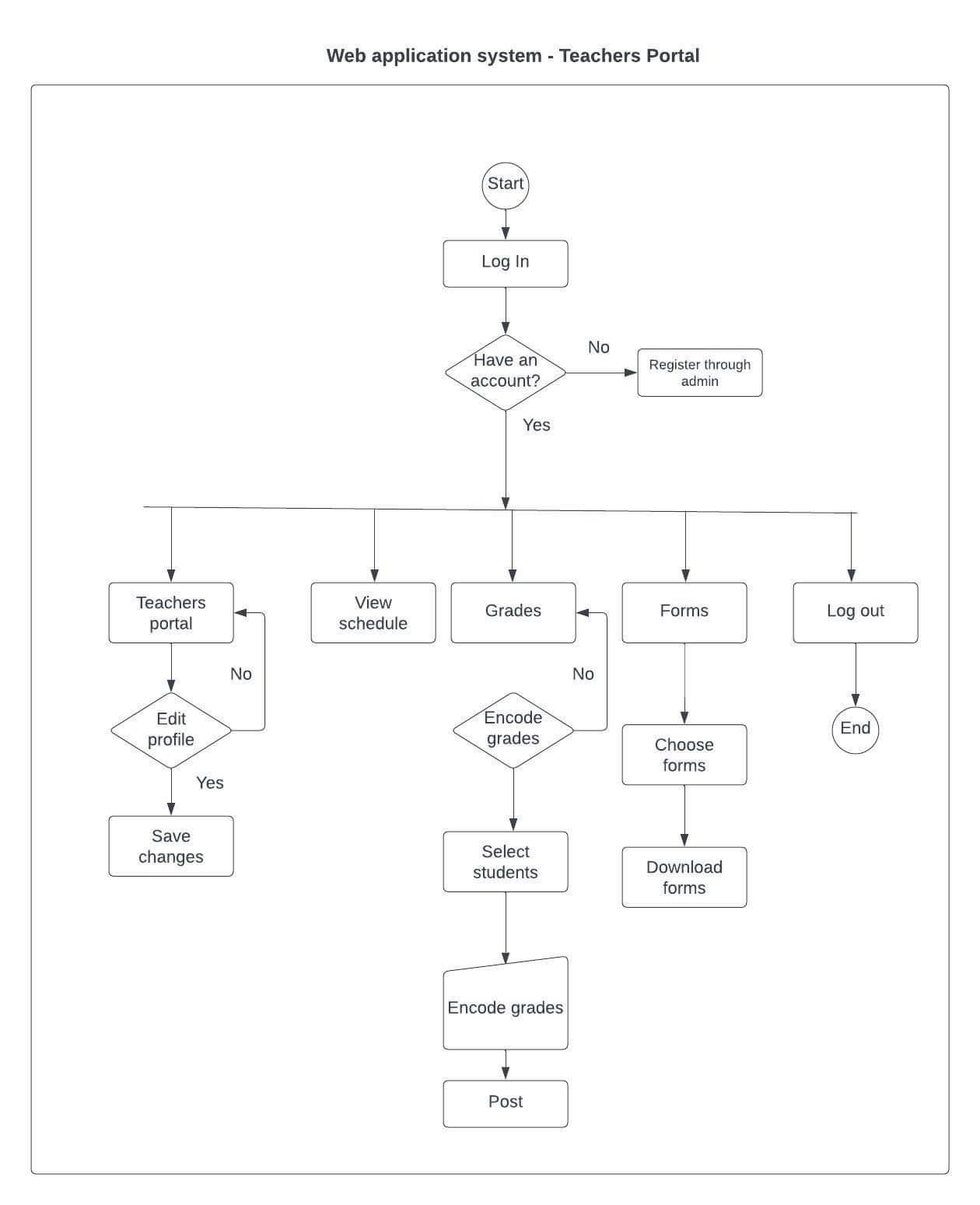
**Student Portal**

**A diagram of a flowchart

Description automatically generated**

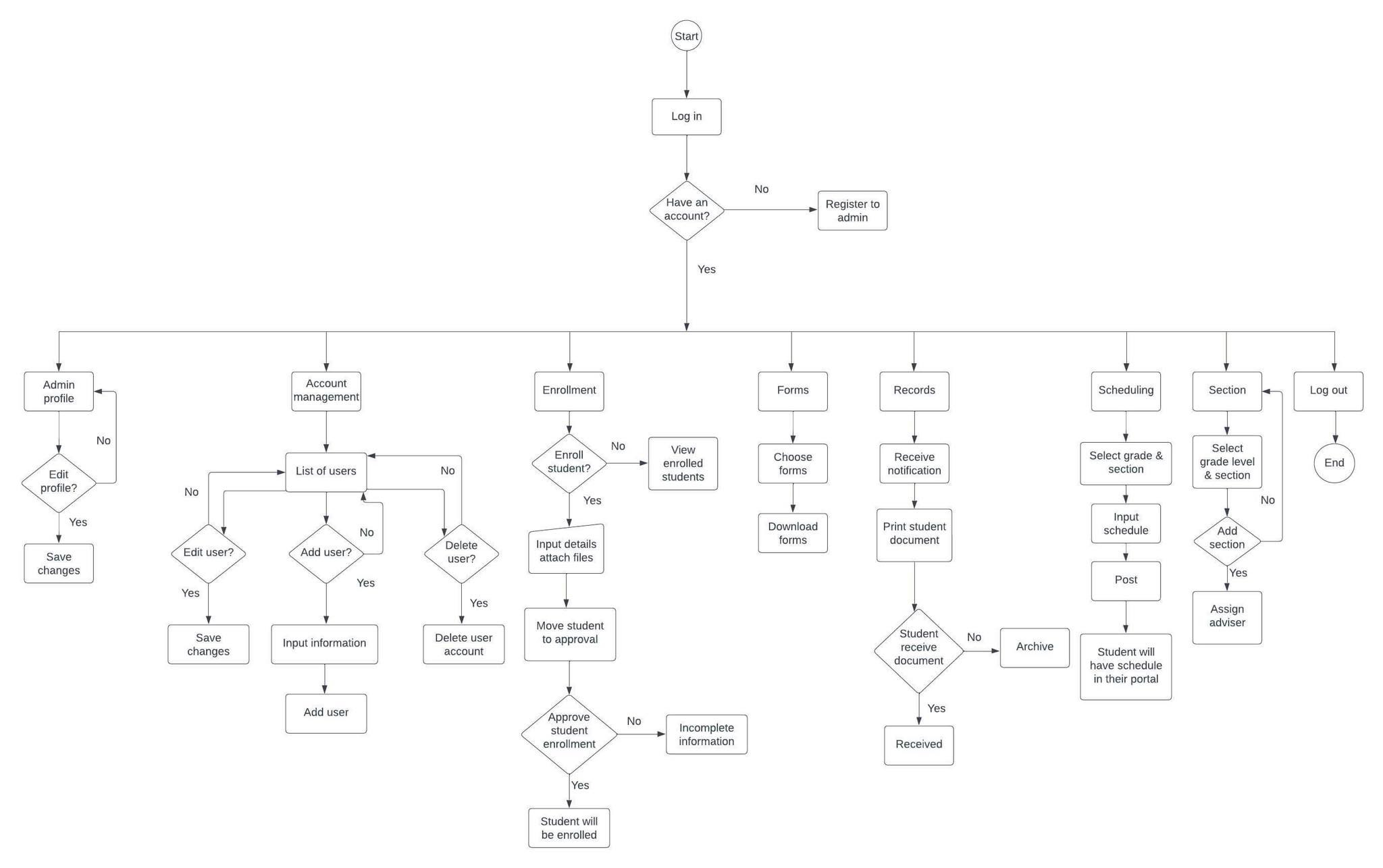
**Figure 9. System Flowchart of OSP360 Web Application –**

**Student Portal**



**Figure 10. System Flowchart of OSP360 Web Application –**

**Teacher Portal**



**Figure 11. System Flowchart of OSP360 Web Application –**

**Admin Portal**

**SYSTEM FRAMEWORK**

The requirement modeling of the system is to be represented using the Activity Diagram. Activity Diagram [5] is used to model the dynamic aspects of a system. In this, the entire system flow of the mobile and web system application is exhibited using this UML modelling approach.

A diagram of a cell phone

Description automatically generated

S

Figure 12. Mobile Application Activity Diagram

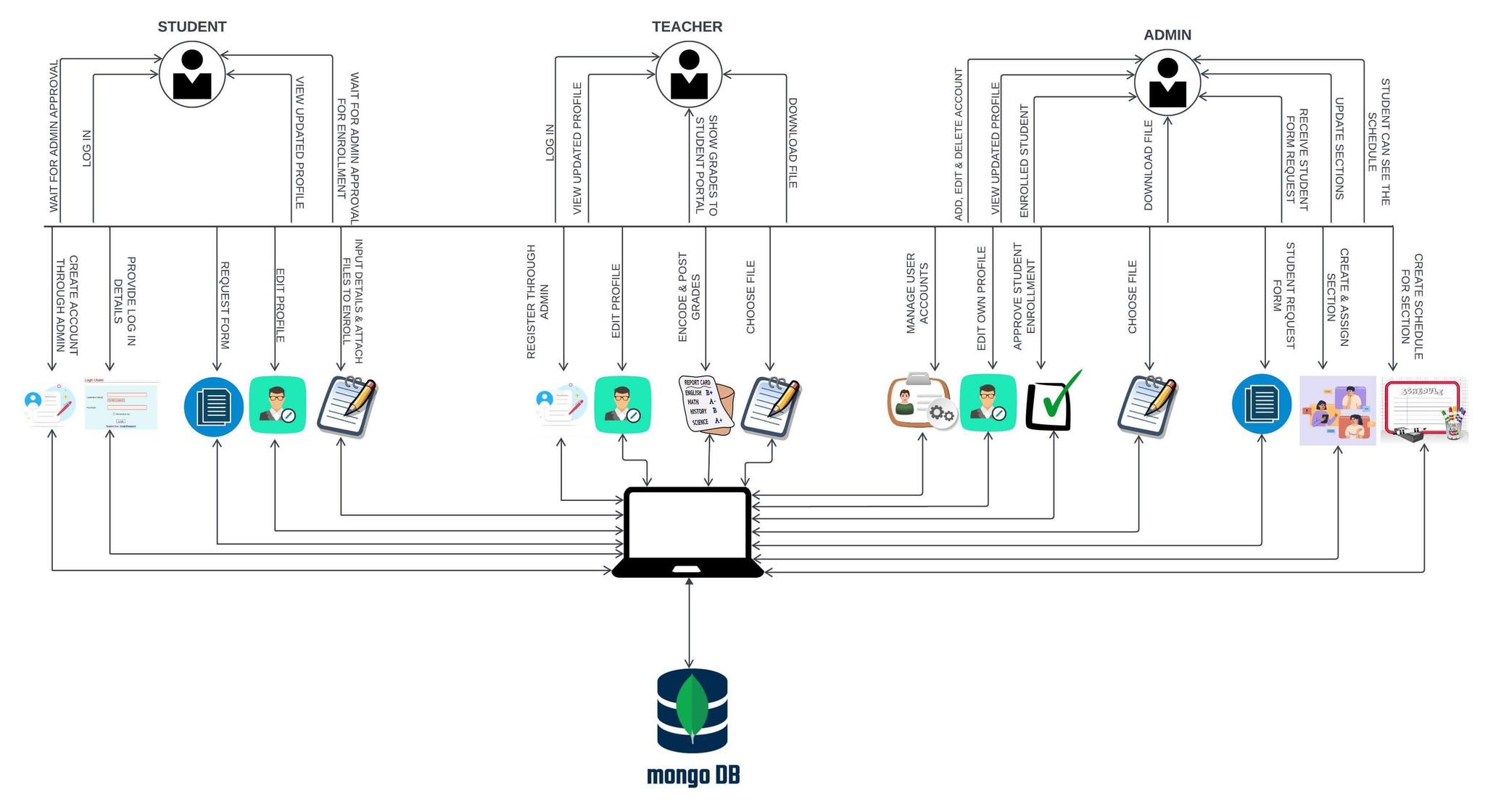


Figure 13. Web Application System Activity Diagram

## 4.3 DEVELOPMENT AND TESTING

In this study, the researchers will explain the testing process and its functionality of the developed mobile and web application of OSP360: Development of One-Stop Portal with Enrollment system for Sta. Juliana Highschool.

