

# Development of Children Education Investment Plan (A Case Study of Edo State University, Iyamho)

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## ABSTRACT

A lot of parents and guardians in Nigeria have a hard time paying for their children's college education. This study suggests creating a Children Education Investment Plan (CEIP) as a strategic way to get ready financially for future educational needs. The proposed system allows parents to make regular payments weekly, monthly, or yearly into a university-managed account through the bursary unit. This encourages parents to save money in a structured way for higher education. A review of the existing literature reveals that, although financial institutions provide education-related savings plans, there is currently no evidence of a university-based education investment system of this kind. This gap shows how new and useful the proposed model could be. The system was built as a web-based application using HTML, CSS, PHP, and MySQL database technologies. This made sure that it was easy to use, accessible, and able to handle data well. The study stresses the importance of proactive financial planning for ensuring the educational futures of children and suggests that Nigerian universities should use institution-based education investment plans.

**Keywords:** Development, Children, Education, Investment

## INTRODUCTION

One of the traditional ways to pay for college is with savings (Susan et al., 2023). It's generally assumed that you'll use your savings as part of your plan to get through college, and it's even hard to pay for your whole education with just your savings (Álvarez, et al., 2025). Many people who are getting ready for college rely only on grants, scholarships, and loans, but none of those options is as safe or easy to get as money you already have or your family. Some students worry that having money saved up for college will make them ineligible for financial aid, but that's not always the case. Remember, the less debt you take on while you're in school, the sooner you can start living a debt-free life and enjoy the financial benefits of your professional education (Korankye, & Gokmenoglu, 2024).

Dynarski (2022) said that before you start saving for your child's or your own education, you should have a clear plan and specific goals in mind. For example, how much will college tuition cost when your child goes to college, taking inflation into account? What schools should be part of that calculation? How much money do you want to have saved by the time your child moves into a dorm room? A good place to start is to figure out how much money you need and how much of that you can realistically save. If you want to save this much, you'll need to figure out how much you should save each year and then each month for your child's education (Festa et al., 2019). You will see that working toward a set goal makes it easy to see how far you've come. If you'd rather just save a lot of money, figure out a percentage of your income that you can always afford to give up, and then regularly save that money as an investment in your child's college fund. Saving will be easy if you make it a habit.

The Edo State government set up Edo State University Iyamho (ESUI), which is near Auchi in the Etsako West Local Government Area of Edo State. It was founded in 2014. The National Universities Commission recognized the University and gave it a license on March 23, 2016. It is the 41st state-owned university and the 142nd university in Nigeria (Ebhuomhan, 2016).

Edo State University, Iyamho is a world-class school that charges tuition. The University was set up to meet the growing need for high-quality higher education in Edo State and Nigeria as a whole (<https://www.edouniversity.edu.ng>). A lot of parents and guardians don't have enough money to send their kids to Edo State University. Because of this, it's important to make a budget system (institutional fees calculator) that will help people save money so they can go to college.

Due to the rising cost of higher education and the uncertainty about future costs (Barr, 2020; World Bank, 2023), many parents start thinking about how to pay for their children's college education early on. Questions about how much things cost, how much money you need to save, and what the best ways to invest are are important for making decisions about household finances (Brown et al., 2016). The cost of tertiary education, which includes tuition, housing, transportation, and learning materials, keeps going up. This puts a lot of financial strain on families and often leads to student debt after graduation (Lochner & Monge-Naranjo, 2016). Even with these problems, planning your finances early and making structured investments can make paying for school easier and lower your long-term financial burden (Lusardi & Mitchell, 2023). Because education has such a big impact on the economy and society, investing in children's education is still an important way to make sure they have opportunities and grow in the future (Psacharopoulos & Patrinos, 2018).

### **Concept of Education Investment**

Investing in education means putting money, materials, and people toward learning new things, improving skills, and gaining new abilities that help people be more productive and the country grow. Many people think of it as a way to improve human capital, which is very important for changing the economy and society. Research shows that putting money into education helps the economy grow by making workers more productive and creative (Yusuf, 2014). When it comes to children, investing in education means that families, governments, and institutions plan for the long term to make sure that children can get a good education by paying for tuition, learning materials, and other academic needs. Kante (2021) says that every loving parent wants the best for their child, but life is full of surprises, and even the best plans can go wrong. An unfortunate event could make them feel unsafe, especially if you're not there for them anymore.

