A PROJECT IN IT 332: INTEGRATIVE PROGRAMMING AND TECHNOLOGIES

WEB-BASED

SCHOLARSHIP APPLICATION SYSTEM

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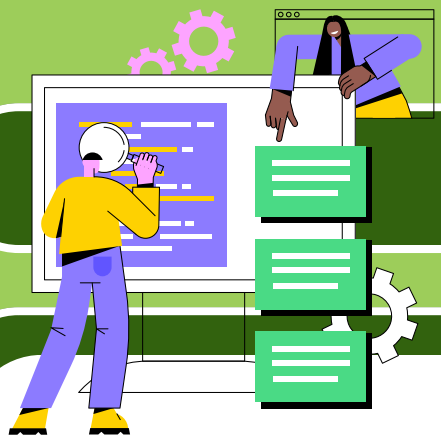
SUBMITTED TO: NIÑA P. AGUILA



PROJECT DESCRIPTION

Grant programs and institutions play an important role in nurturing and supporting researchers by providing financial assistance, mentoring, resources and platforms to showcase their work. Applying for scholarships usually involves submitting an application and supporting documents such as academic transcripts, letters of recommendation, essays, or portfolios that demonstrate talent or accomplishments. And to make it easier for the applicants to submit forms, different platforms were created for them to use, evolving scholarship applications that integrate emerging technologies just like the Web-based scholarship application system(scholarship application process).

Web-based scholarship application system(scholarship application process)is designed to simplify the process of assessing students' academic performance for scholarship applications. It takes all the requirements needed for the application including grades, indigency, and certificate of enrollment. Significant challenge faced by scholarship providers and committees is the manual processing of papers and their security; the standard or manual process needs to improve considerably. And through the development of the web-based system, it helps to regularly maintain smooth processing of documents and satisfy the applicant with their support.

Paper – based scholarship application process can be time-consuming, labor intensive, and costly. The process of gathering and assessing applications may be complicated as well as error-prone, with missing documents or incomplete applications being common. These difficulties might lead to application delay, missed deadlines, and poor applicant numbers.

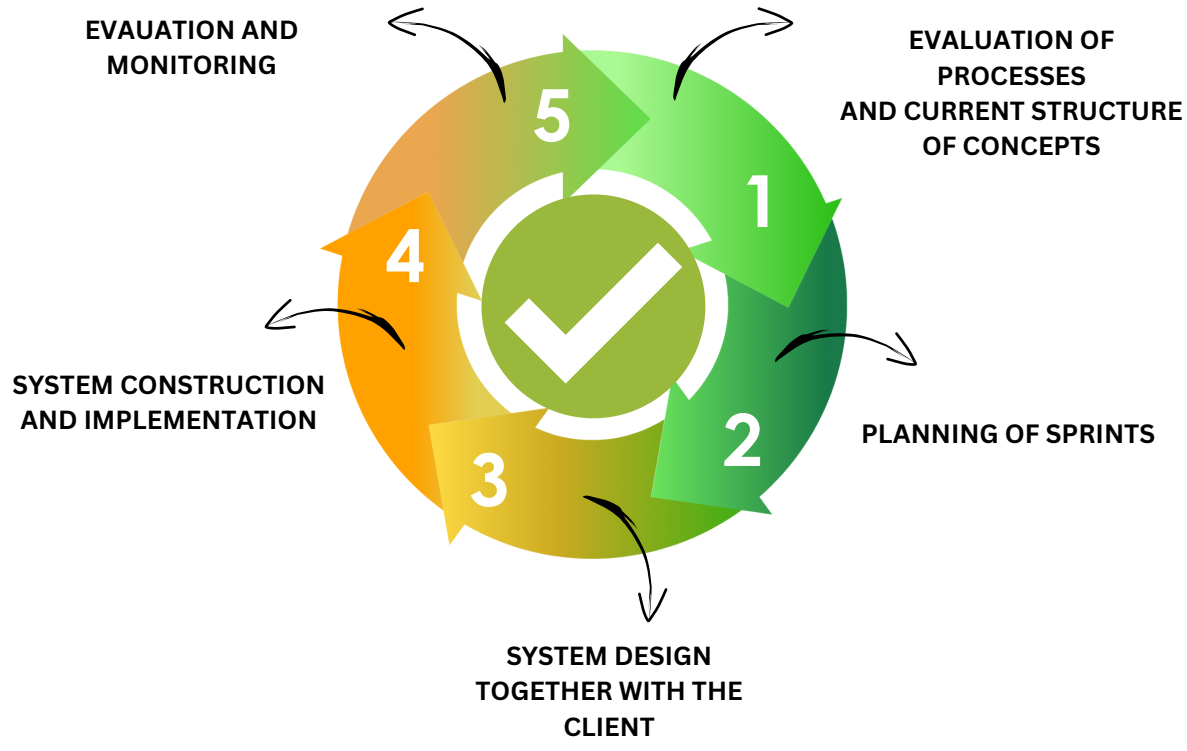
The continued use of manual or paper-based procedures and manual document verification in scholarship administration is unmistakable proof that a problem exists. Administrators must handle physical papers like application forms, transcripts, and recommendation letters while using these conventional techniques, which leads to laborious operations that are prone to mistakes. The use of manual verification is resource-intensive and increases the possibility of missing or managing important papers improperly. This issue is highlighted by the requirement for repetitive manual verification and the buildup of copious paperwork, underscoring the need for a more effective and streamlined method to manage scholarship documents.