**Unit Testing**

**Table 10. Mobile Unit Test Result Summary**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Code 01** | **Functional Test** | **Remarks** | **GRADE** |
| 001 | Test\_user\_login | PASSED | Working 100% |
| 002 | Test\_user\_view\_grade | PASSED | Working 100% |
| 003 | Test\_user\_view\_profile | PASSED | Working 100% |

**Table 10** provides a summary of the unit test outcomes of OSP360: Development of One-Stop Portal with Enrollment system for Sta. Juliana Highschool mobile application. The unit test was carried out by the team, assessing all the features of the mobile application. Throughout this testing process, the team identified several bugs and errors, which were promptly addressed by the developer.

To verify the unit testing results, member Mr. Cristobal's from Innovation Geeks group were involved. All the testing procedures were performed correctly and, as a result, the overall outcome of the unit testing was deemed passed.

**Table 11. Web Unit Test Result Summary**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Code 01** | **Functional Test** | **Remarks** | **GRADE** |
| 01 | Test\_users\_login | PASSED | Working 100% |
| 02 | Test\_admins\_accounts\_management | PASSED | Working 100% |
| 03 | Test\_admin\_add\_user | PASSED | Working 100% |
| 04 | Test\_admin\_edit\_user | PASSED | Working 100% |
| 05 | Test\_admin\_delete\_user | PASSED | Working 100% |
| 06 | Test\_user\_update\_profile | PASSED | Working 100% |
| 07 | Test\_admin\_enroll\_student | PASSED | Working 100% |
| 08 | Test\_admin\_approve\_enrollment | PASSED | Working 100% |
| 09 | Test\_admin\_records\_notification | PASSED | Working 100% |
| 10 | Test\_admin\_create\_section | PASSED | Working 100% |
| 11 | Test\_admin\_create\_schedule | PASSED | Working 100% |
| 12 | Test\_admin\_teacher\_download\_forms | PASSED | Working 100% |
| 13 | Test\_teacher\_encode\_grades | PASSED | Working 100% |
| 14 | Test\_teacher\_view\_classlist | PASSED | Working 100% |
| 15 | Test\_teacher\_view\_schdule | PASSED | Working 100% |
| 16 | Test\_student\_view\_schedule | PASSED | Working 100% |
| 17 | Test\_student\_enrollment | PASSED | Working 100% |
| 18 | Test\_student\_request\_form | PASSED | Working 100% |
| 19 | Test\_student\_view\_grades | PASSED | Working 100% |
| 20 | Test\_student\_attach\_file | PASSED | Working 100% |
| 21 | Test\_student\_view\_clearance | PASSED | Working 100% |

Table 11 provides a summary of the unit test outcomes of OSP360: Development of One-Stop Portal with Enrollment system for Sta. Juliana Highschool web application The unit test was carried out by the team, assessing all the features of the mobile application. Throughout this testing process, the team identified several bugs and errors, which were promptly addressed by the developer.

To verify the unit testing results, member Mr. Cristobal's from Innovation Geeks group were involved. All the testing procedures were performed correctly and, as a result, the overall outcome of the unit testing was deemed passed.

**Functional Testing**

**Table 12. Web Functional Test Result Summary**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case #** | **Module** | **Remarks** | **GRADE** |
| 1 | Login | PASSED | Working 100% |
| 2 | Admin Account Management | PASSED | Working 100% |
| 3 | User Edit Profile | PASSED | Working 100% |
| 4 | Student Request Form | PASSED | Working 100% |
| 5 | Student Enrollment | PASSED | Working 100% |
| 6 | Admin Create Section | PASSED | Working 100% |
| 7 | Admin Create Schedule | PASSED | Working 100% |
| 8 | Admin and Teacher download form | PASSED | Working 100% |
| 9 | Admin Enroll Student | PASSED | Working 100% |
| 10 | Admin Approve Student Enrollment | PASSED | Working 100% |
| 11 | Teacher Encode Grades | PASSED | Working 100% |
| 12 | Admin receive records notification | PASSED | Working 100% |
| 13 | School Website | PASSED | Working 100% |

**Table 13. Mobile Functional Test Result Summary**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case #** | **Module** | **Remarks** | **GRADE** |
| 1 | Login | PASSED | Working 100% |
| 2 | Form Request | PASSED | Working 100% |
| 3 | Student Edit Profile | PASSED | Working 100% |

**Table 12 and Table 13** present the outcomes of module testing during the functional testing phase. The testing method used was black-box testing, which was applied to OSP360: Development of One-Stop Portal with Enrollment system for Sta. Juliana Highschool. In the initial trial, Shen Danielle Villoso conducted the testing to ensure the proper functionality of both the mobile and web applications. During this testing, a few modules initially failed to pass, but the developer promptly addressed the identified errors.

Subsequently, another round of testing was carried out by another team member, Mr. Cristobal, a member of the Innovation Geeks group. This testing aimed to confirm that all modules were functioning correctly. After evaluating all the functionalities, the overall result of the functional testing was deemed successful.

**System Testing**

The GTMetrix Tool is used to test the performance of the web application.

## Table 14. GTMetrix Performance Test Result Summary

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Run(s)** | **Grade** | **Performance**  **Percentage Score** | **Structure**  **Percentage Score** | **Web Vitals** | |  |
| **LCP (seconds)** | **TBT**  **(milliseconds)** | **CLS Score** |
| 1 | B | 98% | 75% | 857ms | 8ms | 0 |
| 2 | A | 93% | 87% | 1..7s | 0ms | 0 |
| 3 | B | 87% | 87% | 2.5s | 0ms | 0 |
| 4 | A | 94% | 88% | 1.6s | 0ms | 0 |
| 5 | B | 89% | 82% | 2.1s | 0ms | 0 |
| **Overall Mean** | B | 92.2% | 83.8% | 172.98ms | 0 | 0 |

**Web Security Compliance**

## Table 15. Web Compatibility Checklist

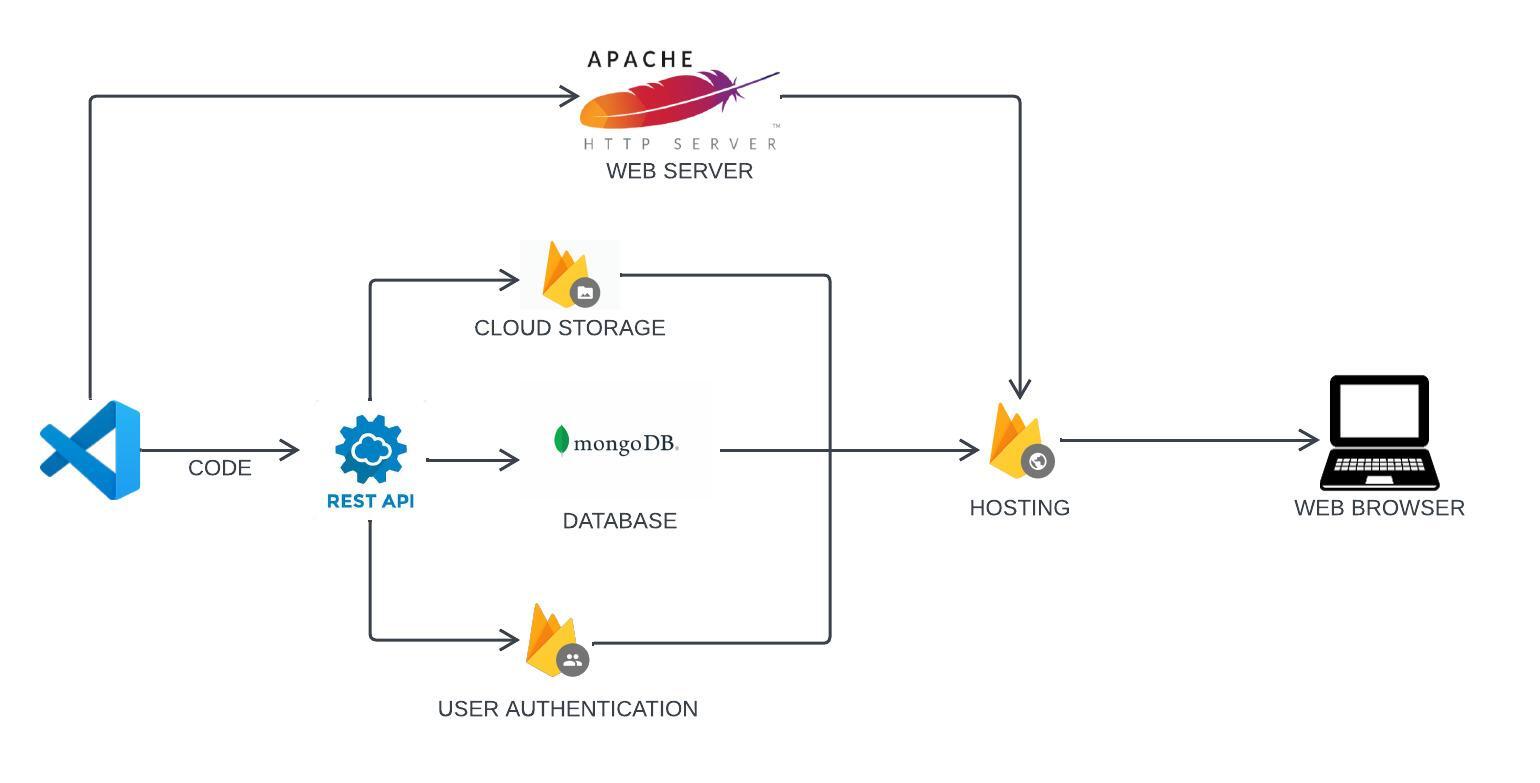
|  |  |  |
| --- | --- | --- |
| **Browser** | **Version** | **Compatible** |
| Microsoft Edge | Version 118.0 |  |
| Google Chrome | Version 120.0 |  |
| Opera Browser | Version 102.0 |  |

## 4.4 DESCRIPTION OF THE SYSTEM

OSP360: Development of One-Stop Portal with Enrollment System of Sta. Juliana High School a mobile and web application tool for Filipino students from a public school in Capaz Tarlac City. The mobile application is designed for students only of Sta. Juliana Highschool where they can access various types of modules these modules are accessing their profile, viewing both of their class schedule together with their class teacher and viewing their grades. On the other hand, on their web system three users can use this which are the Teachers, Admins and Students can access this website where it caters all modules such as Teachers can access their profile, view their class list, view their schedule, download forms, and encode students grades. Admins can access their profile, manage accounts, enroll students, access records and download forms. And lastly students can view their profile, access enrollment, access clearance information, view their schedule and view their grades.