### **Children Education Investment Planning**

Refky, F. (2021) stressed that planning for children's education investments means making structured financial and strategic choices that will help secure a child's educational future. This includes plans for saving money, insurance plans, government money, and support systems run by institutions. Research indicates that strategic planning assists families in coping with escalating educational expenses and guarantees uninterrupted educational progression. Also, household income, parental education level, occupation, and long-term financial stability all play a role in investment decisions. These factors affect how much money families can put into their children's education.

### **Household Financing and Educational Outcomes in Nigeria**

Due to a lack of public funding, household financing is very important for education in Nigeria. Studies show that family investment has a direct impact on children's educational progress and their ability to get a good education (Bappayo. 2024). But differences in income and socioeconomic status make it hard for some people to get an education. Kids who come from families with good finances tend to do better in school than kids who come from low-income families. This shows how important it is to have structured plans for investing in education to close the gaps in inequality.

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## Government and Institutional Investment in Education

For a country to grow, the government must spend money on education. The Universal Basic Education (UBE) program is one of many that aims to give all children free and required schooling. But research shows that Nigeria's education system is still not getting enough money, which causes problems like not enough qualified teachers, not enough good schools, and not enough access to good education (Uloma, & Nwogu, 2023). Funding problems continue at the university level, including at Edo State University, because of low internally generated revenue, bad policy implementation, and economic problems (Niyi, et al. 2023). These problems make it harder for education investment strategies to work.

## Early Childhood Education Investment

Investing in early childhood education (ECE) is a smart move that pays off big. Studies show that investment in early education improves cognitive development, school readiness, and long-term academic success. But in Nigeria, it is still hard to get good early childhood education, especially in low-income areas. This shows how important it is to plan investments in a structured way to make sure kids get a good start in school (Unicef, 2021).

## Factors Influencing Children Education Investment Plans

Planning for children's education investments is influenced by a mix of economic, social, institutional, and demographic factors. These factors affect how families, governments, and institutions spend money on children's education and long-term academic growth.

**Economic Factors:** The state of the economy has a big impact on how much money people put into their children's education. Parents' ability to pay for school is directly affected by their household income, job status, and the cost of education. Research indicates that households with higher incomes are more inclined to consistently invest in education, whereas low-income families frequently encounter difficulties in covering educational costs (Oketch et al., 2024). Inflation and rising tuition costs also affect planning choices. Families need to use structured savings and investment plans to keep paying for their children's education.

**Parental Education and Awareness:** The education level of parents has a big impact on investment choices. Parents who are educated tend to value education more and are more likely to plan for their children's academic future. Studies show that parents who know about the long-term benefits of education are more likely to plan ahead for their children's schooling (Kumari, 2023).

**Socioeconomic and Environmental Factors:** The amount of money people spend on education depends on their socioeconomic status, where they live, and the community they live in. Poverty, bad infrastructure, and not enough learning resources can make it hard for kids from low-income families to get a good education (World Bank, 2024). Environmental factors include things like access to schools, the quality of the infrastructure, and the availability of learning materials.

**Government Policies and Institutional Support:** Government policies and institutional frameworks have a big impact on how people plan to invest in education. Government money, scholarships, and other forms of financial aid can help families pay for school. In Nigeria, programs like the Universal Basic Education (UBE) program try to make education more available, but there are still problems with how they are carried out (Ogunode et al., 2023). Universities and other educational institutions can also affect investment decisions by offering structured programs and financial aid options.

**Family Size and Demographic Factors:** The size of a family and other demographic factors, like the age of the parents and the number of children, affect how resources are distributed. Families with more than one child may have trouble making ends meet, which can lead to less money being spent on each child's education. On the other hand, smaller families can often spend more on each child (Oketch et al., 2024).

**Cultural and Social Norms:** Cultural beliefs and societal norms influence perceptions regarding educational investment. In some places, traditional gender roles and preferences may affect how much people are willing to spend on their children's education. But more people are aware of gender equality, which has led to more money being spent on education for both boys and girls in many areas.

**Financial Planning and Investment Options:** Having access to financial tools like savings plans, insurance policies, and education investment schemes is very important for planning for school. Structured financial planning helps families pay for school over the long term and lowers the chance of financial problems (Kumari, 2023).

Education is the first step in development. The word "education" comes from the Latin word "educare," which means "to lead out" or "to bring out." Every child has natural abilities that should be nurtured and given the chance to grow. Brain development in the early years is very important for a child's life and future. In order for young children to reach their full potential, they need to learn and be stimulated. In every society and every family, education is the basis for progress. Putting money into early childhood education is one of the best things we can do to end poverty, speed up economic growth, and make gender equality better. Everyone has the right to an education, no matter where they were born or where they live. Education is not only a basic human right, but it is also a necessary way to reach your full potential, promote long-term economic growth, and promote gender equality. Every child should be able to go to a better college or university like EDSU, which has everything they need to learn and train.