The established procedures and practices that have been in place for years are what lead to manual or paper-based processes and manual examination of scholarship materials. Because of the physical documentation involved in these procedures, administrators must manually handle, examine, and check each document. This method has two distinct consequences. First of all, administrators must spend a considerable amount of time and money manually processing and cross-referencing a large number of documents. Second, relying heavily on manual checks raises the possibility of human mistake, which could result in incorrect treatment, oversight, or misinterpretation of critical research data.

Overall, in order to address the problem, this research is necessary to achieve the objectives of creating and providing a scalable, reliable, and cost-effective service by developing a web-based scholarship application system for scholarship applicants. The project will focus on Sustainable Development Goal (SDG) 4, "Quality Education" It aspires to encourage universal access to inclusive, high-quality education and emphasizes the notion that education is one of the most effective and reliable engines of long-term progress.

DEVELOPMENT MODEL

AGILE METHODOLOGY



Considering of its adaptability, teamwork, and iterative process, the Agile methodology is perfect for our system development. It facilitates teamwork and communication, enabling early and continuous delivery of functional software, and enables quick adaption to shifting needs. With this strategy, results are focused on the needs of the client and constant improvement.

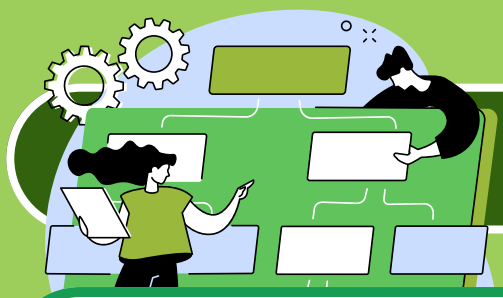
Evaluation of processes and current structure of concepts. It is important to evaluate current processes and conceptual frameworks in an organization or project during this phase. It seeks to comprehend present practices and pinpoint areas for the development of web-based scholarship application system. Teams may successfully develop systems by optimizing the development process and ensuring that it is in line with project objectives.

Planning of sprints. The selection of user stories, their decomposition into tasks, estimation of effort, task assignment to team members, and definition of acceptance criteria are all done at this phase in order to maximize production. This planning enables iterative feedback and the adoption of modifications to the framework or system while guaranteeing clear objectives, efficient resource allocation, and prompt delivery of valuable functionality.

System design together with the client. Researchers pick design for framework and discuss choices with clients. The client is involved in the process from the outset, and their input is critical.