## 4.5 IMPLEMENTATION PLAN (DEPLOYMENT/IMPLEMENTATION)

The researchers will cover the steps involved in implementing and deploying the mobile and web applications for the benefit of the users of OSP360: Development of One-Stop Portal with Enrollment System of Sta. Juliana High School



**Figure 45. Diagram for Web Implementation and Development**

Figure 46 illustrates the development of OSP360: Development of One-Stop Portal with Enrollment System of Sta. Juliana High School web application. The OSP360: Development of the One-Stop Portal with Enrollment System for Sta. Juliana High School web application is created using ReactJS, a JavaScript library employed for the frontend. Conversely, for the backend, an Apache web server is used to construct an application programming interface and establish connections to the database and cloud storage. MongoDB, a programming language commonly used for managing relational database systems, is utilized as the database.

A green and black text

Description automatically generated

**Figure 46. Diagram for Mobile Implementation and Deployment**

Figure 46 illustrates the development of OSP360: Development of One-Stop Portal with Enrollment System of Sta. Juliana High School mobile application. OSP360: Development of One-Stop Portal with Enrollment System of Sta. Juliana High School mobile application is built using Flutter. Flutter is an open-source software development kit that is used for creating a cross platform mobile application.

We aim to distribute the mobile application via the Play Store, allowing students to easily download it once the development is complete. However, as we cant upload the application to the market directly, we will provide an alternative method. Students will find a downloadable link for the application on the web system’s landing page, leading them to the APK file. Teachers and Administrators will also receive the mobile application’s APK file and relevant information.

# CHAPTER 5

**SUMMARY, CONCLUTION AND RECOMMENDATION**

### **5.1 SUMMARY**

Sta. Juliana High School in Capas, Tarlac is a public high school that offers education in the area which most of the students are “aetas” every enrollment period a lot of paperwork’s has been use and done in the school, all the students as well as parents come to enroll their children to give and support them to the quality of education the teachers of Sta. Juliana High School is offering. The online enrollment system will also provide convenience for the students and parents. They can see the system anytime and anywhere if they have an internet connection. This eliminates the need for them to physically go to school and wait in long lines just to enroll. The online enrollment system can also provide real-time updates and notification to the students and parents. They can easily be informed about important dates, deadline, and announcements regarding the enrollment process. This ensures that everyone is well-informed, and no one missed out on any important information. The system can also improve the accuracy of data and reduce errors. With the manual paper-based system, there is a higher chance of mistakes and misplacement of documents. However, with the online system all the information and documents are stored digitally, making it easier to organize and retrieve when needed. Implementing an online enrollment system in Sta. Juliana High School will greatly benefit the school community. It will streamline the enrollment process, reduce paperwork, provide convenience, improve communication, and ensure accuracy of data. It is a modern and efficient solution that will make the enrollment period a smoother and more efficient experience for everyone involved. The web application allows students to view their grades, edit their profiles, and access their schedules. This provides them the necessary tools to stay updated and informed about their academic progress and class arrangements. Teachers on the other hand can manage their class lists, schedule classes, upload grades, and download forms through the online enrollment system. This streamlines their administrative tasks and reduces paperwork. They can easily input and update information, making the process more efficient and accurate. The administrators play a crucial role in the online enrollment system as they have the authority to approve or reject forms submitted by the student. They can also manage user accounts, adding, editing, or deleting them as necessary. This ensures that the system is secure and only authorized individuals have access to it. Overall, the One-Stop Portal with Online Enrollment brings innovation and improvement to Sta. Juliana High School. It revolutionizes the enrollment process, enhances communication between students, teachers, and administrators, and ultimately improves the quality of the enrollment experience for all parties involved.

### **5.2 CONCLUSION**

In conclusion, the implementation of the School Portal at Sta. Juliana High School not only aims to improve the overall efficiency of administrative processes but also seeks to empower individuals by granting them more control over their time and commitments. By transitioning from traditional, paper-based methods to a digital platform, the school endeavors to create an environment that fosters productivity, convenience, and a sense of empowerment for all stakeholders involved in the educational journey.

### **5.3 RECOMMENDATIONS**

The following recommendations suggested by the researchers to improve the effectiveness of the system in the future:

* The researcher recommends using a phone number to API verification and send message to the user once their account has been activated.
* It is also recommended to have additional features in mobile application of student in viewing schedules and enrollment system.
* Another recommendation is to have e-certificate where outstanding students can receive and download in their portal.
* Researchers also recommend in teachers’ portal to have attendance records.
* Last recommendation is that admin can notify and send announcements to students via phone/email.

**Reference:**

[1] James, J. (2019) “The Importance of having a student portal” <https://teletype.in/@stevenaustin/SyjCcb2NN>

[2] Ranjan, R. (2022, August 16). “Benefits of Having a student Portal”. Easy Management Notes. <https://www.easymanagementnotes.com/blog/benefits-of-having-students-portal/>

[3] Curacubby Team, (2020, November 19). “Why Your School Needs Online Enrollment” [https://www.curacubby.com/resources/your-school-needs-online-enrollment?fbclid=IwAR03Fj3rLUKqfHLoE4LlrfS7mpoh3CXBUzqmt2yu8WBr3TLY2R2dGmduY8o#](https://www.curacubby.com/resources/your-school-needs-online-enrollment?fbclid=IwAR03Fj3rLUKqfHLoE4LlrfS7mpoh3CXBUzqmt2yu8WBr3TLY2R2dGmduY8o)

[4] Helen (2021, September 5). “4 key benefits of an online enrollment system to your school” <https://helen.edu.vn/4-key-benefits-of-an-online-enrollment-system-to-your-school/>

[5] Teachmint (Dec 2021). “Student Portal” <https://blog.teachmint.com/student-portal/>

[6] Ingeniux “Why Every College and University Needs a Modern Student Portal’ <https://www.ingeniux.com/blog/why-every-college-and-university-needs-a-modern-student-portal>

[7] St. Paul University – Quezon City <https://spuqc.edu.ph/>

[8] De La Salle University<https://www.dlsu.edu.ph/>

[9] APEC School <https://apecschoolsinc.my.salesforce-sites.com/InquiryForm?gid=bfd482079c82218659f6a1c7803f0a0eef96f46a953d62cf0bfc1eb08bc8e706&gclid=Cj0KCQjwtamlBhD3ARIsAARoaEzzb5Djzxj0gnpWFZ0rGR9eBPgLNlG-DvWCa4B3dCCABMH7xKSFgmIaAre2EALw_wcB>

[10] Pasig Catholic College <https://docs.google.com/forms/d/e/1FAIpQLSc5WvURcYICpMq1rRmg6Q_PgmtGGptha6ERST6tQuA0kbggtw/viewform>

# APPENDICES

# APPENDIX A. RELEVANT CODES

WEB SYSTEM

**LOG IN**

<?php

session\_start();

global $con;

include\_once '../vendor/sonata-project/google-authenticator/src/FixedBitNotation.php';

include\_once '../vendor/sonata-project/google-authenticator/src/GoogleAuthenticatorInterface.php';

include\_once '../vendor/sonata-project/google-authenticator/src/GoogleAuthenticator.php';

include\_once '../vendor/sonata-project/google-authenticator/src/GoogleQrUrl.php';

require '../vendor/autoload.php';

if (isset($\_SESSION["log1authentication"])) {

header("Location: studentprofile.php");

exit();

}

if (isset($\_SESSION['loginerror'])) {

echo "<script>alert('Invalid Credential')</script>";

session\_destroy();

// header("Location: login.php");

}

if (isset($\_POST['submit'])) {

// $con = new MongoDB\Client("mongodb+srv://jeraziahm725:lenard725@cluster0.cgnztuo.mongodb.net/");

$con = new MongoDB\Client("mongodb://localhost:27017/");

//echo "Connection to database successfully";

$db = $con->SchoolDB;

//echo "Database SchoolDB selected";

$col = $db->StudentAccount;

//echo "Collection StudentAccount Selected";

$postedemail = $\_POST['email'];

$postedpassword = $\_POST['password'];

$finduser = $col->find(array('email' => $postedemail));

foreach ($finduser as $founduser) {

$storedemail = $founduser['email'];

$storedpassword = $founduser['password'];

if ($postedemail == $storedemail && $postedpassword == $storedpassword) {

$\_SESSION["thissessionname"] = $founduser['name'];

$\_SESSION["thissessionidnumber"] = $founduser['idnumber'];

$\_SESSION["thissessiongradelevel"] = $founduser['gradelevel'];

$\_SESSION["thissessionsection"] = $founduser['section'];

$\_SESSION["thissessionemail"] = $postedemail;

$\_SESSION["log1authentication"] = 1;

$g = new \Google\Authenticator\GoogleAuthenticator();

$secret = $g->generateSecret();

echo '<img src="' . $g->getURL($\_POST['email'], 'localhost', $secret) . '" />';

header("Location: studentprofile.php");

exit();

}

}

$\_SESSION['loginerror'] = 1;

header("Location: login.php");

}

?>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8" name="viewport" content="width=device-width, initial-scale=1.0">

<title>TBD</title>

<link rel="stylesheet" href="./css/login.css">

</head>

<body>

<div class="bg">

<div class="formdiv">

<h1>Student Login</h1>

<h3>Login to your student portal</h3>

<div class="sample">

<form action="login.php" method="POST">

<label for="email">Email</label><br>

<input type="email" id="email" name="email" placeholder="Enter your Email"><br>

<label for="password">Password</label><br>

<input type="password" id="password" name="password" placeholder="Enter Password"><br>

<input type="submit" name="submit" value="Login">

</form>

</div>

</div>

</div>

</body>

</html>

**ADMIN AND TEACHER LOG IN**

<?php

session\_start();

?>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8" name="viewport" content="width=device-width, initial-scale=1.0">

<title>TBD</title>

<link rel="stylesheet" href="./css/login2.css">

</head>

<body>

<div>

<div class="bg">

</div>

<div class="loginform">

<img src="./img/logo.jpg" id="logo" alt="Logo" height="100px" width="100px">

<div class="formdiv">

<h1>Welcome Back!</h1>

<h3>Enter your login details to proceed</h3>

<div class="sample">

<form action="login2.php" method="POST">

<label for="accounttype">I am a:</label><br>

<select name="accounttype" id="accounttype">

<option value="teacher">Teacher</option>

<option value="Admin">Admin</option>

</select><br>

<label for="email">Email</label><br>

<input type="email" id="email" name="email" placeholder="Enter your Email"><br>

<label for="password">Password</label><br>

<input type="password" id="password" name="password" placeholder="Enter Password"><br>

