AlumTrack; Integration of Alumni Tracking Software in La Concepcion College

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In Partial Fulfilment of the Requirement

In the Subject Practical

Research Project

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CERTIFICATE OF ORIGINALITY

We, hereby which certify that this research is my work and that, so the best of my knowledge and understanding, it contains no material previously written or published by another person or group, not any material has been accepted for the award of any other degree or diploma from university or institution of higher learning, except where due acknowledgement is made thereof. Furthermore, we declare that the intellectual contact of this research is the product of our work although we received assistance from others on the manner of organization, presentation, language, and style.

APPROVAL SHEET

This is to certify the study entitled, **"AlumTrack; Integration of Alumni Tracking Software in La Concepcion College"** prepared by ICT research Group 5 have been EXAMINED and PASSED for the Final Oral Defense on 25th of May 2022 at 15:00

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Thank you very much!

ABSTRACT

This research aims to unfold the feasibility of implementation of Alumni Tracking software in La Concepcion College. This includes producing alpha version of the software, iterating through the procedure and create a standard pillar on producing and maintaining such software. This study also dives deep into the 3rd part technologies that has been used and its impact on the whole study. With regards to the financial feasibility of such system. Lastly, the study concludes that implementation of AlumTrack is possible and a valuable tool on learning institution and it recommends a further refinement of the said system in parallel on providing a better curriculum specifically on ICT grade 11 and 12.

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Introduction

There is no doubt that alumni tracking software is a valuable tool for learning institutions. By being able to track their students during and after graduation, they are able to gain valuable insights into how their alumni are doing in the workforce. This information can be used to improve the institution's programs and help more of their graduates find success in their chosen careers.

One of the benefits of using this software is that it allows schools to see where their graduates are working and what kind of jobs they have obtained. This can help identify which programs are most successful in preparing students for work after graduation. Additionally, it can give insight into which industries or companies may be good targets for recruiting new graduates.

Another benefit of alumni tracking software is that it provides data on how many of the school's alumni are actually employed. This information can be used to show employers just how successful a particular school's graduates have been in finding employment after leaving school. It also allows schools to compare themselves against other institutions, giving them an idea of where they stand in terms of graduate employability rates.

Project Context

A school without alumni tracking software is at a disadvantage compared to schools that have one. With no system in place, the school cannot keep track of its former students or their current status. In this case, we are focusing on an institution that doesn't have an alumni tracking software, highlighting the deficiency of not having an alumni tracking software in our school is mainly because we don't have any record or way to track our past students and their accomplishments after they graduate from our school. We are not able to keep in touch with them which means we can't ask for their help or support when needed; furthermore, since there's no record or database containing information about our past graduates, potential employers or other institutions cannot easily find out about us either.

In contrast, if we had an alumni tracking software installed in our school, its advantages would be substantial: first, it would act as a medium through which we could keep in touch with all our past students; secondly, by compiling all important data related to each graduate (e.g.: ID number, fields of study, grades achieved etc.), said database could be used as leverage for marketing purposes; finally and most importantly perhaps, such software could serve as an efficient tool for screening applicants during recruitment processes. Additionally, it provides an easy way for current students to find contact information for alumni who may be able to offer them guidance or advice about their own career paths.

Purpose and Description

The purpose of this paper is to define the scope and capability of the Alumni tracking software. This will include things such as the ability to track students who did not graduate from the school of installation through partnerships*, what information the software does not track (such as private information), etc. While defining the true scope of an Alumni tracker, it is important to highlight features that make it valuable for both students and educators alike. These might include personal insights that the software can give after surveying alumni, lifelong stories shared by graduates, employment statistics, professional growth rates – anything that would be beneficial for current or future students.

Alumni tracking software can be used to track a variety of information about former students, including their academic performance, employment history, and professional growth. However, there are some limitations to what this software can do. First, it cannot track personal information such as social security numbers or addresses. Second, it only tracks data from graduates who attended the school where the alumni tracker was installed; it does not track data from graduates who did not attend that school (although schools could partner with other institutions in order to compile that data). Finally, while the alumni tracker

provides a wealth of valuable information about former students, its usefulness depends on how much data is input into it by educators and parents/guardians.

Despite these limitations, however, the alumni tracker offers many benefits for both students and educators alike. For example, Students can use alumni tracker software to see how they compare with other graduates in the same field of study and identify opportunities for professional growth. Schools also can use the alumni tracker to store data as performance testing and to evaluate their programs and teacher performance. Most importantly, alumni tracker software can provide lifelong stories and rewards for the students who have completed their education at this school.

*Alumni tracker's ability to track graduates from third party schools is limited by bilateral partnership on that third party institution or if the user who graduated from that school voluntarily filled up all the neccesary details. This voluntary information however are not guaranteed to be accurate.

Objectives of the study

The objectives of the study are to track students after they graduate from college and ascertain their academic and professional status. The software will also be able to provide information on the colleges that the students have attended, as well as their majors and graduation dates.

To begin with, the objectives of the study are as follows:

1. Track students after they graduate from Senior high school.
2. Monitor their academic progress and degree completion rates.
3. Assess their employability and career paths post-graduation.

4. Identify any gaps in services or support that may need to be addressed for student success tracking purposes.

5. Facilitate better collaboration between institutions of higher education and employers.

6. Generate longitudinal data on student outcomes that can be used for program improvement.

7. Enable the institution to analyze how different interventions (eg, mentorship programs) impact students' success trajectories over time.

8. Encourage lifelong learning among alumni members.

9. Assist with fund raising efforts by providing detailed information about where graduates ended up.

10. Support marketing efforts by highlighting the successes of alumni.

These are just a few examples of what the alumni tracker can do once it has been implemented. It is an invaluable tool for both colleges and students alike, as it allows us to keep track of our graduates' progress and ensure that they are getting the most out of their education.

Scope and Delimitation

Figure 1: La Concepcion College

The research, titled "Alumni tracker," will only be conducted in the city of San Jose Del Monte, Bulacan, and in the School of La Concepcion College. The purpose of this paper is to define the scope of the capability of the Alumni tracking software.

Scope

1. Allows present and past students to create and view their information.

2. All possible Senior high school students in La Concepcion College can access the website.

3. Monitor registered students on the platform

4.Allows administrators to view the database entirety through the Admin tools

5. Allows users to access the site anytime anywhere.

Limitation

1. The site is meant only for La Concepcion College SHS students

2. Developers can’t guarantee 100% database security

3. Bugs and exploits might surface in the future on the platform

4. The platform is not meant to replace Learning management system such as Edmodo and Moodle

5. The website is vulnerable to DDoS.

Significance of the Study

As time passes by, we need to remember the people who made their achievements in the past. This research about Alumni Tracker might help the teachers, students, and board of directors of La Concepcion College understand how this tracker tracks their past students or classmates about what they are doing in their lives.

Students - This study will help the students know how this tracker works and will know how and what the past students did after they graduated college.

Teachers - This study about this tracker makes them updated on the student's information on what they're doing after their studying at La Concepcion College

School - This will introduce how the school represent their students regarding their educational quality. This can make students find their information updated and provide connections to others.

Alumni – This would help alumni to bring back their connection to the former school they graduated from.

Parents - This might help them know what their child did in college and after college. This provides information that they didn't know

Future Researchers - This will help them understand and give them the idea on how the alumni tracker works

Definition of terms

Bootstrap- Cascading Style Sheet framework that offers design simplicity in mobile-first web design.

CSS- Cascading Style Sheet, a primary design utility in web development that allows developers to have more control over the design process.

Database – A location/framework that enables websites to create and access information through the use of API.

Fork – Duplicating a certain repo of all its contents and remixing with third party code.

Github – A version control software that allows developers to have a multi chronographic copy of their code.

HTML – Hypertext markup language, a markup language that enables developers to an interface on browsers to create web accelerated applications.

Javascript – A programming language that focuses on a web platform.

MySQL – A query language that is used to interface between frontend and backend infrastructure.

Php – A database software that allows users to store and create tables of various sizes.

Chapter II

Review of Related Literature and Studies

Theoretical Background

The use of alumni tracking software can be traced back to the early 1990s when universities and colleges first started using the technology to track and manage their relationships with former students. At that time, most alumni tracking software was used for mailing lists and contact management.

Today, there is a wide range of capabilities offered by different alumni tracking software programs. The essential capability of these programs is the ability to manage information about former students and track their interactions with the institution over time. This includes keeping track of things such as which courses they took, what degrees they earned, what jobs they have held since graduation, and whether or not they have made any donations to the school.

This enables institutions to manage their databases of former students and track their interactions with the institution over time. This information can be used to target specific groups or individuals with communications related to fundraising, career services, or other benefits offered by the institution. Additionally, alumni tracking software can help identify potential donors and volunteers based on past interactions with the institution.

Review of Related literature

Local Literature

"The alumni tracking and networking process of the ADZU-SOM allowed a high proportion (96%) of graduate locations to be identified; however, the response rate for graduates of the conventional medical school was much lower at 26%, most probably because those graduates had weaker connection to the named ADZU-SOM researchers on the project, thus introducing the potential for respondent bias for this particular school." (Addressing health workforce inequities in the Mindanao regions of the Philippines, 2017)

"The alumni tracking and networking process of the SHS-Palo allowed a high proportion of graduate locations to be identified; however, retrieval of completed surveys was difficult because of geographical barriers and poor internet connectivity in rural areas of Eastern Visayas, resulting in only a 59% response rate. The response rate for graduates of the conventional medical school was even lower at 30%, the lack of an established alumni tracking system may have contributed to the low response rate." (The impact of socially-accountable, community-engaged medical education on graduates in the Central Philippines, 2017)

"The Connector Study is an attempt to increase and enrich outcomes data in a longitudinal study of low-income graduates of a national network of

innovative high schools by gathering alumni updates through telephone interviews with high school staff members who remain in touch with their former students. Approximately 2 years after they worked with groups of students in high school, these individuals were able to provide information about education, job, and personal outcomes for 96% of 563 graduates. The Connector Study strategy offers a feasible method for collecting quantifiable outcome measures for longitudinal studies. This method also provides information about student change and individual circumstances that is difficult to obtain from students themselves, and that goes beyond the basic outcome indicators available through federal and state student tracking systems." (The Connector Study: A Strategy for Collecting Post-Graduation Data about Low-Income High School Students, 2016)

Foreign Literature

"This tracer study aims to describe users alumni evaluation towards the graduates of Guidance and Counselling Department. This study belongs to the quantitative descriptive study applying survey approach. This study employs random sampling technique with 30% proportion of the total graduate during 2014-2016. This study uses primary data which are obtained directly from the alumni and the users of alumni by using structured questionnaires. The questionnaires are distributed directly to the tracked graduates and the users of alumni." (A Tracer Study on the Graduates of Guidance and Counselling Department of Ahmad Dahlan University, 2017)