Kante (2021), on the other hand, said that we are still very far from where we should be. There are still big differences between the rich and the poor in the country. Students in many public colleges and universities don't have books, internet access, or good classrooms. They go to schools that don't have electricity, water, or hygiene, or they don't have qualified teachers. Without education, we would all be nothing. This education investment plan is meant to protect you from the financial effects of accidents, illness, death, losing your job, or your business failing. The plan will be set up so that kids can get a good education and parents and guardians can easily save money to send their kids to EDSI for the best academic training.

Modern methods of investing in education use systems theory and financial planning models together. These methods see investing in education as a dynamic system that includes money (tuition, savings, funding), institutional support (schools, policies), and expected results (skills, jobs, and growth). Recent models indicate that decisions regarding educational investments are linked to comprehensive household financial planning, encompassing savings, consumption, and long-term anticipations regarding children's future earnings (Kumari, & Gavhale, 2024).

The Human Capital Theory (HCT), first put forth by Becker in 1975, is the most common way to explain why people invest in education. The theory asserts that education constitutes an investment that improves individuals' productivity, skills, and prospective income. This theory posits that parents and governments invest in children's education due to its long-term economic benefits. Recent studies confirm that education is a vital element of human capital development and plays a significant role in economic growth and advancement (Nwachukwu, 2024). Investing in education enhances knowledge acquisition, fosters innovation, and increases workforce productivity, rendering it indispensable for national development. Moreover, human capital theory underscores the significance of early investment in children, as it influences their future competencies and economic prospects. So, education is seen as both a private good and a public investment that helps society as a whole.

Research conducted by Blanden et al. (2022) indicates that parental income, social status, and environmental factors substantially affect children's educational opportunities and outcomes, perpetuating cycles of inequality. The theory of educational inequality elucidates disparities in educational access attributable to socioeconomic variations. It says that kids from richer families get more educational investment, which leads to different results. This theory is important for planning investments in education because it shows that resources need to be spread out fairly and that targeted help is needed for groups that are less fortunate.

The study conducted by Uko and Ekpenyong (2025) asserts that the economics of human development expands human capital theory by emphasizing early childhood investment and its long-term developmental outcomes. This viewpoint emphasizes that investments during childhood produce greater returns compared to those made in later stages of life. Research indicates that investment in education improves children's cognitive skills, social abilities, and long-term productivity, underscoring the significance of early and continuous educational investment. This theory supports the notion that a systematic educational investment strategy should commence early and encompass various aspects of child development.

The household investment theory explains how families make decisions regarding the allocation of resources for children's education. It is predicated on the premise that households seek to optimize utility by equilibrating costs and anticipated future benefits. The empirical research conducted in Nigeria indicates that household decisions regarding educational investment are affected by income level, educational costs, family size, and parental perceptions of educational returns. This theory emphasises that planning for children's education investments is not solely an economic decision but also a strategic one shaped by anticipations of future outcomes (Yelwa & Anyanwu, 2024).

People know that going to college is a big deal for young people. Achieving this goal is one of the most important things you can do to have a bright future. But it's not a big surprise that college is expensive, since tuition costs go up every year. Parents who want their kids to have a good future often start saving for college as soon as their babies take their first steps. Parents who are even more careful are sure to have a clear plan for how to save money for their children's education. Still, having a good plan is always a good idea, especially when it comes to money (World Bank, 2024).

## **METHODOLOGY**

Creating a new system requires careful planning and the choice of the best method or methods to use. In essence, methodology is employed to structure, plan, and oversee the processes involved in system development. We used the object-oriented analysis and design methodology technique (OOADM) for this study because of its idea. The OOADM uses a lifecycle model, just like other common programming methods.

### **Choice of Programming Language**

Like other languages, programming languages are how people express, act on, and think about ideas (software designs). Choosing the right programming languages has a big impact on the quality of software. The HTML, CSS, PHP, and MySQL database technologies is what we will used to make this project. MySQL was chosen for the database design and implementation because it is strong and open source.

### **Location of the Study**

This study was conducted at the Edo State University, Iyamho Campus, Edo State, South of Nigeria. Figure 3.1 shows the geographical map of the location.



Figure 3.1: Map of Edo State University, Uzairue

### Method of Data Collection

Three significant methods were employed to gather data for this study. These methods encompassed observation, interviews, and pre-existing records (refer to Appendix A-1). The data came from interviews with the University busary officers, and a detailed list of school fees for all of the University's courses was also received.