<input type="submit" name="submit" value="Login">

</form>

</div>

</div>

</div>

<?php

require '../vendor/autoload.php';

if (isset($\_SESSION["log2authentication"])) {

if ($\_SESSION["sessionaccounttype"] == "teacher") {

header("Location: teacheraccount/teacherprofile.php");

exit();

} else {

header("Location: teacheraccount/employeeprofile.php");

exit();

}

}

if (isset($\_SESSION['loginerror'])) {

echo "<script>alert('Invalid Credential')</script>";

session\_destroy();

}

if (isset($\_POST['submit'])) {

$con = new MongoDB\Client("mongodb://localhost:27017");

echo "Connection to database successfully";

$db = $con->SchoolDB;

echo "Database SchoolDB selected";

if ($\_POST['accounttype'] == "teacher") {

$col = $db->TeacherAccount;

echo "teacher account Selected";

} else {

$col = $db->AdminAccount;

}

$postedemail = $\_POST['email'];

$postedpassword = $\_POST['password'];

$finduser = $col->find(array('email' => $postedemail));

foreach ($finduser as $founduser) {

$storedemail = $founduser['email'];

$storedpassword = $founduser['password'];

if ($postedemail == $storedemail && $postedpassword == $storedpassword) {

$\_SESSION["thissessionemail"] = $postedemail;

$\_SESSION["thissessionname"] = $founduser['name'];

$\_SESSION["sessionaccounttype"] = $\_POST['accounttype'];

$\_SESSION["log2authentication"] = 1;

if ($\_POST['accounttype'] == "teacher") {

header("Location: teacheraccount/teacherprofile.php");

exit();

} else {

header("Location: teacheraccount/employeeprofile.php");

exit();

}

} else {

}

}

$\_SESSION['loginerror'] = 1;

header("Location: login2.php");

}

?>

</body>

</html>

**STUDENT PROFILE**

<?php

session\_start();

require '../vendor/autoload.php';

if (!isset($\_SESSION["log1authentication"])) {

header("Location: login.php");

exit();

}

$con = new MongoDB\Client("mongodb://localhost:27017/");

// $con = new MongoDB\Client("mongodb+srv://jeraziahm725:lenard725@cluster0.cgnztuo.mongodb.net/");

//echo "Connection to database successfully";

$db = $con->SchoolDB;

//echo "Database SchoolDB selected";

$col = $db->StudentAccount;

//echo "Collection StudentAccount Selected";

$finduser = $col->find(array('email' => $\_SESSION["thissessionemail"]));

?> <!-- initial code for current login info -->

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8" name="viewport" content="width=device-width, initial-scale=1.0">

<title>TBD</title>

<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css" rel="stylesheet"

integrity="sha384-9ndCyUaIbzAi2FUVXJi0CjmCapSmO7SnpJef0486qhLnuZ2cdeRhO02iuK6FUUVM" crossorigin="anonymous">

<link rel="stylesheet" href="./css/sidenav.css?<?php echo time(); ?>">

<link rel="stylesheet" href="./css/studentprofile2.css?<?php echo time(); ?>">

</head>

<body>

<div class="sidenav">

<div class="accountName">

<div class="aimage" style="width: 35%; float: left; overflow: hidden; height: 100%;">

</div>

<div class="aName">

<?php echo "<h3>" . $\_SESSION["thissessionname"] . "</h3>" ?>

<?php echo "<p>" . $\_SESSION['thissessiongradelevel'] . " - " . $\_SESSION["thissessionsection"] . "</p>" ?>

</div>

</div>

<a href="./studentprofile.php" class="active">Profile</a>

<a href="./classenrollment.php">Class Enrollment</a>

<a href="./scheduleviewer.php">Schedule Viewer</a>

<a href="./clearance.php">Clearance Information</a>

<a href="./grades.php">Grades</a>

<form action="studentprofile.php" method="post">

<input id="logoutbutton" type="submit" name="logout" value="Logout Account">

</form>

</div>

<div class="main">

<div class="mainleft">

<h1 style="font-size: 50px; margin-left: 20px; margin-top: 20px;">Student's Profile</h1>

<div class="studentinfo">

<?php

foreach ($finduser as $founduser) {

if ($\_SESSION["thissessionemail"] == $founduser['email']) {

echo "<h1 id='studentname'>" . $founduser['name'] . "</h1>";

echo "<p>Grade Level: " . $founduser['gradelevel'] . "</p>";

echo "<p>ID Number: " . $founduser['idnumber'] . "</p>";

echo "<p>Section: " . $founduser['section'] . "</p>";

echo "<p>Email: " . $\_SESSION["thissessionemail"] . "</p>";

echo "<h2>Emergency Contact: </h2>";

echo "<h3>" . $founduser['guardianname'] . "</h3>";

echo "<p>Relationship: " . $founduser['relationship'] . "</p>";

echo "<p>Occupation: " . $founduser['occupation'] . "</p>";

echo "<p>Address: " . $founduser['Address'] . "</p>";

echo "<p>Telephone/Mobile Number: " . $founduser['Telephone/Cellphone'] . "</p>";

echo "<p>Email: " . $founduser['guardianemail'] . "</p>";

}

}

?>

</div>

</div>

</div>

<?php

if (isset($\_POST['logout'])) {

session\_destroy();

header("Location: login.php");

exit();

}

?>

</body>

</html>

# APPENDIX B. UNIT TESTS REPORTS

**UNIT TEST**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **TEST CODE** | **01** | | | |
| **PROJECT** | **OSP360: Development of One-Stop Portal for Sta. Juliana High School (Web System)** | | | |
| **CREATOR** | **Jhersell Bactol** | | | |
| **REVIEWER** | **Shen Danielle Villoso** | | | |
| **REVIEW DATE** | **October 28, 2023** | | | |
| **Functional Test** | | **Description** | **Unit Test** | **Pass/Fail** |
| Test\_user\_login | | User attempts to login to the mobile app | Test invalid username and password | Pass |
| Test valid username and password | Pass |
| Test\_admin\_accounts\_management\_student | | Admin attempts on creating account for student | Name = student name  Email = student@stajuliana.com  Password = Password123!  Phone Number = 09111111111  Confirm Password = Password123!  Age= 2,  Sex= female,  Grade Level = grade9,  LRN- 1234,  Guardians Name= name,  Address= 100 street,  [Email= name@.com](mailto:Email=%20name@.com),  Contact Number=09123456789,  Occupation= student,  Relationship= sister | Pass |
| Name =  Email =  Password = Password123!  Phone Number = 09111111111  Confirm Password = Password123!  Age= 2,  Sex= female,  Grade Level = grade9,  LRN- 1234,  Guardians Name= name,  Address= 100 street,  [Email= name@.com](mailto:Email=%20name@.com),  Contact Number=09123456789,  Occupation= student,  Relationship= sister  Attach Grades = invalid  Attach Good moral = invalid | ass |
|
| Test\_admin\_accounts\_management\_teacher\_and\_admin | | Admin attempts on creating account for admin and teacher | Name = Teacher/admin name  Email = teacher@stajuliana.com  Password = Password123!  Phone Number = 09111111111  Confirm Password = Password123!  Employee Number=37492374  Age= 2,  Sex= female,  Subjects=Filipino and English  Position= Teacher 1  Department= Grade 7  Guardians Name= name,  Address= 100 street,  [Email= name@.com](mailto:Email=%20name@.com),  Contact Number=09123456789,  Occupation= guard  Relationship= sister | Pass |
| Name = Teacher/admin name  Email = c  Password = 1234  Phone Number = 09111111111  Confirm Password = 1234  Employee Number=asdfg234  Age= 27,  Sex= female,  Subjects=Filipino and English  Position= Teacher 1  Department= Grade 7  Guardians Name= name,  Address= 100 street,  [Email= name@.com](mailto:Email=%20name@.com),  Contact Number=09123456789,  Occupation= guard  Relationship= sister | Pass |
| Test\_admin\_EditAccount | | Admin attempts to edit user account | Test Editing user account | Pass |
| Test\_admin\_DeleteAccount | | Admin attempts to delete user | Test Deleting user account | Pass |
| Test\_User\_UpdateProfile | | User attempts to edit their profile | Test user updated profile | Pass |
| Test\_admin\_enroll\_student | | Admin attempts to enroll student | Name = student name  Email = student@stajuliana.com  Password = Password123!  Phone Number = 09111111111  Confirm Password = Password123!  Age= 2,  Sex= female,  Grade Level = grade9,  LRN- 1234,  Guardians Name= name,  Address= 100 street,  [Email= name@.com](mailto:Email=%20name@.com),  Contact Number=09123456789,  Occupation= student,  Relationship= sister  Attach Grades=valid  Attach GoodMoral=Valid | Pass |
| Name =  Email =  Password = Password123!  Phone Number = 09111111111  Confirm Password = Password123!  Age= 2,  Sex= female,  Grade Level = grade9,  LRN- 1234,  Guardians Name= name,  Address= 100 street,  [Email= name@.com](mailto:Email=%20name@.com),  Contact Number=09123456789,  Occupation= student,  Relationship= sister  Attach Grades = invalid  Attach Good moral = invalid | Pass |
| Test\_admin\_approve\_student\_enrollment | | Admin attempts to approve student enrollment | Name = student name  Email = student@stajuliana.com  Password = Password123!  Phone Number = 09111111111  Confirm Password = Password123!  Age= 2,  Sex= female,  Grade Level = grade9,  LRN- 1234,  Guardians Name= name,  Address= 100 street,  [Email= name@.com](mailto:Email=%20name@.com),  Contact Number=09123456789,  Occupation= student,  Relationship= sister  Attach Grades= valid  Attach Good moral=valid  Approve Student Enrollment | Pass |
| Name =  Email =  Password = Password123!  Phone Number = 09111111111  Confirm Password = Password123!  Age= 2,  Sex= female,  Grade Level = grade9,  LRN- 1234,  Guardians Name= name,  Address= 100 street,  [Email= name@.com](mailto:Email=%20name@.com),  Contact Number=09123456789,  Occupation= student,  Relationship= sister  Attach Grades = invalid  Attach Good moral = invalid | Pass |
| Test\_admin\_records\_notification | | Testing records be notified when requested a form | Test Receive Button | Pass |
| Test Archive Button | Pass |
| Test\_admin\_CreateSection | | Admin attempts to create Section | Test add section and assign teacher | Pass |
| Test\_admin\_Createschedule | | Admin attempts to create student schedule | Test create schedule for 1 week | Pass |
| Test post schedule to student portal | Pass |
| Test\_admin\_teacher\_download\_forms | | Teacher and admin attempts to download forms | Test Download form | Pass |
| Test\_Teacher\_EncodeGrades | | Teacher attempts to encode grades | Test Encode Grade to student | Pass |
| Test Post Student Grades | Pass |
| Test\_Teacher\_view\_ClassList | | Teacher attempts to open classlist | Test viewing teachers class list | Pass |
| Test\_student\_view\_ClassSchedule | | Student attempts to view schdule | Test Student view schedule | Pass |
| Test\_student\_enrollment | | Student attempts to enroll in the school | Grade Level = Grade 7  Attach Grades = Valid | Pass |
| Grade Level = Grade 7  Attach Grade =”blank” | Pass |
| Test\_student\_request\_form | | Student attempts to request form in school portal | Name = Valid  LRN = Valid  Email = student@gmail.com | Pass |
| Name = invalid  LRN = invalid  Email = fbafeiffhweofh | Pass |
| Test\_student\_view\_Grades | | Student attempts to view grades | Test student viewing of grades | Pass |
| Test\_student\_view\_Clearance | | Student attempts to view clearance | Test student clearance | Pass |
| Test student upload missing documents | Pass |
| Test\_student\_AttachFiles | | Student attempts to attach files | Test Student attaching files | Pass |