"Short messages system, email blast and social media are used to communicate with the alumni. Graduates received the password and username to enter the website of search tracker. This research focuses on the respond percentage and alumni characteristics (transition period, job nowadays, vertical and horizontal relevance, competence). The result shows that the respond percentage in 2016 research for 2014 graduates is 28%. The median period of transition is four months, and 34% of alumni were employed before graduation. Approximately 83% graduates claimed that their course has close relations with the level of their jobs recently. While 62% said that their education is equal to their occupation. The competence gap between the university contribution and alumni which is zero was found in research skills. These show that UNIKOM has achieved its graduates aim in research skills competence. (E-tracer study implementation of Indonesia Computer University, 2016)

"This is the first descriptive study that uses the survey method to investigate where alumni of Kuwait University's Master of Library and Information Science program are working and what different functions they are performing. The survey method was used to collect mainly quantitative data from alumni. Inferences about the graduates' skills, positions, functions, aspirations and behavior are made from the data collected via the questionnaires. The market is fluid and evolving, and graduates are doing diverse functions that are not typical. Problems that have to do with the profession's image and expectations are voiced. Implications about professional titles and job salaries as well as suggestions for

future planning are discussed in light of survey results." (Library and information science alumni of Kuwait University: Tracking positions and functions, 2018)

Local Studies

"This study aimed to generate data of the Graduate School and its alumni specifically; it sought answer to the following sub-objectives: trace out data of Graduate School Alumni from academic 2011–2012 to 2015– 2016 in terms of civil status, sex, regional residence of alumni; Baccalaureate Degree, Professional Examination(s) Passed and Reason(s) for taking the course'; to determine the employment data in terms of employment status, occupation, position, promotion after finishing Master's Degree; assess the skills acquired by the respondents in their Master's Degree that are most useful in their present job as evaluated by themselves, their peers and supervisor to wit: communication skills, human relations skills, interpersonal skills, entrepreneurial skills, problem solving skills, critical thinking skills, managerial administrative skills, technical skills; assess the status of the Graduate School in its program delivery and implementation as perceived by alumni along the following areas: VMGO, Faculty, Curriculum and Instruction, Support to Students, Research, Extension, Library, Laboratories, Physical Facilities, Administration; determine the relationship between the acquired by the Graduate School Alumni with their present position. determine the relationship between the skills acquired by Graduate School Alumni in the Master's Degree with program delivery and implementation along the ten (10)

areas mentioned as perceived by alumni." (Tracking the Alumni of the Graduate School in a Philippine Higher Education Institution, 2019)

"This study aimed to determine the employability of Batangas State University-Lipa City graduates within two (2) years after graduation. In this tracer study the BatStateU-Lipa City graduates of School Year 2017 -2018 are the participants. To obtain the needed information, the researchers used an online survey to be filled in by the graduates. The survey questionnaire served as the data gathering instrument. The subjects of the study were 454 graduates whose names were drawn randomly from the master list of 514 graduates of the four colleges offering different academic programs. Findings of the study revealed that almost all of the BatStateU-Lipa City graduates are currently employed and working in a full time basis. On the other hand, more than half are holding permanent position. However, most of them are not yet pursuing masters' degree or post graduate studies. The developed alumni directory will help the University in tracking the alumni and to easily collect and update the personal and professional information of graduates.

It is recommended that the graduates may pursue professional development and advancement by taking masters' degree or advance study for them to upgrade their core competencies and land in a job that will provide vast opportunities to practice their profession. The expansion of tie-ups with public and private agencies and enterprises that can provide employment opportunities to the University graduates is a continuing process in all colleges to maintain the higher

rate of employability. Further study may be conducted focusing on the relevance and responsiveness of the different programs." (A TRACER STUDY OF BATANGAS STATE UNIVERSITY (BATSTATEU)- LIPA CITY GRADUATES OF SY 2017 – 2018, 2018)

"In the past, alumni relations, or engagement, tended to be treated as a stand-alone activity divorced from fundraising and other advancement activities. Today, alumni relations is an important part of an institution's advancement activities for many reasons. Alumni are an institution's most loyal supporters. Alumni are fundraising prospects. Alumni generate invaluable word-of-mouth marketing among their social and professional networks. By engaging alumni, an institutions can continue to benefit from their skills and experience. Alumni are great role models for current students and are often well placed to offer practical support to students as they start their careers. Alumni are often in the position to engage the expertise of the institution in their professional lives. Your alumni are your international ambassadors. They take their knowledge of your institution to their hometowns and countries and into their professional and social networks. Maintaining a positive relationship with your alumni means that the messages they share about your institution will also be positive – and current."
(Ramon Torres National Highschool Alumni Tracking System, 2020)

Foreign Studies

"In the Material Design world, paper is the primary surface that everything else exists on. It can grow and shrink, unlike paper in the real world. That means a piece of paper can appear in the center of the screen by growing from a single pixel to its full size and it can even change shape. Paper always shows up with some kind of transition (growing or sliding into place); it is never just suddenly there at full size. Pieces of paper can push each other when their edges collide. Pieces of paper can be split into two, and multiple pieces can join to become one. A sheet of paper can never go through another, but one sheet of paper can slide over another. The fact that paper can slide in front of other paper means that Material Design exists in a 3D environment. The third dimension, plotted on the Z-axis, is how close the object is to the surface of the screen, which affects the shadow it casts and whether it is in front of or behind another piece of paper. Material Design treats the Z-axis as very finite, meaning that there is no significant amount of depth that can be shown (just how many pieces of paper thick is your actual screen?). This limitation means that differences in depth are much more noticeable. Paper is always one density-independent pixel thick (the concept of density which means that it does not bend or fold." (Android User Interface Design: Implementing Material Design for Developers, 2016)

"The study indicates that individuals use Dark Mode for a more satisfying user experience as they feel e.g. less eye strain with a dark themed user interface. Editing and coding software is mostly designed in a light-on-dark color scheme, as users often work for long continuous hours on screen, surrounded by dark

environment. As screen time per individual increases, more users are experiencing ocular diseases. In counteraction, society demanded dark themed interfaces for operating systems, websites, and apps. As individuals were already using unofficial dark themes on different interfaces, tech companies started releasing system updates to make Dark Mode a choice. As Apple released their user interface update just in 2019, Dark Mode is still a relevant trend discussed in the industry and society. Experts indicate that Dark Mode is here to stay, as it satisfies preferences of many users and makes current OLED screens and future digital devices with appropriate display technology more sustainable." (The Rise of Dark Mode: A qualitative study of an emerging user interface design trend, 2020)

"A key factor influencing the effectiveness of a user interface is the usability resulting from its design, and the overall experience generated while using it, through any kind of device. The two main design trends that prevail in the field of user interface design is skeuomorphism and flat design. Skeuomorphism was used in UI design long before flat design and it is built upon the notion of metaphors and affordances. Flat design is the main design trend used in most UIs today and, unlike skeuomorphic design, it is considered as a way to explore the digital medium without trying to reproduce the appearance of the physical world. This paper investigates how users perceive the two design approaches at the level of icon design (in terms of icon recognizability, recall and effectiveness) based on series of experiments and on data collected via a Tobii eye tracker. Moreover, the paper poses the question whether users perceive an overall

flat design as more aesthetically attractive or more usable than a skeuomorphic equivalent. All tested hypotheses regarding potential effect of design approach on icon recognizability, task completion time, or number of errors were rejected but users perceived flat design as more usable. The last issue considered was how users respond to functionally equivalent flat and skeuomorphic variations of websites when given specific tasks to execute. Most tested hypotheses that website design affects task completion durations, user expected and experienced difficulty, or SUS (System Usability Scale) and meCUE questionnaires scores were rejected but there was a correlation between skeuomorphic design and increased experienced difficulty, as well as design type and SUS scores but not in both websites examined." (A Comparative Study of Skeuomorphic and Flat Design from a UX Perspective, 2018)

Chapter III

Technical Background

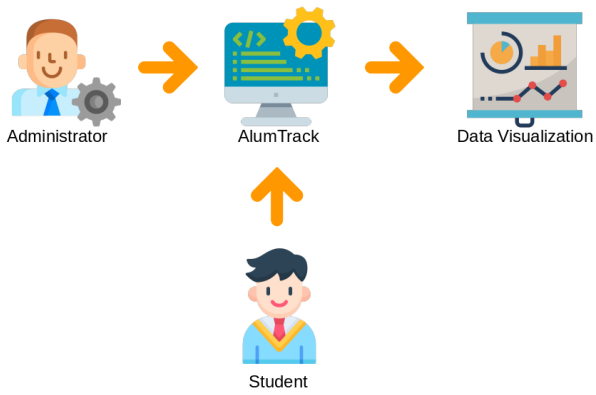


Figure 2: Block diagram of the system

The Alumni Tracking System is a tracking system wherein user will be able to see a persistent records of all Alumni Graduates, The user of our Alumni Tracking system will be the students, in our system they will be able to see the accrued data from the Alumnus, Monitoring the system would be our Admin, they're in charge of monitoring the system and the statistics being put into the system, Once our System collected the accrued data, they will be put in a Data Visualization to print out reported aggregated information.

Details of the technology to be used

Lubuntu - a lightweight Linux distribution based on Ubuntu. It uses the LXDE desktop environment, which is designed for low-resource systems. Lubuntu is intended to be a more lightweight alternative to Ubuntu, suitable for older hardware and slower internet connections.

Php (Php hypertext preprocessor) - a server-side scripting language designed for web development but also used as a general-purpose programming language. A PHP interpreter is installed on the web server and runs in response to HTTP requests from clients, usually browsers. PHP code is embedded into the HTML document and interpreted by the web server. The resulting output is sent to the client browser.

InnoDB - a storage engine for the MySQL database management system. It was introduced in 2001 and became the default storage engine for MySQL in 2005. InnoDB is an ACID-compliant database, meaning that it guarantees atomicity, consistency, isolation, and durability (ACID) of data stored in its tables.

Browser - Any modern browser is supported, but the processor should support SSE2 and other modern instruction sets.

Sublime text - a text editor for code, markup and prose. It features rich selection of editing commands, including indenting and unindenting, paragraph reformatting, line joining, multiple selections, regular expression search and replace across files. It also includes a plug-in system to add new features.

Database Modeler – Android application that allows users to visualize the relationship of different tables in InnoDB on a practical way

GPT 3 – A machine learning algorithm that has been designed for use in natural language processing tasks. It is based on the 3-layer Perceptron model, and has been found to be more accurate than other NLP algorithms when used for tasks such as text classification and sentiment analysis.

Infinity free – A free webhosting site for website prototyping.

Hostinger – A webhosting company that sells domain names.

Development Phase

Software requirements

Table 1 Operating System: Lubuntu 20.04

Processor	Dual core 64bit
RAM	1GB (with GUI), 512MB (TUI only)
Storage	16GB
Graphics	Any GPU, 16MB VRAM

Note: Lubuntu doesn't have a official minimum requirements

Table 2 PHP

Processor	Intel Core 2 duo E4300 and up
RAM	4GB DDR2 and up
Storage	128GB SSD

Table 3 InnoDB

Processor	Intel Core 2 duo E4300 and up
RAM	4GB DDR2 and up
Storage	128GB SSD

Table 4 Browser

Processor	Pentium 4 or up with SSE2
RAM	1GB
Storage	500MB

Table 5 Sublime text

Processor	Any 64Bit
Graphics API	OpenGL
Desktop environment	GTK 3.10+

Development Phase Workflow

During the development phase, everything that will be needed to implement the project

is arranged. A schedule is made, materials and tools are prepared and instructions are given to the group. The development phase is complete when the implementation is ready to start.