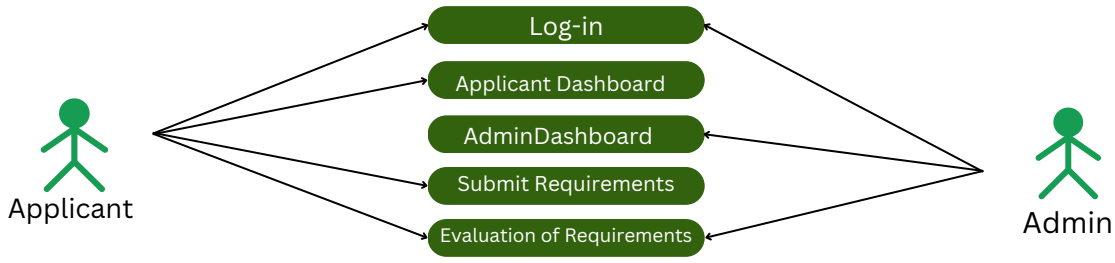
System constructions and implementation. According to design standards, the system is built and deployed during this phase. Coding, testing, and debugging are all part of it to make sure it works and is accurate. The web-based scholarship application system is subsequently set up and configured in the target environment.

Evaluation and Monitoring. This stage of system development comprises evaluating and monitoring the system's functionality, usability, and performance. It entails tasks including performance assessment, functionality testing, user acceptance testing, feedback gathering, and continuing maintenance. This stage makes sure the web-based scholarship application system satisfies the criteria, operates properly, and maintains its high performance over time.



SYSTEM ARCHITECTURE

WEB-BASED SCHOLARSHIP APPLICATION SYSTEM

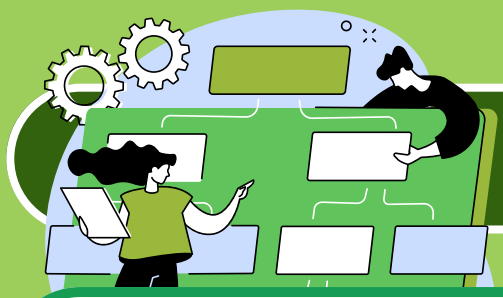


Use Case Diagram

Use case diagrams depict the various ways users or outside entities interact with the system to accomplish particular goals and give a high-level overview of the system's capabilities. By giving a visual depiction of how the system is utilized and the interactions between various elements, it helps ease communication between users, developers, and clients.

Database Diagram

Visual representation of the structure and relationships within a database. It provides a graphical view of the tables, columns, and their associations, helping to understand the organization of the data and how different entities are related.



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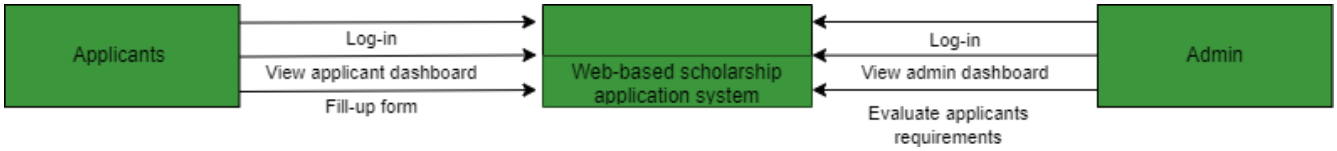
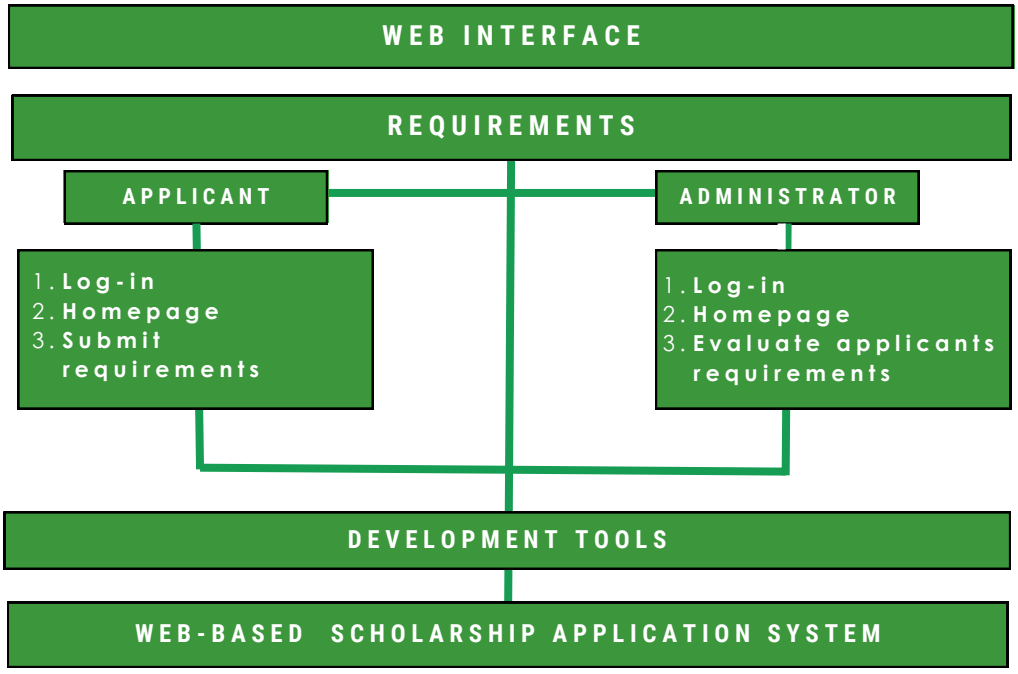