**UNIT TEST**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **TEST CODE** | | **01** | | |
| **PROJECT** | | **OSP360: Development of One-Stop Portal for Sta. Juliana High School (Mobile Application)** | | |
| **CREATOR** | | **Jhersell Bactol** | | |
| **REVIEWER** | | **Ralph Christian Crisobal** | | |
| **REVIEW DATE** | | **October 28, 2023** | | |
| **Functional Test** | **Description** | | **Unit Test** | **Pass/Fail** |
| Test\_user\_login | User attempts to login to the mobile app | | Test invalid username and password | Pass |
| Test valid username and password | Pass |
| Test\_user\_view\_grades | User attempts to view their grades | | Test student view grades | Pass |
| Pass |
| Test\_user\_view\_profile | User attempts to view their profile | | Test students view profile | Pass |
| Pass |

**UNIT TEST**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | 001 | | **Test Item** | Login(student) Request Form | | | |
| **Module** | Account Validation | | | |
| **Pre-conditions** | | Navigate to the Login/Sign-In page. | | | | | | |
| **Verification Steps** | | User has been registered with the given details. | | | | | | |
| **Created By** | | Lenard Mendoza | | **Reviewed By** | Shen Villoso | | **Date Tested** | 27-Sept-2023 |
| **ID** | **Action** | | **Data**  **(Input Value)** | | **Expected Results** | **Actual Results** | | **Status**  **(Pass/Fail)** |
| 1.1 | Submit Login Request | | Username = blank  Other ‘Fields’ valid | | Error message should be displayed. | As Expected | | **PASS** |
| 1.2 | Submit Login Request | | Username = special chars  Other ‘Fields’ valid | | Prompt invalid input data. | As Expected | | **PASS** |
| 1.3 | Submit Login Request | | Username = valid  Password = valid | | Successful notification should be shown, and the request accepted. | As Expected | | **PASS** |
| 1.3 | Forgot Password | | Email=valid  New Password=valid  Repeat Password= valid | | Successful notification should be shown, and the request accepted. | As Expected | | **PASS** |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | 002 | | **Test Item** | Login(Teacher and Admin) Request Form | | | |
| **Module** | Account Validation | | | |
| **Pre-conditions** | | Navigate to the Login/Sign-In page. | | | | | | |
| **Verification Steps** | | User has been registered with the given details. | | | | | | |
| **Created By** | | Lenard Mendoza | | **Reviewed By** | Shen Villoso | | **Date Tested** | 27-Sept-2023 |
| **ID** | **Action** | | **Data**  **(Input Value)** | | **Expected Results** | **Actual Results** | | **Status**  **(Pass/Fail)** |
| 2.1 | Submit Login Request | | Role=valid  Username = blank  Other ‘Fields’ valid | | Error message should be displayed. | As Expected | | **PASS** |
| 2.2 | Submit Login Request | | Role=valid  Username = special chars  Other ‘Fields’ valid | | Prompt invalid input data. | As Expected | | **PASS** |
| 2.3 | Submit Login Request | | Role=valid  Username = valid  Password = valid | | Successful notification should be shown, and the request accepted. | As Expected | | **PASS** |
| 2.4 | Submit Login Request | | Role=invalid  Username= valid  Password=valid | | Prompt invalid input data. | As Expected | | **PASS** |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | | 003 | | **Test Item** | Create User Account Form | | | |
| **Module** | Accounts Management | | | |
| **Pre-conditions** | | User has been successfully logged in. | | | | | | |
| **Verification Steps** | | User has been granted with necessary permission/privilege to manage account. | | | | | | |
| **Created By** | | Lenard Mendoza | | **Reviewed By** | Shen Villoso | | **Date Tested** | 27-Sept-2023 |
| **ID** | **Action** | | **Data**  **(Input Value)** | | **Expected Results** | **Actual Results** | | **Status**  **(Pass/Fail)** |
| 3.1 | Create Account (student) | | Name = student name  Email = student@stajuliana.com  Password = Password123!  Phone Number = 09111111111  Confirm Password = Password123!  Age= 2,  Sex= female,  Grade Level = grade9,  LRN- 1234,  Guardians Name= name,  Address= 100 street,  [Email= name@.com](mailto:Email=%20name@.com),  Contact Number=09123456789,  Occupation= student,  Relationship= sister | | Successful notification should be shown, and the request accepted. | As Expected | | **PASS** |
| 3.2 | Create Account(student) | | Name = student name  Email = a  Password = b  Phone Number = 0911323212  Confirm Password = b  Age= 2,  Sex= female,  Grade Level = grade0,  LRN- 1234,  Guardians Name= name,  Address= 100 street,  [Email= name@.com](mailto:Email=%20name@.com),  Contact Number=0914573574,  Occupation= student,  Relationship= sister | | invalid inputs error messages should be displayed. | As Expected | | **PASS** |
| 3.3 | Create Account (Teacher and admin) | | Name = Teacher/admin name  Email = teacher@stajuliana.com  Password = Password123!  Phone Number = 09111111111  Confirm Password = Password123!  Employee Number=37492374  Age= 2,  Sex= female,  Subjects=Filipino and English  Position= Teacher 1  Department= Grade 7  Guardians Name= name,  Address= 100 street,  [Email= name@.com](mailto:Email=%20name@.com),  Contact Number=09123456789,  Occupation= guard  Relationship= sister | | Successful notification should be shown and the request accepted. | As Expected | | **PASS** |
| 3.4 | Create Account (Teacher and admin) | | Name = Teacher/admin name  Email = c  Password = 1234  Phone Number = 09111111111  Confirm Password = 1234  Employee Number=asdfg234  Age= 27,  Sex= female,  Subjects=Filipino and English  Position= Teacher 1  Department= Grade 7  Guardians Name= name,  Address= 100 street,  [Email= name@.com](mailto:Email=%20name@.com),  Contact Number=09123456789,  Occupation= guard  Relationship= sister | | invalid inputs error messages should be displayed. | As Expected | | **PASS** |
| 3.5 | Update/Edit Profile | | Edit User Account | | User’s Account should be updated | As Expected | | **PASS** |
| 3.6 | Delete User | | Delete an account | | Account should be deleted | As Expected | | **PASS** |
| 3.7 | Submit View Account Details | |  | | Account Details should be displayed. | As Expected | | **PASS** |

# APPENDIX C.

**INTEGRATION TEST REPORTS**

## INTEGRATION TEST

|  |  |
| --- | --- |
| **TEST CASE NAME**  **PROJECT**  **CREATOR**  **REVIEWER**  **REVIEW DATE** | **OSP360: One Stop Portal with Enrollment system for Sta. Juliana Highschool.**    **Shen Danielle H. Villoso**    **Ralph Cristian Cristobal** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Module No.** | **Module** | **Action (Description )** | **Expected Result** | **Status** | **Comments** |
| **As User – Student (Mobile Application)** | | | |  |  |
| 1 | Log in | log in with valid email address and password | Student profile should be displayed | PASS |  |
| 2 | Profile | Click profile | Student profile should be displayed | PASS |  |
| 2 | Grades | Click grades | Grades should be displayed | PASS |  |
| 3 | Log out | Click log out and logout | Log in page should be displayed | PASS |  |

## INTEGRATION TEST

|  |  |
| --- | --- |
|  |  |
| **TEST CASE NAME**  **PROJECT**  **CREATOR**  **REVIEWER**  **REVIEW DATE** | **Display User Pages**    **OSP360: One Stop Portal with Enrollment system for Sta. Juliana Highschool.**  **Shen Danielle H. Villoso**    **Ralph Cristian Cristobal** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Module No.** | **Module** | **Action (Description)** | **Expected Result** | **Status** | **Comments** |
| **As A Students (Web Application)** | | | | | |
| 1 | Test URL | Open the browser and enter the URLS | Log in page should be displayed | PASS |  |
| 2 | Log In | Enter valid email address and password | Welcome page should be displayed | PASS |  |
| 3 | Profile | Click profile, edit profile | Profile should be displayed, and profile should be edited. | PASS |  |
| 4 | Class enrollment | Click Enrollment  Input Grade Level  Attach Files | Enrollment should direct to admin approval | PASS |  |
| 5 | Schedule viewer | Click schedule | Student should view his/her week schedule | PASS |  |
| 6 | Clearance information | Click Clearance | Student can see if they have pending files to submit | PASS |  |
| 7 | Grades | Click grades | Grades should be displayed | PASS |  |
| 8 | Log out | Click log out | Student should be back in Login Screen | PASS |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Module No.** | **Module** | **Action (Description)** | **Expected Result** | **Status** | **Comments** |
| **As A Teacher (Web Application)** | | | | | |
| 1 | Test URL | Open the browser and enter the URLS | Log in page should be displayed | PASS |  |
| 2 | Log In | Enter valid email address and password | Welcome page should be displayed | PASS |  |
| 3 | Profile | Click Profile, edit profile | Edited profile should be updated | PASS |  |
| 4 | Class | Click class and select section | Teacher would be able to see his/her class list | PASS |  |
| 5 | Forms | Click forms, Choose form to download | Teacher can pick forms they want and download it | PASS |  |
| 6 | Encode Grades | Click Grades  Select Section  Select Student | Teacher can encode and post student grades | PASS |  |
| 7 | Log out | Click log out and log out | Log in page should be displayed | PASS |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Module No.** | **Module** | **Action (Description)** | **Expected Result** | **Status** | **Comments** |
| **As A Administrator (Web Application)** | | | | | |
| 1 | Test URL | Open the browser and enter the URLS | Log in page should be displayed | PASS |  |
| 2 | Log In | Enter valid email address and password | Welcome page should be displayed | PASS |  |
| 3 | Account Management | Pick role to create account.  Input valid Information | Created account should be activated | PASS |  |
| 4 | Enroll Students | Click Approve, select student to approve and assign them to section.  Click Enroll to enroll student. | Student with complete requirement should be assigned to section and be enrolled in the school | PASS |  |
| 5 | Forms | Click forms, Choose form to download | Admin can pick forms they want and download it | PASS |  |
| 6 | Records | Click records  Click receive | Record admin should see the forms requested | PASS |  |
| 7 | Schedule | Click Schedule  Select Grade Level,  Select Section  Create Schedule | Once admin created the schedule it will be uploaded to student portal | PASS |  |
| 8 | Section | Click Section  Select grade level  Create section  Assign adviser | Created section should be one of the choices in assigning students to sections in approval | PASS |  |