All matters must be clear for the researchers that will carry out the implementation.

1. Installation of Xampp – For LAN testing

2. Installation of sublime – Initial file creation

3. Asking for client input – Evaluating and noting what the client wants to achieve

4. Telling clients what we can do – Highlighting the team's capability and shortcoming

5. Creation of wireframe - Preliminary design phase

6. Designing using CSS/Bootstrap – Implementing the wireframe to browser readable code

7. Research for details – Looking for technicalities and bleeding edge technology

8. Publish in Github – Backing up and open sourcing the project

9. Publish in Web Hosting – Officially test the software in real world condition

10. Project published – Finalizing all reports, striking golden release

Implementation Phase

In order to run our Alumni tracker, we need to use webhosting, in a word, web hosting is the process of renting or purchasing space on the Internet to house a website. To be seen online, website material such as HTML, CSS, and images must be stored on a server. We buy a domain server online to host our alumni tracker website, A domain is a website's name, a URL is how to access to a website, and a website is what visitors view and interact with once they arrive. To put it another way, when you buy a domain, you are purchasing the name for your website, but you must still develop the website. So what device you can use to access websites? For many people, web browsing on desktop computers is still the most obvious way to access the internet. Every OS-based desktop system that has WiFi, Ethernet, or 3G connectivity and allows you to install a web browser (or comes with one preinstalled) can access the internet.

- Cloud solutions, outsourcing services in exchange for a lower control

What do we mean when we say we're going to deploy and have our solutions in the cloud? Simply said, we rely on a network of external remote servers (data centers) to provide on-demand access to software, data, and media assets.

- On-premise solutions, greater control and less scalability

To store and install software systems, this type of solution necessitates the use of company-owned servers or physical equipment. They can also be outsourced by renting servers for exclusive use from an external data center.

- Hybrid solutions, the best of both worlds

  Hybrid solutions integrate a company's on-premise systems and equipment with other solutions or outsourced services that are hosted on a public or private cloud. They're a type of hybrid solution that's usually considerably more cost-effective and optimized from a cost-management perspective, while also ensuring greater performance, control, scalability, resource availability, and seamless workflows than complete cloud or on-premise solutions.

How the project will work?

The project would start on preliminary test phase where the researcher would take notes about the actual processes that goes into the future implementation of the software. While at it, they would consult the clients and other parties that is involved in the commissioning of the project and would brief them based on the specification that they would set. After that the design phase would start, based on the client’s input and the appropriate actions that the

development team deemed necessary. Whilst with that, the discovery of the technologies to be used would be started by discovering different platforms and services. This would undergo preliminary testing and feasibility study. Highlighting pros and cons and deciding which best suite the project.

The proposed software can be accessed through the browser by anyone. But can only be used by Senior high School students on the alpha testing. The purpose of the software is to create a uniform data aggregation that has to be filled by the students. They can log in using their unique ID number and their default password as their birthday. This gives them access to the form and user page. In which they can view and edit their profile information.

The administrator on the other hand, can monitor the software's database and can view each user profile. They have the ability to modify some of the database entry to ensure a safe for work profile. The proposed software will help the administration of La Concepcion College by providing a custom implementation of already made forms in much concise way. Based on the current and future needs.

Chapter IV

Methodology

This chapter describes the data gathering instrument used and the methods used in developing the software include the system development cycle and the analytical tools are briefly discussed.

The proponent used a Descriptive – Qualitative development method. This type of research describes what exists and may help to uncover new facts and meaning. Descriptive research can be explained as a statement of affairs as they are at present with the researcher having no control over variable. Descriptive research is a type of research that is used to describe the characteristics of a population. Moreover, descriptive research may be characterized as simply the attempt to determine, describe or identify what is, while analytical research attempts to establish why it is that way or how to came to be.

The goal of qualitative descriptive studies is a comprehensive summarization, in everyday terms, of specific events experienced by individuals or groups of individuals. A qualitative descriptive approach needs to be design of choice when a straight forward description of a phenomenon is desired. It is an approach that is very useful when researchers want to know, regarding events, who were involved, what was involved, and where did things take place.

Data Gathering Instruments

Interview In gathering the data, the researchers consults some faculty members who gave details about the project vision and their requirements and specification for the said software.

Observation It is active acquisition of information from a primary source. The proponents utilized the observation process to gather more ideas how they can help the school officials facilitate their search for student information. From this observation, we noticed some problems encountered in manually searching for information by Senior High School students of La Concepcion College school.

Internet research The proponents conducted an internet research to gather more data and related topics to our study.

System testing The researchers have developed an alumni tracker system that will help speed up the process of finding information on SHS Students at La Concepcion College and will make it easier for school officials to find details of their students and what was their outcome when they graduated from School.

System Development Process

System development process is a set of steps that are typically followed when creating a software system. The first step in the process is requirements gathering, where the system requirements are identified. This involves interviewing stakeholders and users to determine what the system should do. Once the requirements are gathered, they are

analysed to determine feasibility and to create a project plan. The design of the system is then created based on the requirements, and tested for feasibility. Once it is determined that the design meets all of the requirements, it is implemented into production. Finally, quality assurance testing is done to ensure that there are no defects in the system

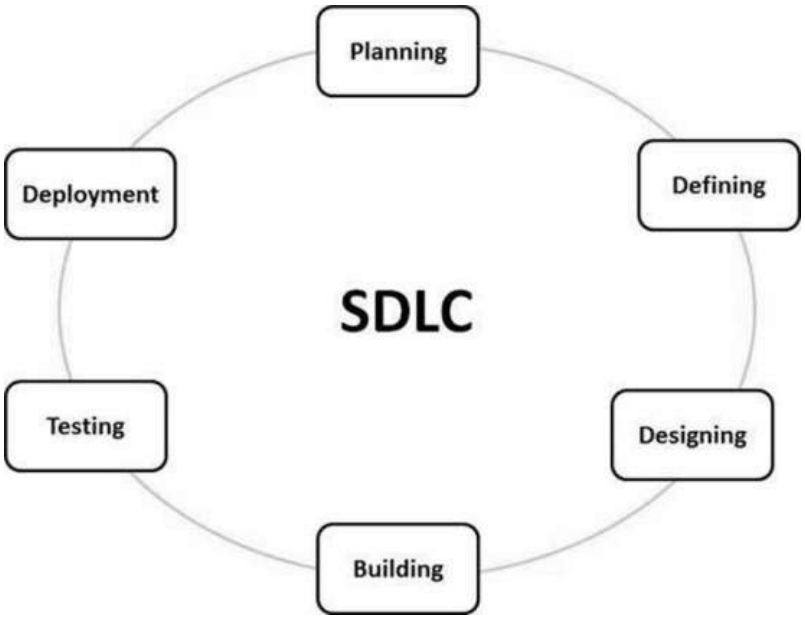


Figure 3: Software lifecycle

Planning, this involves highlighting the basic needs of the client that would be fulfilled by the propose system.

Defining, on defining phase the development team are in charge of defiining the critical mission profile of the proposed system and how it should be integrated to the development.

Designing, This is the first step of software development take place, the general form of the software is being designed and integrated based on the client's needs.

Building, the designed program would be build from the ground up by the development team and that includes implementation of the previous design phase.

Testing, the first iteration of the software would undergo preliminary testing and be passed on the group of dedicated testers in the development team. They are in charge of making sure that the software would run as intended and wrinkle out most of the bugs on the process.

Deployment, once the software passed the preliminary testing the software would be deployed on the customer's field of mission.

Requirement Analysis

Requirement analysis is the process of understanding and documenting the needs of a customer or user for a new or existing software system. The goal of this process is to ensure that all requirements are captured and that they are clear, concise, and testable.

Economic feasibility The researchers conducted feasibility study to determine the cost effectiveness of the software implimentation and development. It consist of factoring the previous (if any) compared to the proposed system.

Operating cost are the total expenses related on the proposed system operation. This includes factoring the static and dynamic operating cost to arrive on estimated cost. Since

AlumTrack is the first system to be implemented, there's no any available cost factor comparison.

Table 6: Operating cost (AlumTrack)

Item	Monthly expenditure	Per annum expenditure
A. Personnel		
(1) Admin @700/day	28,000.00	235,000.00
B. Supplies		
(1) Notebook @ 15.00	15.00	180.00
(1) Ballpen @ 7.00	7.00	7.00
	22.00	187.00
C. Equipment (Efficiency Tier)		
(1) Raspberry Pi4 4GB	6,219.75	6,219.00
(2) 2" 128GB SSD	1,898.00	1,898.00
(2) SATA to USB	372.00	372.00
(1) Set of KB and mouse	182.00	182.00
(1)22" Ginza 1080p TV	2,638.00	2,638.00
	11,309.00	11,309.00
D. Miscellaneous		
Electricity		
• Raspberry pi		

Cost per hour = rate x (W/1000)		
Cost per hour = 10.25 x (5W/1000)		
Cost per hour = 0.055		
Cost per day = 0.055 x 24hrs = 1.32		
Cost per month = 1.32 x 31 = 40.92	40.92	
Cost per year = 40.92 x 12 = 492		492.00
• 22” Television		
Cost per hour = 10.25 x (30w/1000)		
Cost per hour = 0.3075		
Cost per day = 0.3075 x 9 = 2.7675		
Cost per month = 2.7675 x 31 = 85.79	85.79	
Cost per year = 85.79 x 12 = 1030.00		1030.00
• Peripherals and misc.		
Cost per hour = rate x (W/1000)		
Cost per hour = 10.25 x (5W/1000)		
Cost per hour = 0.055		
Cost per day = 0.055 x 24hrs = 1.32		
Cost per month = 1.32 x 31 = 40.92	40.92	
Cost per year = 40.92 x 12 = 492		492.00
Total Annual cost (first year)		248,510.00

Cost benefit analysis - AlumTrack does not have a existing system to be replaced.

Existing System Cost	0
Proposed System Cost	248,510.00
Annual Asset Value	248,510.00

The client would accrue the total asset value stated above. Adding asset based value to the business.

Development cost

Development cost can be a major factor in the overall budget for a project. It is important to understand the different types of software development costs and how they can impact your project. There are three primary categories of software development cost: personnel, materials, and services. Personnel costs include salaries and benefits for developers, testers, and other staff involved in the project. Materials costs include licenses, tools, testing tools, servers or cloud services used for development or testing purposes. Services costs involve contracting with an outside company to provide specific services such as design or coding assistance."