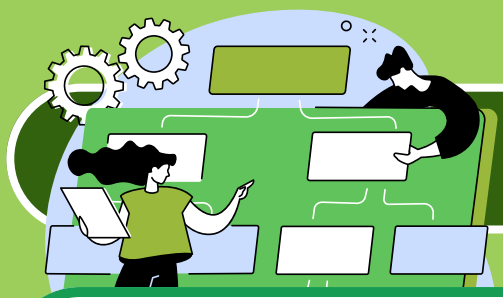
Context Diagram

Context diagram clearly and succinctly describe the system's interactions between the administrators and applicants with the outside world. Setting up the system's boundaries, identifying the key outside parties engaged, and emphasizing the data flows between them all help.



Conceptual Framework

Conceptual framework helps one grasp the theoretical underpinnings and study's structure by acting as a road map or guide. gives a visual depiction of the theoretical foundations of the research investigation and the anticipated correlations between variables. It aids in the comprehension of the conceptual model and the reasoning underlying the study's design and hypotheses by both researchers and readers.



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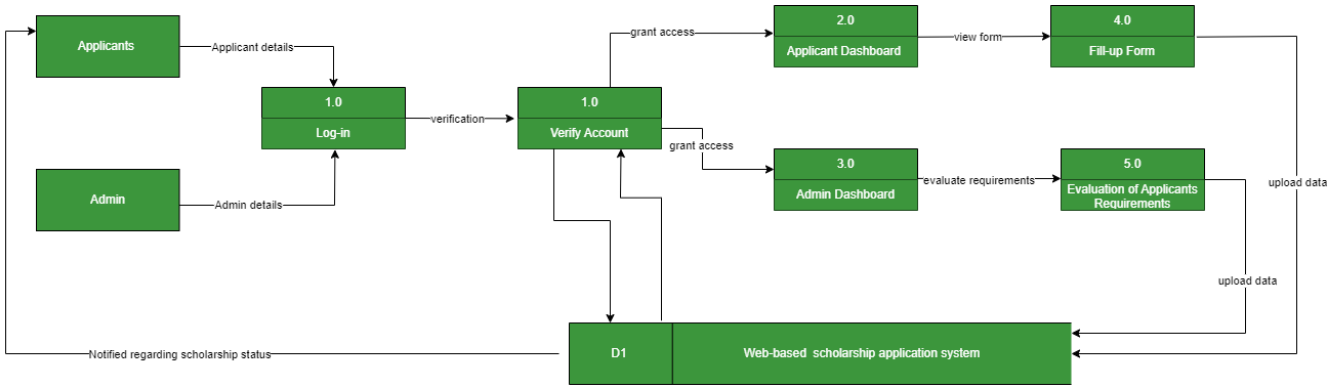
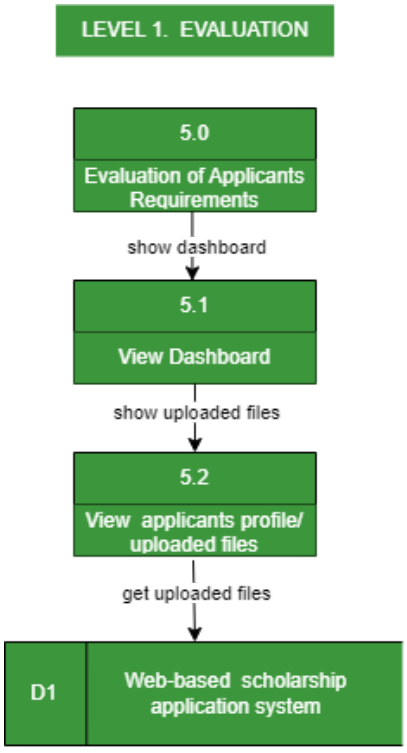
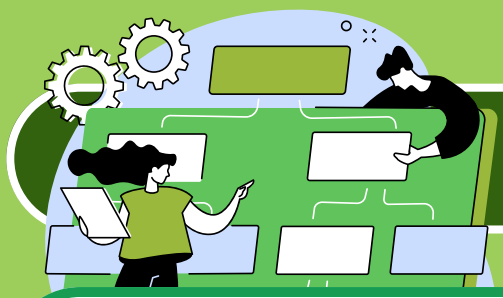