# APPENDIX D FUNCTIONAL TEST REPORTS

**FUNCTIONAL TEST**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | 001 | **Module** | User Login | | |
| **Test Description** | Test various Login functionalities. | | | | |
| **Pre-conditions** | Navigate to the Login user | | | | |
| **Created By** | Shen Villoso | **Reviewed By** | Ralph Cristobal | **Date Tested** | 25-09-2023 |
| **Test Case(s)** | **Action** | **Expected System Response** | | **Number of Execution** | **Status**  **(Pass/Fail)** |
| Login Account | Submit Login Request | Will log in to their own Profile | | 3 | PASS |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | 002 | **Module** | Accounts Management | | |
| **Test Description** | Test various Account management functionalities. | | | | |
| **Pre-conditions** | Account must have the necessary permission/privilege to manage accounts. | | | | |
| **Created By** | Shen Villoso | **Reviewed By** | Ralph Cristobal | **Date Tested** | 25-09-2023 |
| **Test Case(s)** | **Action** | **Expected System Response** | | **Number of Execution** | **Status**  **(Pass/Fail)** |
| Create Account | Create Account | Will able to log in on their account | | 1 | PASS |
| Update Account | Update/Edit Profile | Successful notification should be shown and the request accepted. | | 1 | PASS |
| Delete Account | Delete User | Successful notification should be shown and the request accepted. | | 1 | PASS |
| View Account Details | Submit View Account Details | Account Details should be displayed. | | 1 | PASS |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | 003 | **Module** | Profile Module | | |
| **Test Description** | Test Edit profile in every User | | | | |
| **Pre-conditions** | Navigate to Profile in your portal | | | | |
| **Created By** | Shen Villoso | **Reviewed By** | Ralph Cristobal | **Date Tested** | 25-09-2023 |
| **Test Case(s)** | **Action** | **Expected System Response** | | **Number of Execution** | **Status**  **(Pass/Fail)** |
| Edit Profile | Change Profile Photo  Edit Information | User is able to update profile | | 1 | PASS |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | 004 | **Module** | Form Request | | |
| **Test Description** | Test student request form | | | | |
| **Pre-conditions** | Navigate Form request in school website | | | | |
| **Created By** | Shen Villoso | **Reviewed By** | Ralph Cristobal | **Date Tested** | 25-09-2023 |
| **Test Case(s)** | **Action** | **Expected System Response** | | **Number of Execution** | **Status**  **(Pass/Fail)** |
| Request Form | Request Student Form | Request will notify admin | | 1 | PASS |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | 005 | **Module** | Student Enrollment Module | | |
| **Test Description** | Test Student Enrollment | | | | |
| **Pre-conditions** | Navigate to Enrollment in Student Portal | | | | |
| **Created By** | Shen Villoso | **Reviewed By** | Ralph Cristobal | **Date Tested** | 25-09-2023 |
| **Test Case(s)** | **Action** | **Expected System Response** | | **Number of Execution** | **Status**  **(Pass/Fail)** |
| Enroll | Input Grade Level  Attach File | Student enrollment will direct to admin for approval | | 1 | PASS |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | 006 | **Module** | Create Section Module | | |
| **Test Description** | Test admin creating section | | | | |
| **Pre-conditions** | Navigate to Section in Admin Portal | | | | |
| **Created By** | Shen Villoso | **Reviewed By** | Ralph Cristobal | **Date Tested** | 25-09-2023 |
| **Test Case(s)** | **Action** | **Expected System Response** | | **Number of Execution** | **Status**  **(Pass/Fail)** |
| Create section | Select grade level  Create Section  Assign Adviser | Section created will be one of the choices in assigning section for student | | 1 | PASS |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | 007 | **Module** | Schedule Mobile | | |
| **Test Description** | Test create schedule in Admin Portal | | | | |
| **Pre-conditions** | Navigate to create schedule in Admin Portal | | | | |
| **Created By** | Shen Villoso | **Reviewed By** | Ralph Cristobal | **Date Tested** | 25-09-2023 |
| **Test Case(s)** | **Action** | **Expected System Response** | | **Number of Execution** | **Status**  **(Pass/Fail)** |
| Create schedule | Select grade Level  Select section  Select day, time and subject | Created schedule will be uploaded in Student Portal | | 1 | Pass |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | 008 | **Module** | Form Module | | |
| **Test Description** | Test form to download | | | | |
| **Pre-conditions** | Navigate to Forms in Admin and Teachers Portal | | | | |
| **Created By** | Shen Villoso | **Reviewed By** | Ralph Cristobal | **Date Tested** | 25-09-2023 |
| **Test Case(s)** | **Action** | **Expected System Response** | | **Number of Execution** | **Status**  **(Pass/Fail)** |
| Download form | Choose Form  Click form to Download | Files clicked to be Download | | 1 | Pass |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | 009 | **Module** | Enrollment Module | | |
| **Test Description** | Test Admin Enrolling student | | | | |
| **Pre-conditions** | Navigate to enrollment in Admin portal | | | | |
| **Created By** | Shen Villoso | **Reviewed By** | Ralph Cristobal | **Date Tested** | 25-09-2023 |
| **Test Case(s)** | **Action** | **Expected System Response** | | **Number of Execution** | **Status**  **(Pass/Fail)** |
| Enroll Student | Name = student name  Email = student@stajuliana.com  Password = Password123!  Phone Number = 09111111111  Confirm Password = Password123!  Age= 2,  Sex= female,  Grade Level = grade9,  LRN- 1234,  Guardians Name= name,  Address= 100 street,  [Email= name@.com](mailto:Email=%20name@.com),  Contact Number=09123456789,  Occupation= student,  Relationship= sister | Enroll Student will be moved to approval | | 1 | Pass |
| Enroll Schedule | Name = student name  Email = a  Password = b  Phone Number = 0911323212  Confirm Password = b  Age= 2,  Sex= female,  Grade Level = grade0,  LRN- 1234,  Guardians Name= name,  Address= 100 street,  [Email= name@.com](mailto:Email=%20name@.com),  Contact Number=0914573574,  Occupation= student,  Relationship= sister  Attach Files = invalid | Incomplete information and invalid files student cannot be enrolled | | 1 | Pass |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | 010 | **Module** | Enrollment Module | | |
| **Test Description** | Test approval of student enrollment onsite and online | | | | |
| **Pre-conditions** | Navigate to enrollment in Admin Portal | | | | |
| **Created By** | Shen Villoso | **Reviewed By** | Ralph Cristobal | **Date Tested** | 25-09-2023 |
| **Test Case(s)** | **Action** | **Expected System Response** | | **Number of Execution** | **Status**  **(Pass/Fail)** |
| Approval | View student need approval  Select student  Assign section to student  Validate files uploaded by students  Approve student if information is complete | Approve student and complete information will be enrolled | | 1 | Pass |
| Enrolled Student | Click Enrolled Student  View Enrolled Student | Enrolled student will show up here | | 1 | Pass |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | 011 | **Module** | Encode Grades Module | | |
| **Test Description** | Test teachers encoding of grades | | | | |
| **Pre-conditions** | Navigate to encode grades in teachers portal | | | | |
| **Created By** | Shen Villoso | **Reviewed By** | Ralph Cristobal | **Date Tested** | 25-09-2023 |
| **Test Case(s)** | **Action** | **Expected System Response** | | **Number of Execution** | **Status**  **(Pass/Fail)** |
| Encode Grades | Select Subject  Select Students  Encode Grades | Grade encoded should be posted in student portal | | 2 | Pass |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | 012 | **Module** | Records Module | | |
| **Test Description** | Test admin records receive notification | | | | |
| **Pre-conditions** | Navigate to Records in Admin Portal | | | | |
| **Created By** | Shen Villoso | **Reviewed By** | Ralph Cristobal | **Date Tested** | 25-09-2023 |
| **Test Case(s)** | **Action** | **Expected System Response** | | **Number of Execution** | **Status**  **(Pass/Fail)** |
| Records (receive) | Show Requested Files  Validate Information  Click Receive | Received file will be on receive tab | | 1 | Pass |
| Records (archive) | Show Requested File  Invalid Information  Click Archive | Invalid file will be archives | | 1 | Pass |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | 013 | **Module** | School Portal | | |
| **Test Description** | Test School Portal | | | | |
| **Pre-conditions** | Navigate to Sta. Juliana Website | | | | |
| **Created By** | Shen Villoso | **Reviewed By** | Ralph Cristobal | **Date Tested** | 25-09-2023 |
| **Test Case(s)** | **Action** | **Expected System Response** | | **Number of Execution** | **Status**  **(Pass/Fail)** |
| Home | Press Home | Can see latest updates about the school | | 1 | Pass |
| About | Press About | Can see brief background about the school | | 1 | Pass |
| Office | Press Office | Can see the head offices of the school | | 1 | Pass |
| Form Request | Enter form needed | Request will direct to admin | | 1 | Pass |
| Contact us | Press Contact Us | Can see contact information about the school | | 1 | Pass |

# 

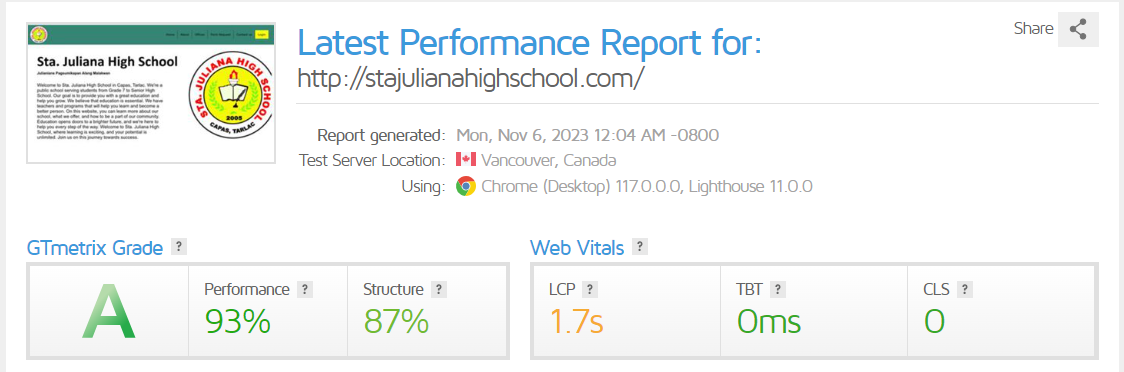
# APPENDIX F.