Table 7: Development cost

A. Hardware cost	Amount
(1) Laptop*	0.00
Laptop specs:	
RAM = 4GB	
Hard disk = 480GB	
Processor = Core 2 Duo T9400@2.5GHz	
Operating System = Lubuntu 20.04	
(1) Mouse*	0.00
B. Software cost	
(1) Visual studio code	0.00
(1) Lubuntu 20.04	0.00

C. Labor cost	
(1) Web developer 30,000 per month (6mos)	180,000.00
(n) System tester and contributors^	0.00
	180,000.00
D. Electric consumption cost	
• Laptop	
Cost per hour = 10.25 x (65w/1000) = 0.66	
Cost per day = 0.66 x 4hrs = 2.66	
Cost per month = 2.66 x 31 = 82.46	82.46
• Stand fan	
Cost per hour = 10.25 x (15w/1000) = 0.15375	
Cost per day = 0.15375 x 4 = 0.615	
Cost per month = 0.615 x 31 = 19.065	19.065
E. Food and transportation cost	1,000.00
Summary	
a. Hardware cost	0.00
b. Software cost	0.00
c. Labor cost	180,000.00
d. Electricity cost	102.00
e. Food and transportation cost	1,000.00
Total development cost	181,102.00

Note:

* The equipment stated above technically cost nothing as they are 5 years or older. According to Internal Revenue Service (IRS), digital equipment is regarded as “depreciated” once it reached 5 years after the original purchase. Thus, in the eyes of taxation the equipment used in this development is hereby worthless.

^ AlumTrack is an open sourced project, thus everyone is volunteering their free time in developing it. Which means, System testers and contributors are not paid at all.

Software cost is free of charge since they are Free and Open Source Software (FOSS)

Operational feasibility is the ability of a software system to be operated in an effective and efficient manner. This includes having the necessary resources available, such as personnel, hardware, and software. The system must also be able to meet its goals and objectives while being able to adapt to changes in the environment.

Fishbone Diagram

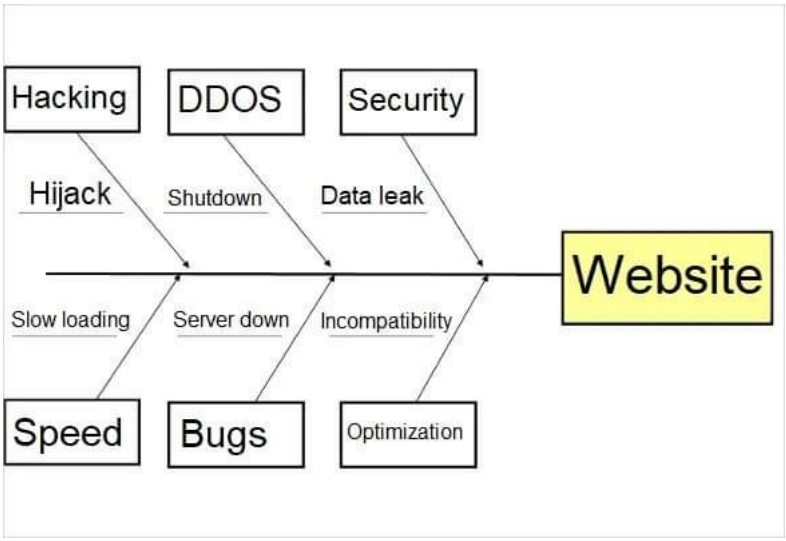


Figure 4: Fishbone diagram

Schedule feasibility is the ability of a software development project to adhere to its proposed schedule. A software development project's feasibility is often determined by its ability to meet certain milestones and deadlines. If a software development project falls behind schedule, it may be deemed infeasible.

Gantt chart is a graphical tool that is used to display the start and finish dates of tasks as well as their duration. This type of chart can be helpful for project managers when they are planning out a project. It can also be used to help track the progress of a project.

Activites	MARCH				APRIL				MAY			
	1	2	3	4	1	2	3	4	1	2	3	4
Strategy and Planning												
Data Gathering												
System Analysis and Design												
Chapter 1 -Introduction												
Introduction												
Project Context												
Purpose and Description of the Project												
Objectives of the Project												
Scope and Limitation of the Project												
Significance of the Project												
Chapter 2 - Review of Related Literature and Studies												
Foreign Literature												
Local Literature												
Local Studies												
Foreign Studies												
Chapter 3 - Technical Background												
Details of Technology												
Technicality of the Project												
Implementation Phase												
Development Phase												
Chapter 4 - Research Methodology and Data Gathering												
Reseach Methodology												
SDLC												
Gantt Chart												

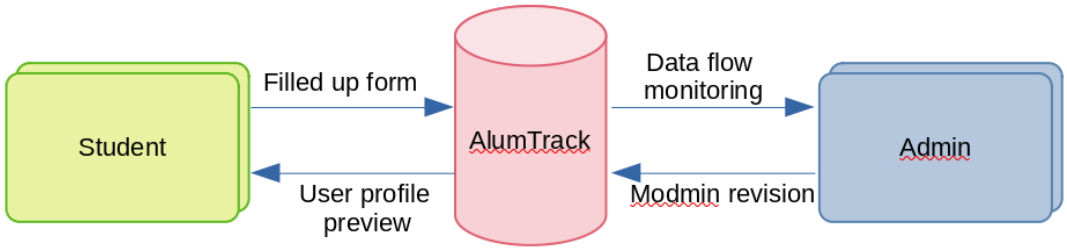
Figure 5: Gantt chart

Requirement documentation

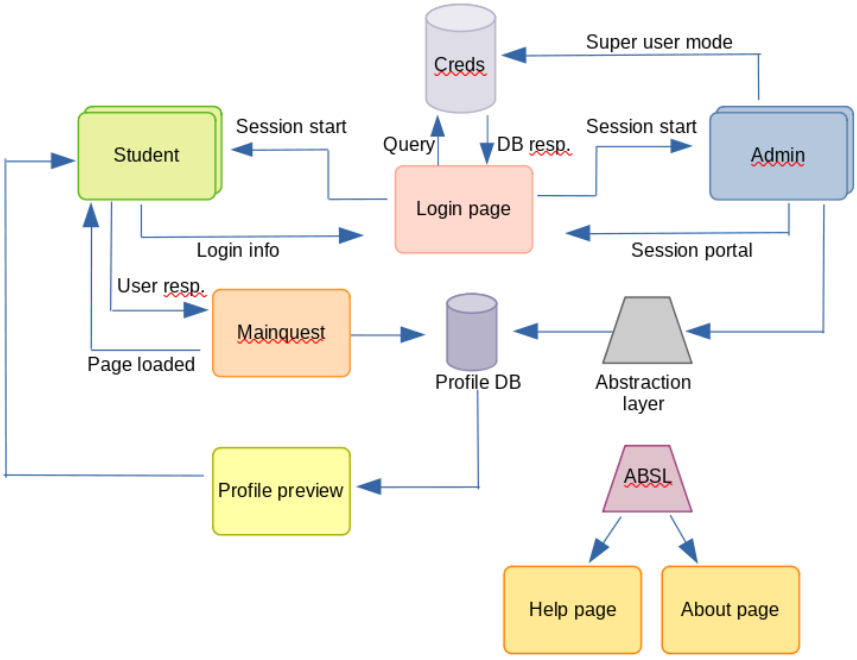
This section presents the initial design of the system by discussing its major components and their interaction.

Data and process modelling is a critical step in the software development process. By creating accurate models of the data and processes involved, we can ensure that our software is designed to meet the needs of our users. This helps to avoid costly redesigns and implementation failures later in the project. Data and process modeling also enables us to optimize our designs for performance and efficiency.

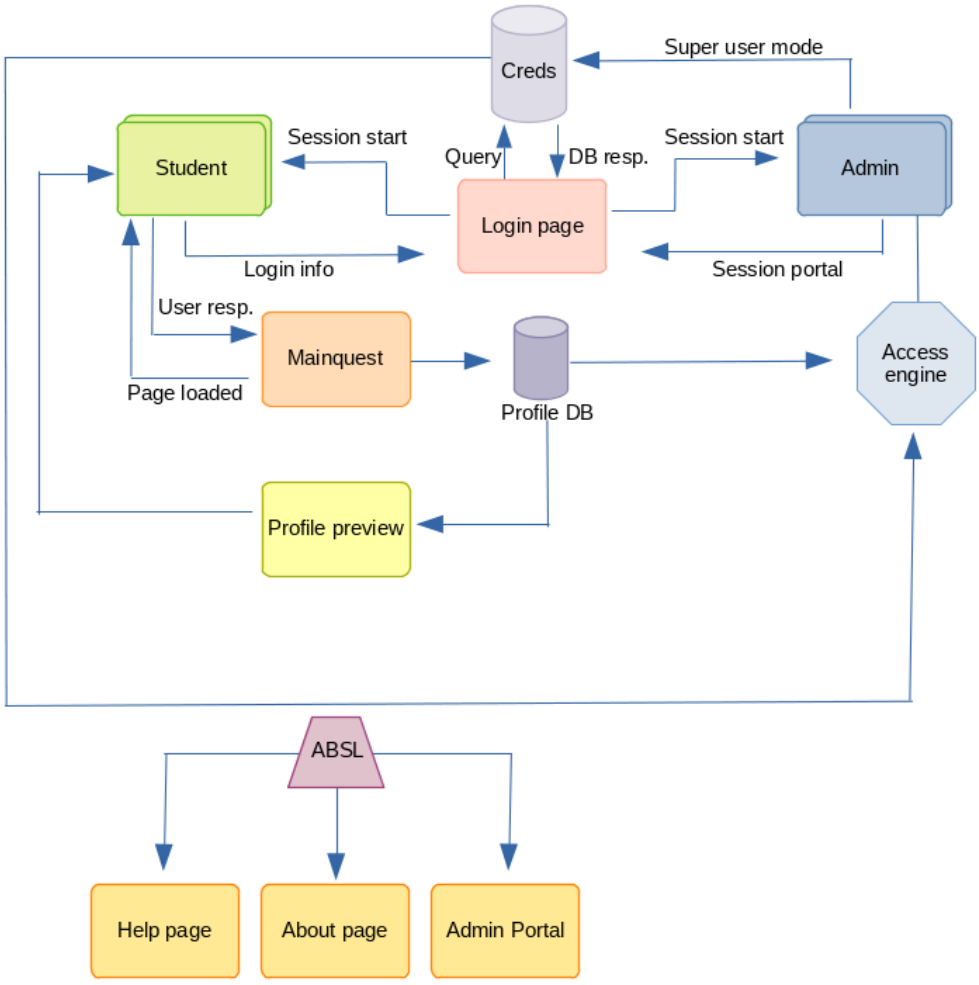
Data flow diagram A data flow diagram (DFD) is a graphical representation of the flow of data through an information system. It shows the processing steps and the data stores involved in the system. DFDs are used in software development to help identify and understand the system's requirements.



Data Flow Diagram Level 0 or Context Diagram. It's a basic overview of the whole system or process being analysed or modelled. The level 0 DFD shows the high-level overview of the system. It identifies the major components and how they interact. It does not show any detail about how each component works, just how they are connected.