Level 0 Data Flow Diagram

Figure gives a high-level overview of the way data is processed or manipulated within a system. It illustrates the interactions between data sources or destinations, the system itself, and the entire system as a single process or function.



The module that the researchers are concentrating on is displayed at Level 1. It acts as a starting point for building more intricate diagrams at lower levels, which give a more thorough grasp of the functionalities of the system.



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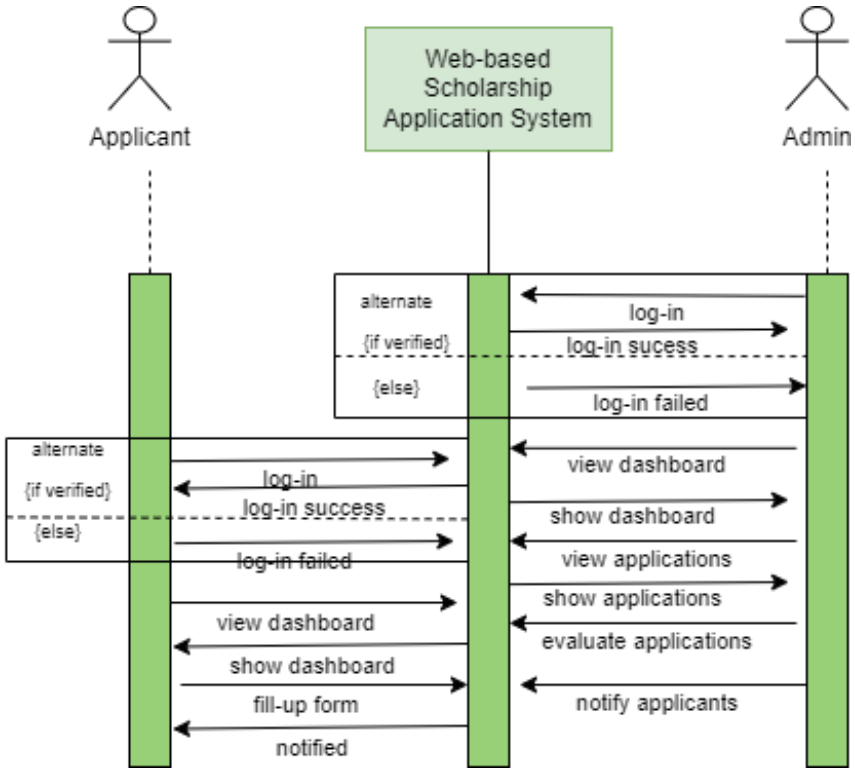
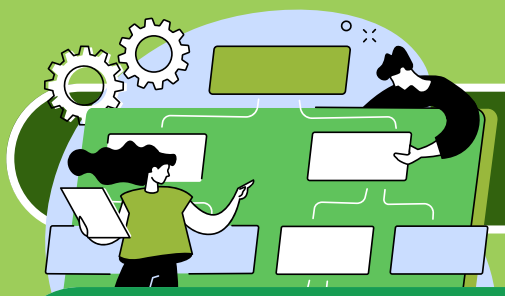