Web Performance Assessment Report

**Run 1.**

****

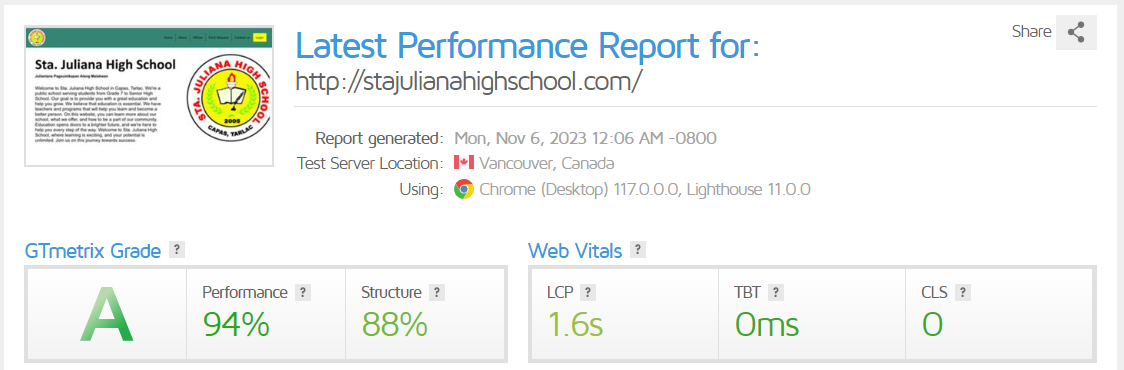
**Run 2.**

****

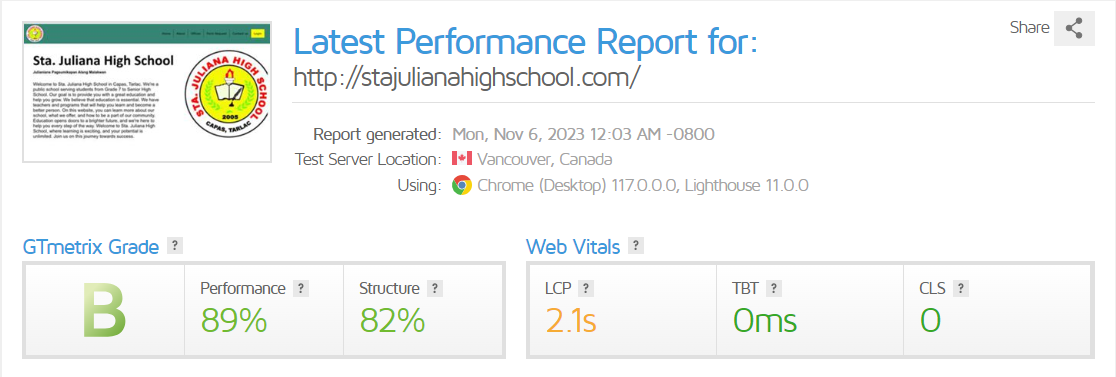
**Run 3**

**A screenshot of a web page

Description automatically generated**

**Run 4 **

**Run 5**

****

# APPENDIX G.

Weekly Status

**WEEKLY STATUS REPORT**

DATE: August 30,, 2023

**QUADROS**

**SF:40%**

**Accomplished Task:**

* Finished doing Chapter 1-3 Manuscript
* 70% Front-end

**Planned activities for next week:**

* Start studying and developing database.
* Schedule meeting with client.

**Issues/Concerns:**

* Difficulty in creating database.

**Solutions:**

* We might review creating database.

|  |  |  |
| --- | --- | --- |
| Name | Grade | Signature |
| Shen Danielle Villoso | 100% | A black and white image of a letter  Description automatically generated |
| Jhersell Bactol | 100% | A close-up of a black text  Description automatically generated |
| Lenard Mendoza | 100% | A close-up of a logo  Description automatically generated |
| Daryl Mananghaya | 100% | A black background with a black square  Description automatically generated with medium confidence |

**WEEKLY STATUS REPORT**

DATE: September 8, 2023

**QUADROS**

**SF:55%**

**Accomplished Task:**

* Finished doing Chapter 1-3 Manuscript
* Changed colors of UI
* 75% Front-end

**Planned activities for next week:**

* Start studying and developing database.
* Schedule meeting with client.

**Issues/Concerns:**

* Issue on revising front-end client offer

**Solutions:**

* Update Front-end

|  |  |  |
| --- | --- | --- |
| Name | Grade | Signature |
| Shen Danielle Villoso | 100% | A black and white image of a letter  Description automatically generated |
| Jhersell Bactol | 100% | A close-up of a black text  Description automatically generated |
| Lenard Mendoza | 100% | A close-up of a logo  Description automatically generated |
| Daryl Mananghaya | 100% | A black background with a black square  Description automatically generated with medium confidence |

**WEEKLY STATUS REPORT**

DATE: September 20, 2023

**QUADROS**

**SF:65%**

**Accomplished Task:**

* Finished chapter 1-3 manuscript revision.
* Change layouts of modules.
* Modified pages.
* Completed the Conference paper.
* Completed chapter 4.1.
* 80% Front-end.

**Planned activities for next week:**

* Start developing the database.
* Continue system development in both functionality and database of the system.
* Continue doing chapter 4.
* Start to have system testing.

**Issues/Concerns:**

* Issue on Database

**Solutions:**

* Fix Database

|  |  |  |
| --- | --- | --- |
| Name | Grade | Signature |
| Shen Danielle Villoso | 100% | A black and white image of a letter  Description automatically generated |
| Jhersell Bactol | 100% | A close-up of a black text  Description automatically generated |
| Lenard Mendoza | 100% | A close-up of a logo  Description automatically generated |
| Daryl Mananghaya | 100% | A black background with a black square  Description automatically generated with medium confidence |

**WEEKLY STATUS REPORT**

DATE: September 29, 2023

**QUADROS**

**SF:76%**

**Accomplished Task:**

* Finished chapter 1-3 manuscript.
* Change layouts of modules.
* Modified pages.
* Completed doing the Conference paper.
* Completed chapter 4.1.
* Start doing chapter 4.2.
* 80% Front-end.
* Revised IEEE paper.
* Started doing mobile application.

**Planned activities for next week:**

* Start developing the database.
* Continue system development in both functionality and database of the system.
* Continue doing chapter 4.
* Start to have system testing.
* Revision of our conference paper.
* Meeting with client.

**Issues/Concerns:**

* Revision in Front-end added feature of client

**Solutions:**

* Adjust Front-end

|  |  |  |
| --- | --- | --- |
| Name | Grade | Signature |
| Shen Danielle Villoso | 100% | A black and white image of a letter  Description automatically generated |
| Jhersell Bactol | 100% | A close-up of a black text  Description automatically generated |
| Lenard Mendoza | 100% | A close-up of a logo  Description automatically generated |
| Daryl Mananghaya | 100% | A black background with a black square  Description automatically generated with medium confidence |

**WEEKLY STATUS REPORT**

DATE: October 16, 2023

**QUADROS**

**SF: 80%**

Accomplished Task:

* Finished chapter 1-3 manuscript.
* Change layouts of modules.
* Modified pages.
* Completed the Conference paper.
* Completed chapter 4.1.
* Completed chapter 4.2.
* 80% Front-end.
* Started doing mobile application.
* Started chapter 4.3.

Planned activities for next week:

* Continue doing system both mobile and web application for both functionality and database.

Issues/Concerns:

* Issues on Security and Some Database

Solutions:

* Learn Security and analyze database of the system

|  |  |  |
| --- | --- | --- |
| Name | Grade | Signature |
| Shen Danielle Villoso | 100% | A black and white image of a letter  Description automatically generated |
| Jhersell Bactol | 100% | A close-up of a black text  Description automatically generated |
| Lenard Mendoza | 100% | A close-up of a logo  Description automatically generated |
| Daryl Mananghaya | 100% | A black background with a black square  Description automatically generated with medium confidence |

**WEEKLY STATUS REPORT**

DATE: November 1, 2023

**QUADROS**

**SF: 90%**

Accomplished Task:

* Finished chapter 1-3 manuscript.
* Change layouts of modules.
* Modified pages.
* Completed the Conference paper.
* Completed chapter 4.1.
* Completed chapter 4.2.
* 100% web front-end.
* System testing.
* Memorandum of Agreement.
* Started chapter 4.3
* Started chapter 4.4.
* Completed students, teachers and admin profile.
* Completed students, teachers and admin log in page.
* Completed students mobile application portal.
* Completed students, teachers and admin web portal.
* Completed students enrollment.

Planned activities for next week:

* Finalize manuscript.

Issues/Concerns:

* Issue in deploying of the Website

Solutions:

* Learn to deploy system

|  |  |  |
| --- | --- | --- |
| Name | Grade | Signature |
| Shen Danielle Villoso | 100% | A black and white image of a letter  Description automatically generated |
| Jhersell Bactol | 100% | A close-up of a black text  Description automatically generated |
| Lenard Mendoza | 100% | A close-up of a logo  Description automatically generated |
| Daryl Mananghaya | 100% | A black background with a black square  Description automatically generated with medium confidence |

# APPENDIX H.

Transcript of Interview

**Client Interview**

(April 21, 2023)

**Shen:** Good afternoon Sir Caleb, meron po kaming Questions about sa gagawin naming School Website and portal sa school niyo.

**Sir Caleb:** Okay. Goodfternoon din sainyo

**Shen**: Okay sir first question po what is the name of the school? And pwede po kayo mag bigay ng brief background about sa school?

**Sir Caleb:** Sta. Juliana High School yung name ng school, hanggang Senior High School. It is a public school located in Capas,Tarlac.

**Shen:** Okay po Sir, what is the problem you wanted to resolve?

**Sir Caleb:** Unang una is yung forms, katulad ng Form 137, Good Morals and other forms na requests ng Teachers tulad ng Certificate of Attendance at Leave Form.

**Shen:** Okay sir, gusto niyo po bang lagyan natin sa portal ng pwede po may requests ng forms yung student and teachers online?

**Sir Caleb:** Much better siguro yun.

**Shen:** Okay po sir, how about sa enrollment po paano po yung process ng enrollment sa school niyo?

**Sir Caleb:** Actually wala naman binabayaran ang students sa school and pinapasa lang nila kung gusto nila mag enroll is birth certificate at card ng dati nilang grades.

**Shen:** Kung wala pong binabayaran saan po kumukuha ng funds yung school?

**Sir Caleb:** Usually sa government and mostly talaga donations

**Shen:** Sa na mention niyo pong Donation pwede rin po tayo maglagay sa school website ng pwede sila mag donate once makita nila yung school portal.

Sir Caleb: Yes, much better siguro yun para mas marami makaalam na tumatanggap kame ng donation.

**Sir Caleb:** Pwede rin ba natin lagyan ng news and events sa school website para malaman ng mga students and parents kung saan kukuha ng tamang source kapag may tanong sila sa school?

**Shen:** Yes po sir we can do that. Ano po yung mga gusto niyo mangyare sa website

**Sir Caleb:** Ah gusto ko siya maging simple lang talaga para sa mga hindi marunong sa computer Madali nila ma access yung website and mapuntahan yung mga kailangan nila pag binisita nila yung website. Katulad ng News, events, contact number, ung place kung saan sila pwede mag donate and makita rin nila yung mga testimonies ng graduate students naming at mga honor students.