Data Flow Diagram Level 1. It provides a more detailed breakout of pieces of the Context Diagram. It will highlight the main functions carried out by the system, it break down the high-level process of the Context Diagram into its sub processes.



Data Flow Diagram Level 2. Goes one step deeper into parts of Level 1. It may require more text to reach the necessary level or detail about the system's functioning.

System flowchart - A system flowchart is a diagram that illustrates the sequence of steps in a process. It can help you to identify and troubleshoot problems in the process. The steps in the process are represented by boxes, and the arrows between them indicate the sequence of steps.

Mainflow

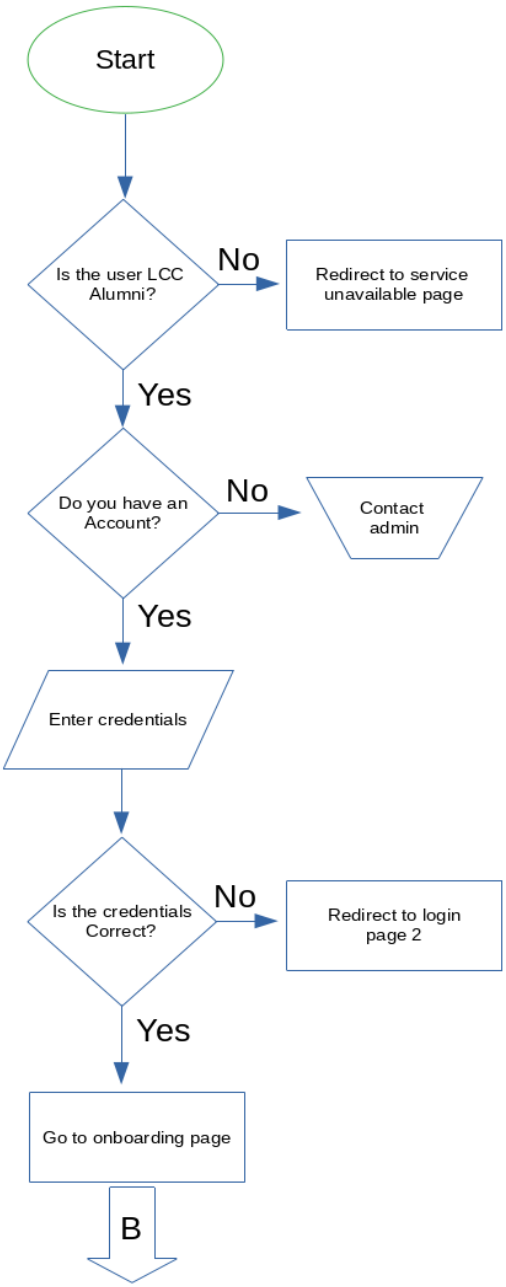

Start
Is the user LCC Alumni?
No
Redirect to service unavailable page
Yes
Do you have an Account?
No
Contact admin
Yes
Enter credentials
Is the credentials Correct?
No
Redirect to login page 2
Yes
Go to onboarding page
B

Figure 6: Mainflow flowchart

Mainflow cont.

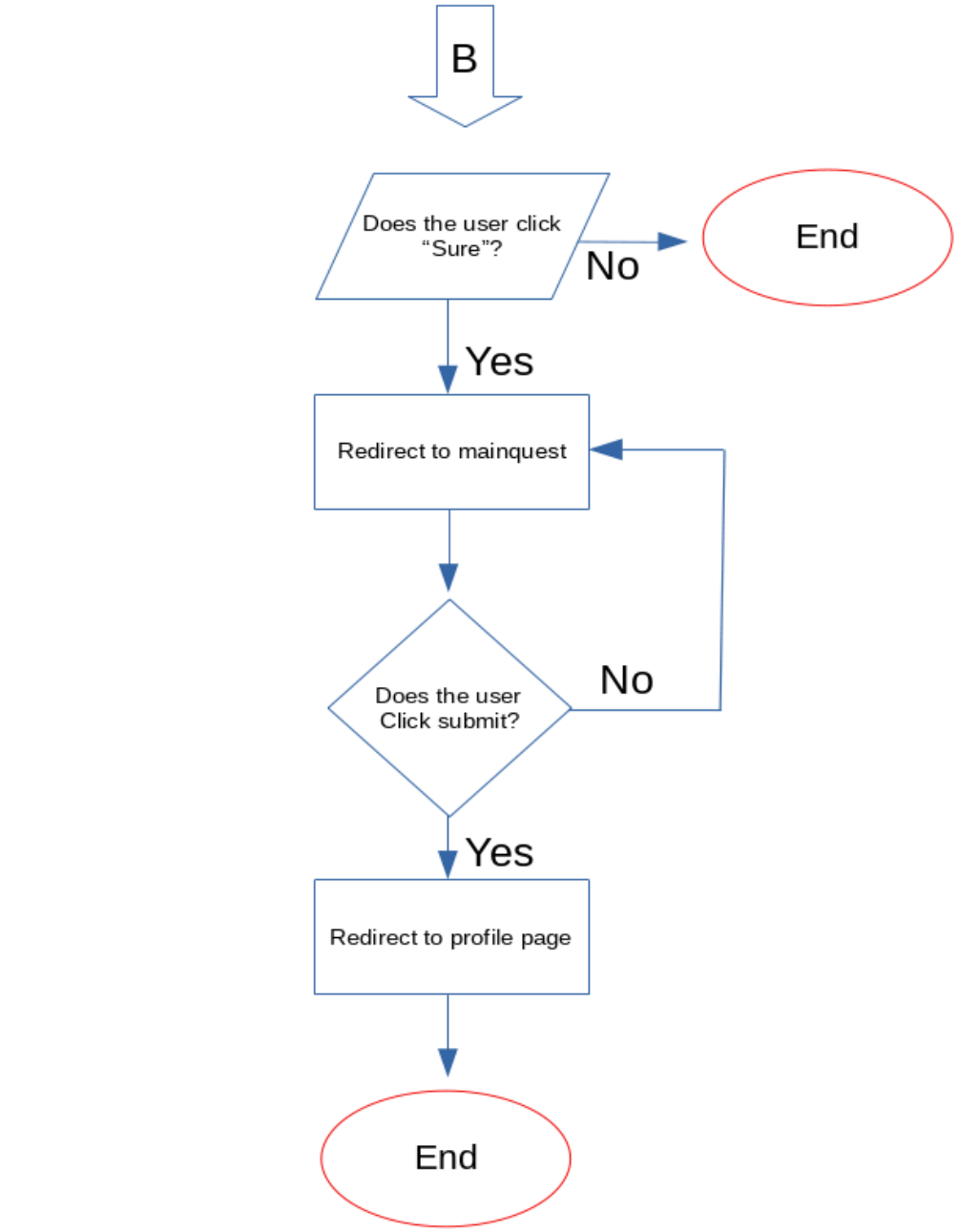


Figure 7: Continuation of mainflow chart

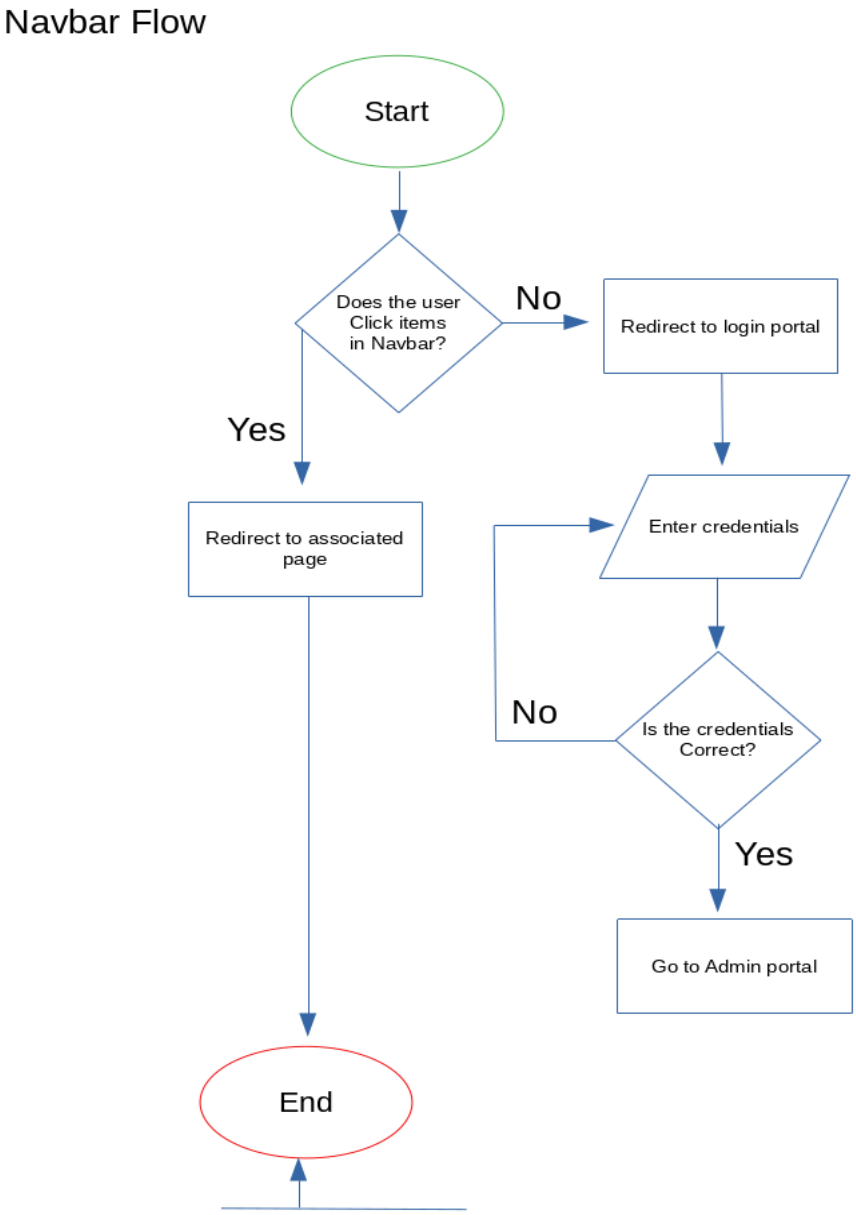


Figure: 8 navflow diagram

Software object modelling (SOM) is a technique for designing software systems. It uses objects to represent the system's components and their relationships. SOM helps you to understand how the system works and makes it easier to modify or extend the system later on.

Use case diagram is a graphical representation of the interactions between a system and its users. It shows the actors (users) and the various use cases that they can perform. Use case diagrams are very helpful in understanding how a system works and identifying potential problems.