Sequence Diagram

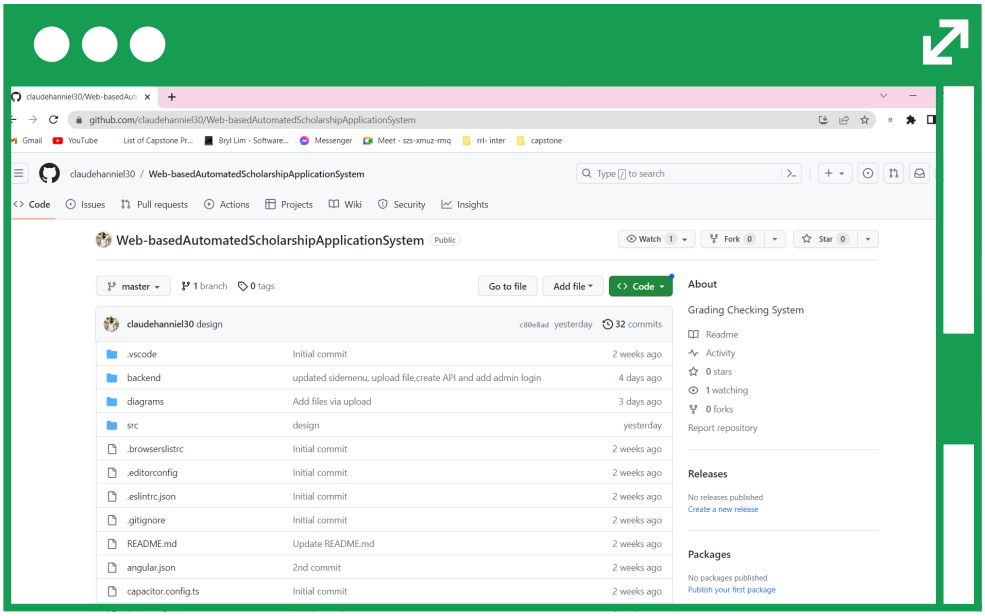
This diagram illustrates how the system, the administrator, and the applicants interact as they log in, complete forms, and evaluate candidates. It offers a clear illustration of the dynamic behavior of a system and is a useful tool for understanding the flow of control and data throughout the execution of a particular use case or scenario.