**Shen:** okay sir, kaya po naming ilagay yan sa website and maging user friendly as much as possible sa users ng website

**Shen:** ano po yung colors ng school niyo para po iparehas naming sa theme ng website

**Sir Caleb:** Green and Yellow pero mas prefer ko ung clean look na white background

**Shen:** Questions po naming na ilalagay sa website, what is the contact Number of the school?

**Sir Caleb:** 09612844757

**Shen**: What are the departments you have in school?

**Sir Caleb:** Records, Principal Office, SSG(Supreme School Government), Guidance

**Shen:** who are the head of the department you've mentioned and what is their contact?

**Sir Caleb:**

Records – Nikki M. Gutierrez - Nikki.gutierrez01@deped.gov.ph

Principal’s Office – Liezl M. Sanchez – liezl.sanchez001@deped.gov.ph

SSG(Supreme School Government) – Reyna Rose B. Cayabyab – reynarose.cayabyab@deped.gov.ph

Guidance – Arnold C. Reyes – Arnold.reyes@deped.gov.ph

**Shen:** What time does the school offices open and close?

**Sir Caleb:** 7:15 AM to 3:00PM

**Shen:** what is the history of the school?

**Sir Caleb:** The roots of Sta. Juliana High School may be traced from the initial efforts of the families to establish a high school for the learners in the barangay since the nearest is in Barangay O’Donnell which is about four kilometers to and from. Through a series of consultations and barangay resolutions, this move earned its fruition in 2005.

Through the generosity and support of then Capas Municipal Mayor, Hon. Reynaldo L. Catacutan, the main building which was used as the Mayor’s Extension office was donated, and thus became the first building of Sta. Juliana High School-O’ Donnell High School-Annex. On the 30th of August 2005, the approved papers of Sta. Juliana High School were received at the Division Office, and the blessing and turn-over ceremony was held on the following day the 31st.

The ceremony was graced by Mayor Catacutan, DepEd Tarlac Province’s Administrative Officer III, Mr. Germarcel Guiao, Capas West District Supervisor, Mr. Victor Marcos, Sta. Juliana High School Principal, Mrs. Amelia Cachero, and some LGU personnel.

At the first year of operation, sixty-seven (67) students were enrolled as first year students; the following School Year 2006-2007, there were 106 enrollees; for SY2017-2018, the population reached 583. But despite the increasing population, and the operation of the school for almost a decade, it has yet any legal instrument indicating its right to operate inside the Crow Valley Military Reservation not until the year 2016.

Through the inexorable efforts of the School Head, Mr. Romelito T. Lugtu and the first Senior High School Focal Person, Liezl M. Sanchez, Sta. Juliana High School finally had a Memorandum of Agreement (MOA) signed by the National Defense Secretary Delfin N Lorenzana. Concurrently, the school was accorded the usufruct agreement; and the MOA is renewable every twenty-five years.

This milestone was also accomplished through the constant support of the DepEd TarlacProvince OIC-Schools Division Superintendent Estrelita S. Cunanan, Municipality of Capas Mayor Reynaldo L. Catacutan, 3rd Congressional District of Tarlac House of Representative Noel L. Villanueva, 710th Special Operations Wing Commander BGen Laurcris P Tumanda, AFP, 790th Air Base Group Commander Major Erwin Rommel I Hernaez, OS, PAF, Punong Barangay Jude C. Lenon and the Council, the teachers, and parents of our learners, and all other stakeholders. (Sent Via MS Word)

**Shen:** what is your school social?

**Sir Caleb:** Sta. Juliana High School - Supreme Student Government - 307005

**Shen:** what do you usually ask when student request for form 137 & good moral

**Sir Caleb:** Name, LRN(Learner Reference Number, Contact Number, Year Graduated and Section/Last School Year Attended

**Shen:** what are the strands you offer for SHS Student?

**Sir Caleb:** TVL (Agri-Fishery Arts Strand), GAS (General Academic Strand)

**Shen:** Can you give us pointers on why we should choose Sta. Juliana as a school to enroll?

**Sir Caleb:** Being an IP school, our school promotes the importance of cultural preservation. It's about broadening the human story, and ensuring all cultures are recognized equally. It is also an excellent choice for students who want to play their part in creating a safe and more prosperous society for all people.

Shen: can you give us a school motto?

**Sir Caleb:** Julianians Pagsumikapan Alang Malakwan

**Shen:** what are the forms that teachers and school employees usually requests?

**Sir Caleb:** Leave Form, Certificate of Appearance, Home Visitation Form, Attendance Sheet, Minutes of the Meeting, Donation Form.

**Client Interview**

(June 13, 2023)

**Shen :** Hello sir mag aask lang po kami ng mga updates, I mean yung updated po na questions namin kasi di po nasama don sa unan batch ng questions.

**Sir Caleb :** Okay sige sige.

**Shen :** Uhm doon po sa 1st batch ng questions nareceived ko po na meron po kayong 4 offices which is yung records, principal office, ssg and guidance. Okay lang po ba sa inyo if nilagay lang po kasi naming don is 3 kind of user lang po which is admin, teachers and students, and yung records principal, ssg and guidance nakapaloob po sya sa admin so lahat po silang 4 admin po and iba po yung teachers and students na user.

**Sir Caleb :** ahh so pwede din silang, when you say admin sila naba yung ano pinaka tawag dito, yung all access na talaga?

**Shen :** Uhm for admin po ang pwede po nilang magawa is pwede po nilang ma enroll yung students which is yung gusto nyo po mangyare in the future yung video po nang meeting na gusto nyo yung sa banda pong teachers na makikita yung class list nila so pwede po sila yung magayos ng mga nag enroll students kung saan po yung designated classrooms nila ganon po.

**Sir Caleb :** Ahh okay.

**Shen :** And then yung admin rin po yung makakapag return nang forms sa mga students, teachers ng request ng forms nila, like yung mga minutes of the meeting po yung mga certificate of appearance, form 137, good moral ganon po sila po meron po silang access na pwede pong (interrupted) .

**Sir Caleb :** Palitan or ..

**Shen :** Ma grant yung request ng teachers ng students.

**Sir Caleb :** Ahhh.

**Shen :** Sino po ba nag hahandle ng mga forms na nirerequest ng student teachers po? Records po ba?

**Sir Caleb :** Kasi most probably kung magiging admin sila .. lahat kasi kami may kanya kanyang kaming records eh mga forms pala, so anyway kung meron isa na pwedeng may access .. kayang siya nalang yung maglalagay ng mga forms ano ba yung mga forms na yon ilalagay sa isang may folder dba? Or parang pinaka sort?

**Shen :** Like ano na po siya sa student portal po ang nakalagay pong mga forms is form 137 and good moral sa mga teachers naman po yung mga nilagay nyo sa unang question. Bale sino po yung gusto nyong makareceive ng request na yon kapag nagrequest po yung teachers and students, records po ba or yung principal or yung guidance po?

**Sir Caleb :** Ahh you mean irerequest pa yung form?

**Shen :** Opo yung mga nag aapprove po, sino po yung mga nag aapprove ganon form?

**Sir Caleb :** Ahh akala ko yung form, downloadable ba yung form na ginagawa nyo?

**Shen :** Uhmm ganto po pakita ko po sa inyo yung ..

**Sir Caleb :** Hindi ko kasi sya ma visualize kung downloadable sya, you mean mag eedit sila online doon mismo sa ano..

**Shen :** Uhm meron na po siyang ano sir parang specific na.. eto po bale nakikita nyo na po yung screen ko?

**Sir Caleb :** Oo.

**Shen :** Uhm … for example po dito nakalagay na po dyan yung form 137, request form yung kelangan po ng school..

**Sir Caleb :** Ahh okay. Oo sige magrerequest sila ng form 137 tapos ..

**Shen :** Pagkarequest nya po ahh hindi po kasi naming alam kung saan po ..

**Sir Caleb :** Kanino makakarating sa ano yan sa records..

**Shen :** Okay po..

**Sir Caleb :** Si records ang gagawa..

**Shen :** Ahh parehas din po sa teachers tsaka sa ano..

**Sir Caleb :** Yan sa records, lahat ng about sa students, good moral .. meron din lip form naman sa ano yan sa .. sa head yan sa head sa principal.

**Shen :** Ahh principal.

**Sir Caleb :** Oo.

**Shen :** Lahat po ng teachers form?

**Sir Caleb :** Oo sa principal nalang siya.

**Shen :** Pwede po ba kami makahingi sir ng mga ano..

**Sir Caleb :** Sample?

**Shen :** Opo lahat po ng example na hinihingi kahit teacher lang po ng mga forms certificate of appearance, meeting of the meeting..

**Sir Caleb :** Ahh sige

**Shen :** Mga ganon po, para po malaman naming kung ano po ilalagay sa ganto pong setup

**Sir Caleb :** Ok sige sige sendan ko kayo ng sample.

**Transcript of Interview**

**Client Interview**

(July 23, 2023)

Shen & Daryl: Goodafternoon sir Caleb

Sir Caleb: Goodafternoon din

Shen: Sir may mga questions lang ako about the enrollment ng students sa school niyo if familiar po kayo sa process and requirement ng school?

Sir Caleb: Ah, yes alam ko naman process and requirements ng school sa students.

Shen: Okay Sir confuse po kasi kami on how you cater the new students and old students what requirements ang mga hinihingi ng school for them to enroll.

Sir Caleb: Ah, ganto kasi yan no guys and old student na galing sta Juliana elementary ang requirement lang naming sakanila ay Birth certificate at Form 137 ng previous grade, kaya may birth certificate pa kasi bagong office na ang mag tatago non. Sa new student naman na galing ibang school katulad ng mga transferee ay Birth certificate, Good Moral at Form 137.

Shen: Pano naman sir if kulang and requirements nila?

Sir Caleb: Sa old student kapag kulang ng Birth certificate pwede sila mag enroll and to follow nalang ung missing requirement pero kapag Form 138 naman ang kulang nila hindi pa sila pwede mag enroll kasi meaning lang siguro non is hindi pa sila nakakapag clearance sa mga teachers nila. Kapag new student naman ganon rin. Parehas lang lahat.

Daryl: Ah bale sir kung birth certificate lang ang kulang sa new student transferee pwede sila mag enroll pero pag good moral at grades ang wala bawal pa?

Sir Caleb: Yes since wala naman bayad ang school pwedeng pwede basta yung requirements na hinihingi ay maibigay nila.

Daryl: Okay po sir mas clear na po siya.

Sir Caleb: Okay buti naman, yung transferee, new student at balik aral pare parehas lang ng requirements, ang nag kakaiba lang sa old student yun lang naman.

Shen: Okay sir noted mas clear na po siya samin. Thank you po

Sir Caleb: No worries.

**APPENDIX I.**

Documentation





**Figure 1 Location and Actual School**

Figure 1 provides a direct view of Sta. Juliana High School, situated in Capaz, Tarlac City. During our visit, we had the opportunity to meet our client in person and gain a firsthand look at their school. Our client offered us a tour of the school, allowing us to get a more comprehensive understanding of the entire campus.





**Figure 2 Presentation of the system to the client.**

Figure 2 illustrates that during our visit to Sta. Juliana High School we had the opportunity to meet with our client. In the image, you can see that we conducted a presentation for our client, showcasing the system we are developing for them. This meeting provided us with a chance to ask feedback and

recommendations from them. Additionally, we engaged in a discussion with our client to explain the system's functionality and flow.

A screenshot of a computer

Description automatically generated with medium confidence