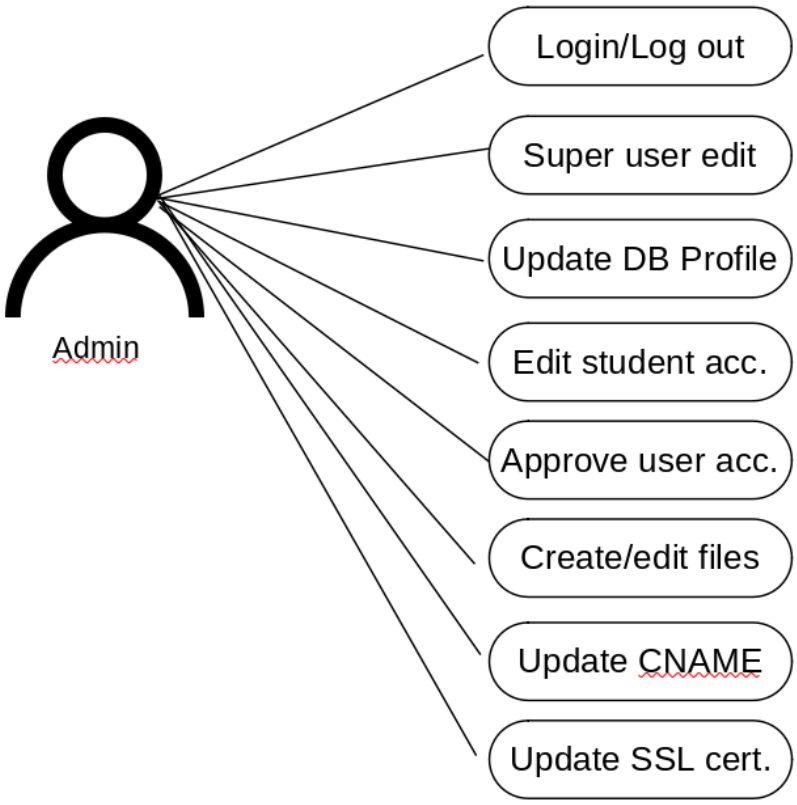
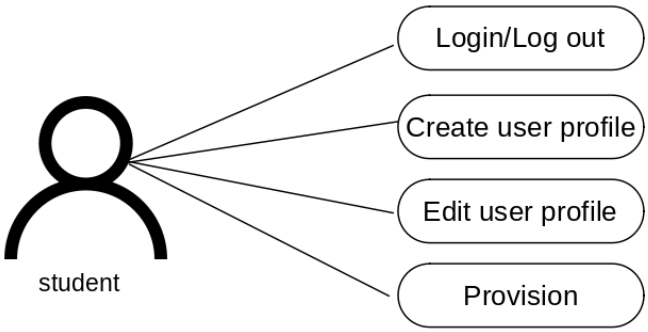


Figure 9: Admin usecase diagram



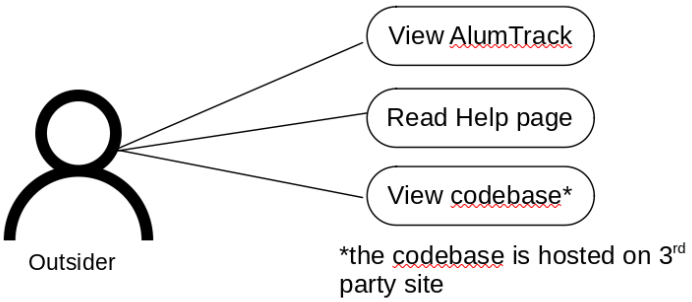


Figure 10: Student/outsider usecase diagram

Design of Software/System

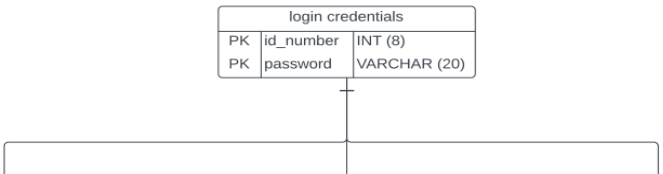
This section discusses the design and implementation of the data structures and algorithms used in the software. Part of the design tools in the technical manual may be lifted as figures in this section.

Data design. This data model contains all the needed logical and physical design choices and physical storage parameters needed to generate a design in a data definition language, which can then be used to create a database.

Software entity relationship diagram (ERD) is a graphical representation of the relationships between entities in a software system. The ERD shows the cardinality and type of each relationship, as well as the attributes of each entity. This information can be used to create a data model for the system, which can then be used to generate code or database tables.

Entity relationship diagram Entity Relationship Diagramming (ERD) is a technique used by database designers to graphically represent the structure of a database. ERDs are created by linking together entities and their relationships. The entities can be anything from people, places, things, or concepts, while the relationships can be any type of connection between two entities.

There are several benefits to using ERD when designing databases. First, it allows you to visualize the structure of your data and make sure that it is logically consistent. Second, it can help you identify potential problems with your data structure before you start building your database. Third, it makes creating SQL queries much easier because you already have a visual representation of the data to work with. Finally, ERDs can be



helpful for documenting existing databases or for training new employees on how the database works

Figure 11: AlumTrack ERD

Data dictionary

A data dictionary is a comprehensive list of all the data that exists in a given database. It can be used to track changes to the data over time, as well as ensuring accuracy and consistency of the data. A good data dictionary will also include definitions for all fields in the database, as well as descriptions of any business rules or algorithms that are used to manipulate the data.

Creating and maintaining a good data dictionary is essential for any organization that relies on accurate and consistent information. It can help ensure that everyone who needs access to the database has a clear understanding of what it contains, and it can be used to troubleshoot problems with the data or with how it is being accessed or processed.

Table 8

Table for login credentials

Login credentials	
id_number	INT (8)
password	VARCHAR (20)

Table 9

Table for personal info

Personal info	
id_number	INT (8)
first_name	VARCHAR (20)
middle_name	VARCHAR (5)
last_name	VARCHAR (20)
birthday	VARCHAR (15)
Gender	VARCHAR (20)
skill1	VARCHAR (25)
skill2	VARCHAR (25)
skill3	VARCHAR (25)
skill4	VARCHAR (25)
Bio	VARCHAR (100)
phone_number	INT (11)

Table 10

Table for Educational profile

Educational Profile	
id_number	INT (8)
current_school	VARCHAR (20)

current_educ_at	VARCHAR (30)
cor/str	VARCHAR (50)
specialization	VARCHAR (50)
learning_style	VARCHAR (25)

Table 11

Table for work profile

Work profile	
id_number	INT (8)
cur_work	TEXT

System Evaluation

The researchers conducted an automated evaluation to test AlumTrack's performance in real world browsing condition. This is done by recording Chrome dev tools panel.

Table 12: Response rundown of Alumtrack

Site process	Time
Loading	167ms
Painting	193ms
Rendering	469ms
System	897ms
Scripting	3201ms
Idle	23301ms

In span of 28 seconds, the first 23 seconds is the idle time while the largest bottleneck in the site is the Javascript rendering @ 3.2 secs. This means that the site responds to the user input reliably.

Table 13

Weighted Mean and Description of the System Reliability Test

Indicators	Weighted Mean	Description
1. Text is clear and printed suitable for target audience	3.60	Very Good
2. The system gives accurate information	3.40	Very Good
3. The flow of the system is easy to understand	3.00	Very Good
4. User can navigate throughout the program without difficulties	3.00	Very Good
5. Overall, the system provides reliable information	3.40	Very Good
General Weighted Mean	3.28	Very Good

Table 13 reveals the weighted and description of the respondents' response in terms of system reliability. Five questions had been answered to evaluate the reliability of the system. Based on the computation, the weighted mean were: 3.60, 3.40, 3.00, 3.00 and 3.40 respectively. The general weighted mean of the system functionality was 3.28 describe as "Very Good".

Table 14

Weighted Mean and Description of the Respondents' Response on the System Security Test

Indicators	Weighted Mean	Description
1. The system has a page strictly for administrator only	4.20	Very Good

2. The system has a page strictly for staff/client only	4.00	Very Good
3. Password is encrypted for security purposes	2.00	Very Good
4. Overall, the system is secured	4.20	Very Good
General Weighted Mean	3.60	Very Good

Table 14 reveals the weighted and description of the respondents' response in terms of system reliability. Five questions had been answered to evaluate the reliability of the system. Based on the computation, the weighted mean were: 4.20, 4.00, 2.00, 4.20 respectively. The general weighted mean of the system functionality was 3.60 describe as "Very Good".

Chapter V

Legal, Ethical and Technical Background

Introduction

The process of software development is often fraught with legal, ethical, and technical challenges. In order to write a software development paper that is legally sound and ethically responsible, it is important to understand the background behind these challenges. This essay will provide an overview of the legal landscape for software development, as well as discuss some of the ethical considerations that come into play

during this process. Finally, we will explore some of the key technical issues that need to be considered when creating software.

The key consideration is licensing and copyright agreement. As the software that accompanies this paper is open source. It's necessary to apply a relevant licensing terms n the repository to tell the general consensus of what's the capability of the chosen licensing and when is the time that they should contact the researchers.

Another key consideration for developers is the code of conduct. As an open source project, AlumTrack must provide a positive environment to everyone harassment free experience to its community members and contributors. This guides everyone who is involved of production, usage and maintenance of the codebase to act accordingly based on this pre defined code of conduct.

When developing software, engineers must also consider potential security vulnerabilities that could put users at risk. One common vulnerability occurs when attackers exploit flaws in code in order gain access to sensitive data or systems. Developers should work closely with security experts throughout the design phase t o identify potential vulnerabilities and build mitigating controls into their code. Another issue that needs consideration is ensuring compatibility between different platforms and devices; a piece of software written for Windows 10 might not run on MacOS or iOS devices without significant modifications. By taking these various factors into account , developers can produce high quality software while minimizing the risks associated with its use.

Legal licensing

The researchers decides that AlumTrack is licensed through pre existing MIT License, it's a short and simple permissive license that only requires preservation of copyright and license notice. Once this conditions are meant and complied upon, anyone can use the software freely and legally.

The following is the official legal binding excerpt of AlumTrack MIT License:

MIT License

NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

The license is condense into following; the user are allowed to use AlumTrack free of charge on commercial use, they are free to modify and distribute the codebase in its entirety (except 3rd party resources such as images, API, etc...) and with only limitation being they should preserve this license notice. The researchers do not have any liability whatsoever on AlumTrack codebase and it is provided "As Is" with no implied warranty.

Ethical

As an open source project, researchers enact a contribution code of conduct to have a positive and meaningful environment to anyone in the community. Below is the full CCOC;

Contributor Covenant Code of Conduct

Our Pledge

- We as members, contributors, and leaders pledge to make participation in our community a harassment-free experience for everyone, regardless of age, body size, visible or invisible disability, ethnicity, sex characteristics, gender identity and expression, level of experience, education, socio-economic status, nationality, personal appearance, race, religion, or sexual identity and orientation.
- We pledge to act and interact in ways that contribute to an open, welcoming, diverse, inclusive, and healthy community.