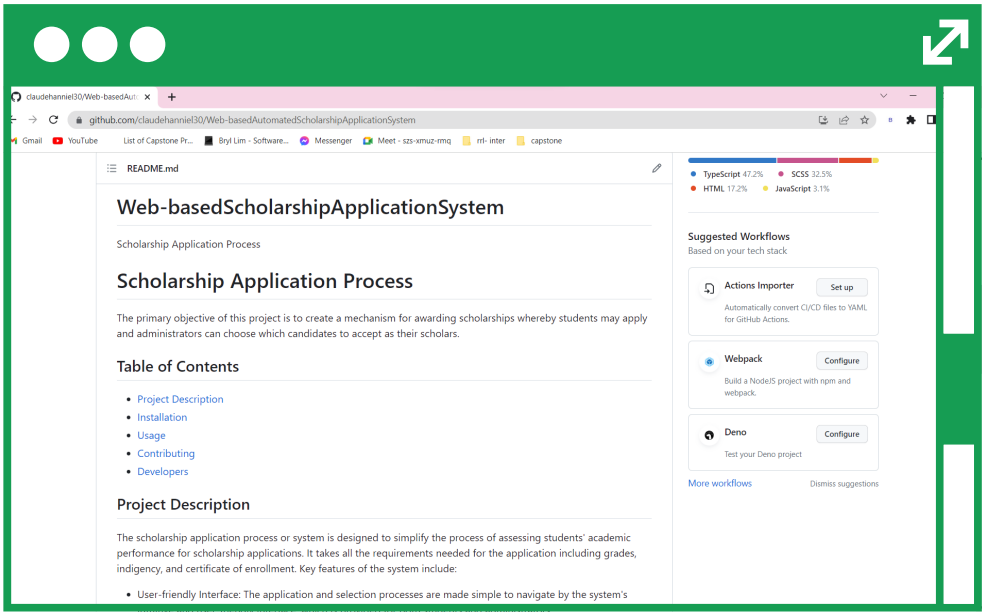


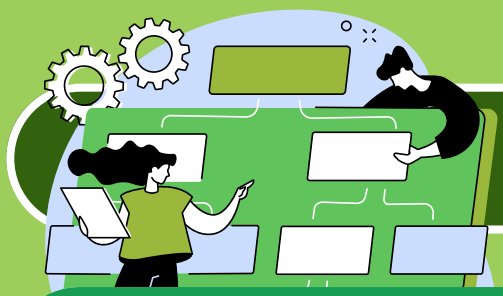
GITHUB REPOSITORY

LINK TO GITHUB:

: https://github.com/claudehanniel30/Web-basedAutomatedScholarshipApplicationSystem.git