Our Standards

Examples of behavior that contributes to a positive environment for our community include:

- Demonstrating empathy and kindness toward other people
- Being respectful of differing opinions, viewpoints, and experiences
- Giving and gracefully accepting constructive feedback
- Accepting responsibility and apologizing to those affected by our mistakes, and learning from the experience
- Focusing on what is best not just for us as individuals, but for the overall community

Examples of unacceptable behavior include:

- The use of sexualized language or imagery, and sexual attention or advances of any kind

- Trolling, insulting or derogatory comments, and personal or political attacks
- Public or private harassment
- Publishing others' private information, such as a physical or email address, without their explicit permission
- Other conduct which could reasonably be considered inappropriate in a professional setting

Enforcement Responsibilities

Community leaders are responsible for clarifying and enforcing our standards of acceptable behavior and will take appropriate and fair corrective action in response to any behavior that they deem inappropriate, threatening, offensive, or harmful.

Community leaders have the right and responsibility to remove, edit, or reject comments, commits, code, wiki edits, issues, and other contributions that are not aligned to this Code of Conduct, and will communicate reasons for moderation decisions when appropriate.

Scope

This Code of Conduct applies within all community spaces, and also applies when an individual is officially representing the community in public spaces. Examples of representing our community include using an official e-mail address, posting via an official social media account, or acting as an appointed representative at an online or offline event.

Enforcement

Instances of abusive, harassing, or otherwise unacceptable behavior may be reported to the community leaders responsible for enforcement at . All complaints will be reviewed and investigated promptly and fairly.

All community leaders are obligated to respect the privacy and security of the reporter of any incident.

Enforcement Guidelines

Community leaders will follow these Community Impact Guidelines in determining the consequences for any action they deem in violation of this Code of Conduct:

1. Correction

Community Impact: Use of inappropriate language or other behavior deemed unprofessional or unwelcome in the community.

Consequence: A private, written warning from community leaders, providing clarity around the nature of the violation and an explanation of why the behavior was inappropriate. A public apology may be requested.

2. Warning

Community Impact: A violation through a single incident or series of actions.

Consequence: A warning with consequences for continued behavior. No interaction with the people involved, including unsolicited interaction with those enforcing the Code of Conduct, for a specified period of time. This includes avoiding interactions in community spaces as well as external channels like social media. Violating these terms may lead to a temporary or permanent ban.

3. Temporary Ban

Community Impact: A serious violation of community standards, including sustained inappropriate behavior.

Consequence: A temporary ban from any sort of interaction or public communication with the community for a specified period of time. No public or private interaction with the people involved, including unsolicited interaction with those enforcing the Code of Conduct, is allowed during this period. Violating these terms may lead to a permanent ban.

4. Permanent Ban

Community Impact: Demonstrating a pattern of violation of community standards, including sustained inappropriate behavior, harassment of an individual, or aggression toward or disparagement of classes of individuals.

Consequence: A permanent ban from any sort of public interaction within the community.

Attribution

This Code of Conduct is adapted from the Contributor Covenant, version 2.0, available at https://www.contributor-covenant.org/version/2/0/code_of_conduct.html.

Community Impact Guidelines were inspired by Mozilla's code of conduct enforcement ladder.

For answers to common questions about this code of conduct, see the FAQ at https://www.contributor-covenant.org/faq. Translations are available at https://www.contributor-covenant.org/translations.

Technical | Github

Researchers leverage the capability of github to provide code hosting and wayback function. This allows the development team to go back and forth on codebase changes from start to finish. Github offers a indespensible tool on code debuging and tracking code changes over time. By using Github, the development team can visualize all the activities of the repository from the beginning up to the present. Providing unprecedented amount of data in the process. On this section, The technical aspect of Github on regards to AlumTrack would be examined using the built in Insight tab on Github.

Pulse

From April 14 2022 upto May 14, 2022 there are 2 issues that arised from bugs, single pull request. With 50:50 ratio on Active issues. On this time period, there are over 58 file

commits, 29 file changes and over 1,377 code additions and 112 deletions. At the same period, the first Alpha release of AlumTrack is finally announced As 0.1.0

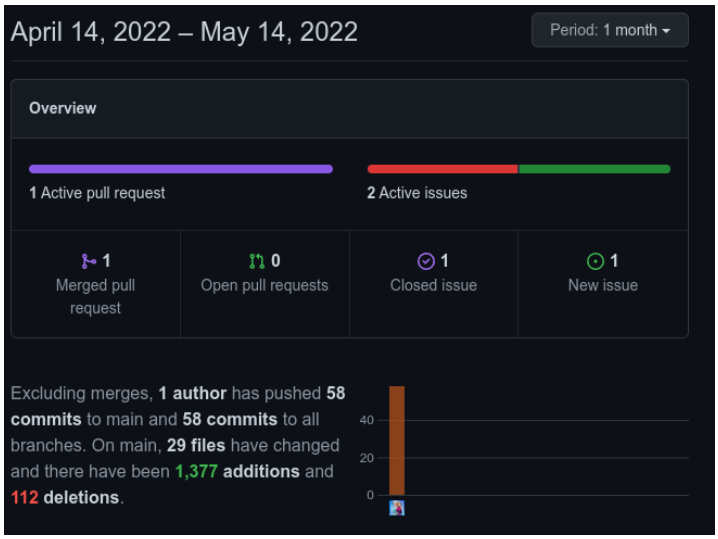


Figure 11: Github Pulse

Contributions

From March 20 to April 24, 2022. There are over 1,629 commits and 359 deletions.

Figure 12: Github Contribution over time

Git clones

Refers to the total number of code similarities on a repository.

Figure 13: Github gitclones

Technical | GPT3

To lower researchers workload, the former chose to use GPT3 as research filler. This lowers the turn around time on development and writing but also assures that the statement being written are unique. Since GPT3 isn't accessible in easier means, the

proponent use YouWrite as a translation tool. Primarily Natural language processing. (NLP) This yields a similar semantic and experience as a human writer would but at much faster turn around time. Though considered bleeding edge, it is just a matter of time for it to see a larger adoption. By using YouWrite, the reliance on unreliable team can easily be offset by using a NLP such as GPT3. Which vastly increases user's capability compared to metrics such as typing speed, data aggregation and rendering. In conjunction with Grammarly, which is a algorithm based grammar checker and plagiarism check in tandem. The researchers can insure a fast, reliable and unique sentences everytime as part of automation workflow. A proprietary workflow develop by the researchers.

Chapter VI

Summary, Conclusion and Recommendations

This chapter discusses the summary, conclusions and recommendation of the proposed system.

Summary

The proposed system is titled "AlumTrack; Integration of Alumni Tracking Software in La Concepcion College". The purpose of this study is to help La Concepcion College have an efficient and fast information retrieval system for students of the school's K to 12 program, the system helps to speed up a student's information retrieval and more this is the consequence of the students when he graduated from such school and whether he continued his studies or whether he used his course.

Conclusion

Based on the study conducted, researchers concluded the following

1. The alumni tracking software is a valuable tool for learning institutions.

2. The tracker can be used to improve a school's program and help more of their students find success in their chosen path.

3. The tracker allows the school to see their graduates what they have become, what job they have obtained and what they are working for.

4. The alumni tracker gives data to the educational institution on how many alumni are employed for the past years.

5. A school without an alumni tracker can be a disadvantage. The school cannot keep track to its former alumni.

6. This can reduce the school staff's workload.

7. The alumni tracker can be a huge guide for current students for the latest trend, technologies and careers.

8. And; can maintain a healthy relationship between the school and the alumni

Recommendations

Based on the researcher's experience in developing AlumTrack, the proponents highly recommend to implement and start the community built upon by this study. Since AlumTrack is still in work in progress. The researcher believes that this isn't the prime time to release the said software. As a matter of fact, the latest AlumTrack release is still on early Alpha. Which is far from perfect, with that said AlumTrack can be still access for a whole year on alumtrack.online . Which until then, the project would either unserromounusly pulled out unless the proponents find a community that would dedicate their time on developing such software.

On the subject of continuation, the researchers recommend that the La Concepcion College should improve their Senior High School ICT strand curriculum. This is to improve the school's capability to produce talented and highly competent student in fields such as web development and computer hardware. Additionally, the proponents recommends that the school should create different group clubs in which passionate students such as us would have a proper venue of collaboration and brainstorming.

List of References

Studies

- Addressing health workforce inequities in the Mindanao regions of the Philippines, 2017

https://www.tandfonline.com/doi/full/10.1080/0142159X.2017.1331035

- The impact of socially-accountable, community-engaged medical education on graduates in the Central Philippines, 2017

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- The Connector Study: A Strategy for Collecting Post-Graduation Data about Low-Income High School Students, 2016

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- A Tracer Study of Batangas State University (Batstateu)- Lipa City Graduates of SY 2017 – 2018, 2018)

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  https://prezi.com/80hfh-9n8vln/rtnhs-online-alumni-tracking-system/

- Android User Interface Design: Implementing Material Design for Developers, 2016)

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Literatures

- A Tracer Study on the Graduates of Guidance and Counselling Department of Ahmad Dahlan University, 2017

  https://www.atlantis-press.com/proceedings/yicemap-17/25880096

- E-tracer study implementation of Indonesia Computer University, 2016

  https://www.semanticscholar.org/paper/E-tracer-study-implementation-of-Indonesia-Computer-Soegoto-Wahdiniwaty/2d47cd68a92b521c2b7bc631bed878f56bf85658

- Library and information science alumni of Kuwait University: Tracking positions and functions, 2018

  https://www.researchgate.net/publication/275799192_Library_and_information_science_alumni_of_Kuwait_University_Tracking_positions_and_functions

Research Repository

https://github.com/elsaversailles/AlumTrack

Appendix (Project proposal)

LA CONCEPCION COLLEGE, INC.
Francisco Homes/Kaypian Rd., City of San Jose Del Monte, Bulacan
Telefax No.: (044) 769-0686
Website: www.laconcepcioncollege.com.ph

Date:_____

La Concepcion College
Francisco Homes/Kaypian Rd.,
City of San Jose Del Monte Bulacan

Sir/Madam:

Greetings of Peace!

We are the grade 12 students of La Concepcion College taking up Information, Communication and Technology (ICT). We are presently enrolled in the Subject Research Project. As a part of our requirement for the mentioned subject, we are required to conduct a feasibility study and make project proposal. We have chosen your institution to be the subject of our study entitled, **AlumTrack; Integration of Alumni Tracking Software in La Concepcion College**. We are asking for your generous help to make this study possible by allowing us to gather relevant information to a time most convenient to you. Rest assured that all information that we gather will be used only for the purpose of completion of the subject and will be treated confidentially.

We are hoping for your kind consideration regarding this matter. Thank you very much!

Respectfully yours,

Vince Bernard Austria
Lead Researcher

Noted by:

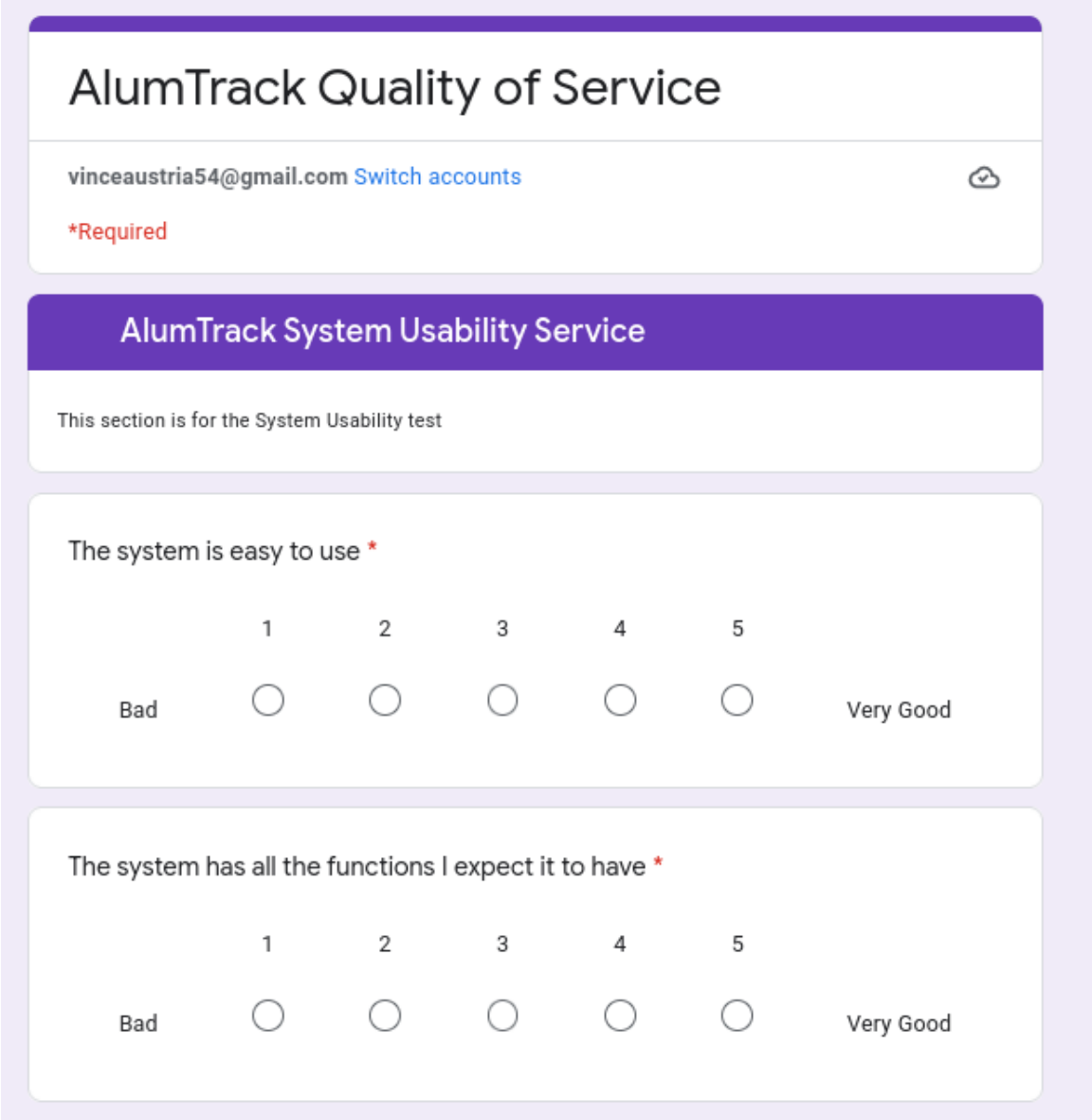
Mr. Jefrey Baladjay
Instructor: Research Project

Instructor: Research

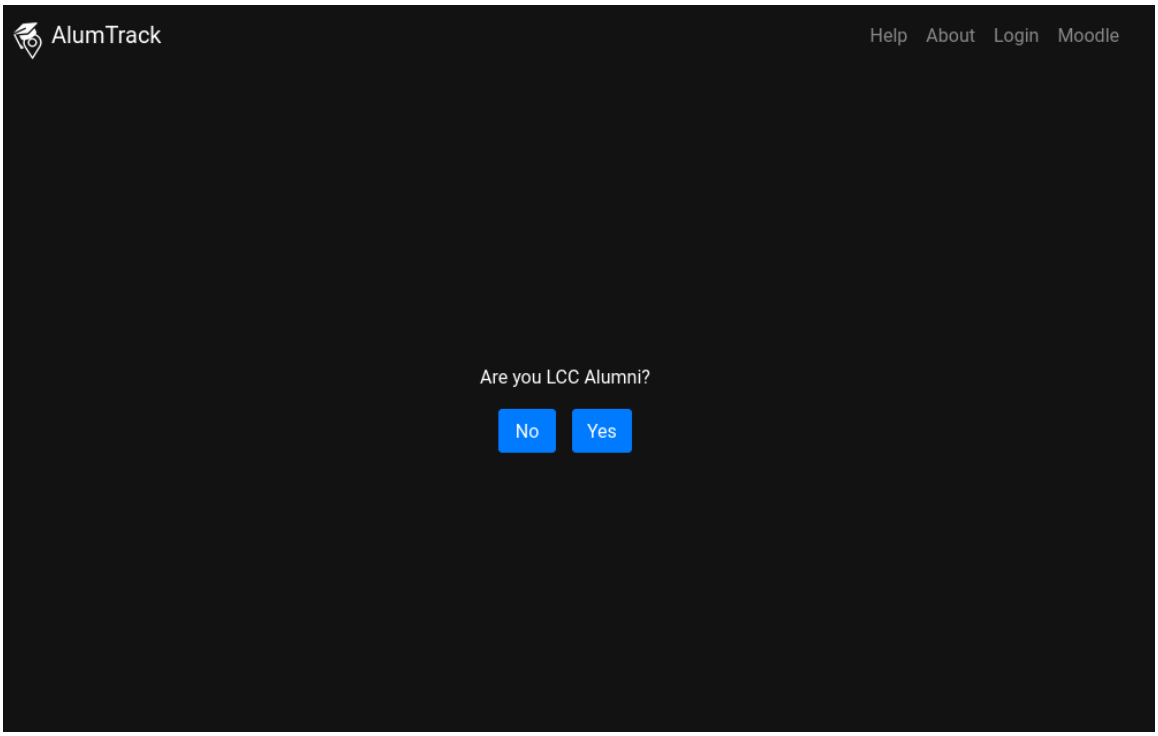
Ms. Joyce F. Gelotin, LPT
SHS Division Head

Approved by:

Dr. Edwin Leoncio L. Saavedra
JHS/SHS Principal


AlumTrack Quality of Service
vinceaustria54@gmail.com Switch accounts
*Required
AlumTrack System Usability Service
This section is for the System Usability test
The system is easy to use *
1 2 3 4 5
Bad
Very Good
The system has all the functions I expect it to have *
1 2 3 4 5
Bad
Very Good

(QoS Survey)



(AlumTrack Homepage)

Visit alumtrack.online for complete pagination

VINCE AUSTRIA

PERSONAL PROFILE

Hello, my name is Vince Austria and I am currently a senior high school student taking ICT as a specialization. My view of the ICT industry is that it is ever-growing and constantly changing, which makes it an exciting field to be in. My hobbies include 3D perspective creation, web development, AI, etc.,

SKILLS

- Critical Thinking
- Computer Hardware
- Computer Repair
- Googling
- Communication
- Organization
- Teamwork
- Problem Solving

CONTACT INFORMATION

vinceaustria54@gmail.com

09159792571

Blk 2 Lot 84 Villa Muzon, Muzon San Jose del Monte City Bulacan

https://www.linkedin.com/in/vince-austria/

EDUCATIONAL TRAINING

La Concepcion College

Senior High School, ICT

- Enrolled Since 2020
- Taking up specialization strand on ICT

Muzon National High School

Grade 11

- Attended from June 2019 to March 2020

EXPERIENCE

Virtual Startup Internship

Sydney School of Entrepreneurship, Forage | Sep. 2021

- Agile Mindset
- Communication
- Competitor Analysis
- Customer Insight
- Innovation
- Value Proposition

CERTIFICATIONS

- How to Make Lumpia (HTML): The Recipe for Success in Web Development | Zuiit - Coding Bootcamp
- Accenture Developer Program | Accenture
- Virtual Startup Internship: Smart Cities | Sydney School of Entrepreneurship
- The Recreational UAS Safety Test | Academy of Model Aeronautics
- Computer Literacy Training Program | Muzon, Sangguniang Kabataan
- Keep Your Business Relevant to the Market with Google Trends | Google
- Introduction to Digital Journalism | Reuters

Curriculum Vitae

Name: Marc Ernest G. Lawingco

Date of Birth: May 17, 2004

Age: 18w yrs. old

Place of Birth: San Jose Del Monte Bulacan

Civil Status: Single

Siblings: Mary Hannah G. Lawingco

Parents: Marcos S. Lawingco Jr.

Marilou G. Lawingco

Educational Attainment

Senior High School: La Concepcion College

Junior High School: La Concepcion College

Elementary: Bagong Buhay B Elementary School

Awards/Honor Received

- Best in Computer
- Athlete of the year

CURRICULUM VITAE

Name: Marino, John Revin Cajilig

Date of Birth: April 3, 2004

Age: 17

Place of Birth: Caloocan City

Civil Status: Single

Siblings: John Rein Marino, John Rei Marino

Parents: Ervina C. Marino, Rey T. Marino, Jr.

Educational Attainment

SHS: Current School, La Concepcion College
JHS: Ebenezer Christian Academy Inc.
Elementary: Ebenezer Christian Academy Inc.

Awards/Honors Received

- Perfect Attendance
- Bulprisa Participant of 2012
- Student Leader Award

Insights

- Revising research papers is the most favorable thing I've learned.
- Making recommendations is quite fun to do.

Contact Information

Email: revsyahsenpai@gmail.com

De Leon, Michael Angelo A.

1016 Feliciano Subdivision Brgy Muzon San Jose Del Monte Bulacan

09274057969

✉ deleonmichaelangelo128@gmail.com

CAREER OBJECTIVE

Graduate and be successful in life.

PERSONAL INFORMATION

Date of Birth: September 26,2004.

Age: 17 years old.

Nationality: Filipino.

Gender: Male.

Civil Status: Single

Religion: Catholic

Mother: Cynthia C. Alcantara

Father: Joaquin G. De Leon

EDUCATIONAL ATTAINMENT

Senior High School: La Concepcion College

High School: Muzon National High School

Elementary School: Benito Nieto Elementary School

Curriculum Vitae

Name : Jeremie Joie E Correa
Date Of Birth: December 13 , 2003
Age: 18 years old
Place of Birth:
Civil Status: Single
Siblings: Jaennielle Joy E Correa
Parents: Junnel F Correa
Imelda E Correa

Educational Attainment

Senior High School: La Concepcion College
Ebenezer Christian Academy INC.
Junior High School: Ebenezer Christian Academy INC.
Elementary School: Timoteo Policarpio Memorial Elementary School

Awards/Honor Received
* N/A