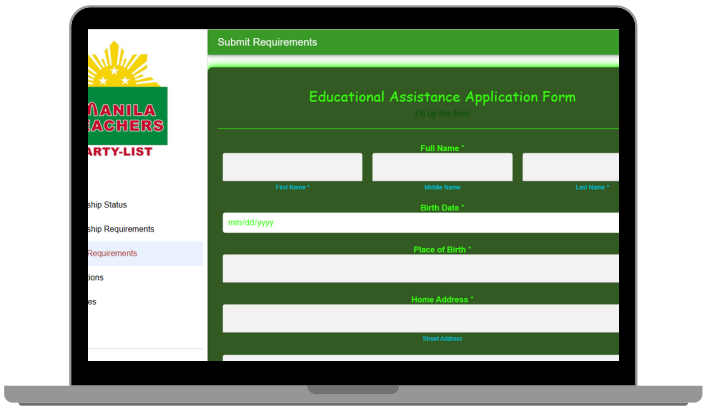


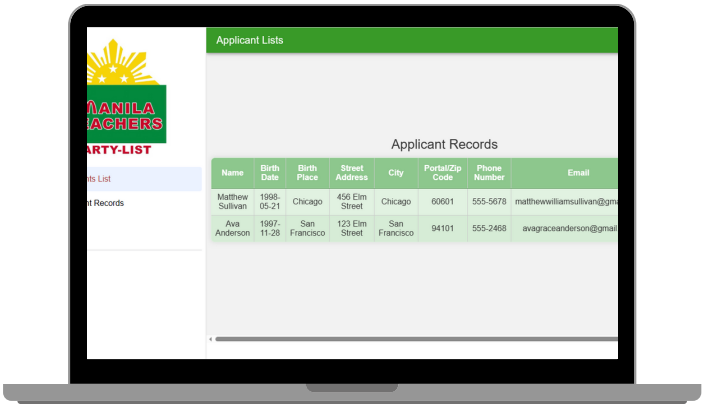


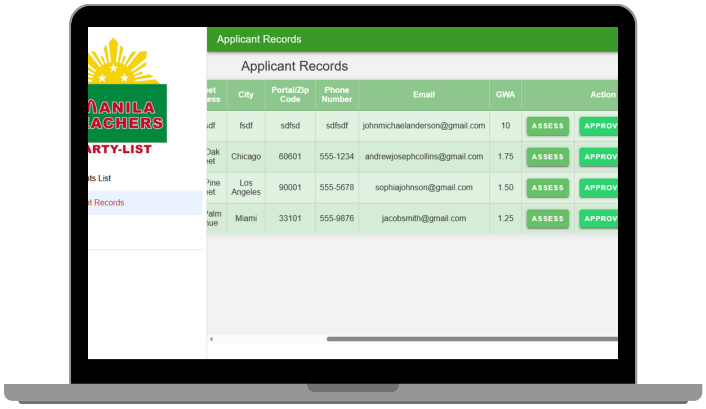


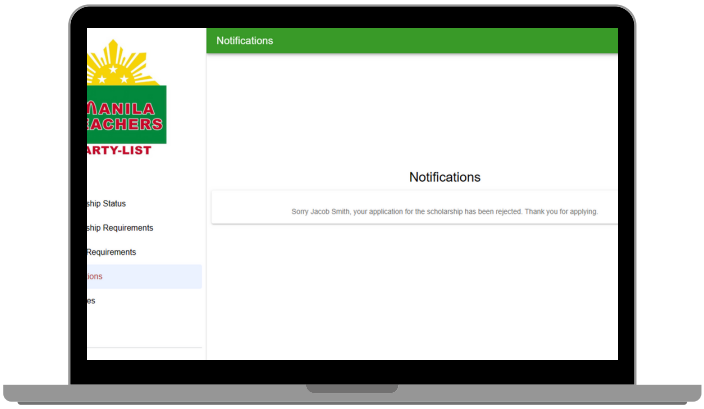
GITHUB REPOSITORY

WEB-BASED SCREENSHOTS









TEAM MEMBERS

GUILAN, AL VINCENT

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SKILLS

- Programming (HTML, CSS, Python and JavaScript), Microsoft Office
- Data Entry
- Microsoft Office (Word,Excel, PowerPoint)
- Have an effective communication, collaboration, and adaptability core soft skills that enable to work well in teams, build strong relationships, and successfully navigate dynamic environments.

LANGUAGE

- FILIPINO
- ENGLISH

EDUCATION

Present | (BSU) BATANGAS STATE UNIVERSITY
- Bachelor of Science Information Technology
- Golden Country Homes Alangilan

2017 -2020 | (AICS) ASIAN INSTITUTE OF COMPUTER STUDIES
- TVL- Information Communication and Technology
- Senior High School

2013-2017|(BNHS) BATANGAS NATIONAL HIGH SCHOOL RIVAL AVE.
- Junior High School

2007-2013 | TONGDOL ELEMENTARY SCHOOL
- Primary School
- Irosin Sorsogon

EXPERIENCE

2019 | ABCC PHILS INC, SMCA BUILDING
- Data Entry
- Typing Students information
- Manage students' records.
- 127 M.H. Del Pilar Street, Batangas City, Batangas

TEAM MEMBERS

BENDAÑA, MARIA NIMUEL L.

- nimuelbendana@gmail.com
- 0966-972-4429

SKILLS

- C/C++, html, Spreadsheet, MS Office
- Have the flexibility to adopt in any environment and
- situation that anyone can be benefited.
- Active listener to anyone and quick learner.
- Have ability to work independently or even being part as a team.

LANGUAGE

- FILIPINO
- ENGLISH

EDUCATION

Present | BATANGAS STATE UNIVERSITY
- Bachelor of Science Information Technology
- Brgy. Alangilan, Batangas City, Philippines

2018- 2020 | LEMERY COLLEGES
- TVL- Information Communication and Technology
- Senior High School
- Bagong Sikat, Lemery Batangas

2014-2018 | ANANIAS C. HERNANDEZ NATIONAL HIGH SCHOOL
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- Arumahan Lemery Batangas

2008-2014 | ARUMAHAN ELEMENTARY SCHOOL
- Primary School
- Arumahan Lemery Batangas

EXPERIENCE

2020 | MACABABAD LAW FIRM (WORK IMMERSION)
- Atty. Lionell M. Macababbad Lawyer - Notary Public
- Office Clerk
- Illustre Avenue, Lemery Batangas

TEAM MEMBERS

TARRAYO, CLAUDE HANNIEL V.

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- 09816851367

SKILLS

- Programming(HTML, CSS, Javascript, Python), Microsoft Office
- With a strong problem-solving abilities, emotional intelligence, and leadership skills.
- Excel in analyzing complex issues, understanding others' perspectives, and inspiring others towards a common goal.

LANGUAGE

- FILIPINO
- ENGLISH

EDUCATION

Present | BATANGAS STATE UNIVERSITY
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- Junior High School
- Batangas City

2007-2012| BATANGAS CITY SOUTH ELEMENTARY SCHOOL
- Primary School
- Batangas City

EXPERIENCE

2019 | PRINTING SHOP
- Printing
- Batangas City

2012-2014 | FOXFIRE COMPUTER SHOP
- Server
- Golden Country Homes Alangilan Batangas City