### Analysis of Existing System

The majority of the existing systems are products and services offered by banks and other financial institutions. These products are made only available to the institution's customers are for profit making.

### Problem of Existing System

The idea behind the development of the proposed system is to tackle the issues related with the old methods of education targeted financial plan, some of the obvious problems with the existing systems are

1. Profit-Oriented: The Existing EDUPLANS offered by banks and financial institutions are profit-focused and not student/parent-centred.
2. Non-Uniqueness in focus: The existing systems are general systems, they are not focused on a particular institution with its peculiarity, in this case the Edo State University, Iyamoh
3. Lack of information Integrity: Presence of massive documents in the existing frameworks can prompt widespread dispersal of records which would make the getting to of a specific target.

### Analysis of the Proposed System

Subsystems are the basic parts that make up every system. In some cases, to understand how a system works, you may need to know how the different parts or subsystems work together. To do this, each subsystem of the domain was looked at to see if there were any problems. To achieve the aforementioned, for each identified

subsystem, the subsequent components were specified: The actor (who does something or takes on a role in the subsystem). Use cases show what the members are doing in the subsystem or what the clients or members will do with the new subsystem. An activity diagram shows the business procedure model, which is what happens in the subsystem or will happen in the new system. Using sequence diagrams to show how and in what order a group of objects interact with each other (Interaction between classes or objects).

Using class diagrams to group things like classes of objects, their qualities, connections, and operations.

### The Targeted Saving Process

The children education investment plan has only one major actor, the parent or guardian, who sets up a savings plan for any number of children that he has. The scenarios involved are as follows

1. User (Parent/Guardian) creates and account on the website.
2. User logs in after account creation and provides information for the following fields
  - i. Number of children/wards
  - ii. Course of Study at Edo State University, Iyamho (This could be intendent) if the child has not yet been admitted.
  - iii. Number of years of study
  - iv. Amount of savings
3. Views and saves the financial plan/recommendation.

### Actors/Users

Use cases are used to define requirement procedures in Object-Oriented examination (Nwankwo, 2016). Nwankwo says that a use case diagram shows how the actors and the use cases are related to each other. A use case is when someone talks about what an actor does.

Users are also ready by being told what kind of data they need to use the new system. They will be told where to type in numbers, letters, and other types of characters. The users are also told what information they need to give when they come in to do business. If the users are not ready after the data has been prepared, it is as good as not doing any work. In this research, one actor is recognized.

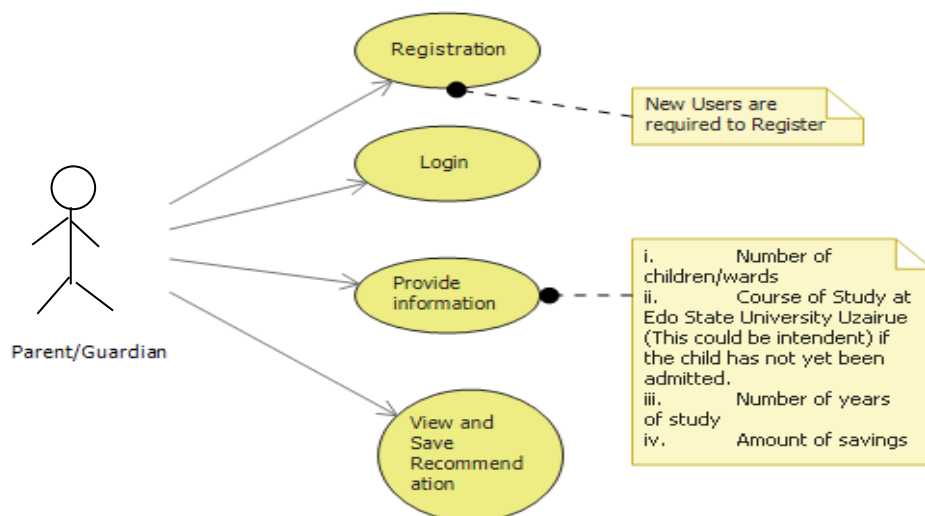


Figure 3.2: Use Case Diagram

### Activity Diagram

Another important behavioral diagram in UML is the activity diagram, which shows the dynamic parts of a system. It is basically a flowchart that shows how one activity leads to another. People often use activity diagrams to show how business processes work. They can also show the steps in a use case outline. The activities shown could happen one after the other or at the same time. In both cases, an activity diagram would have a beginning (the initial state) and an end (the final state). Figure 3.3 shows the activity diagram for data management subsystem.

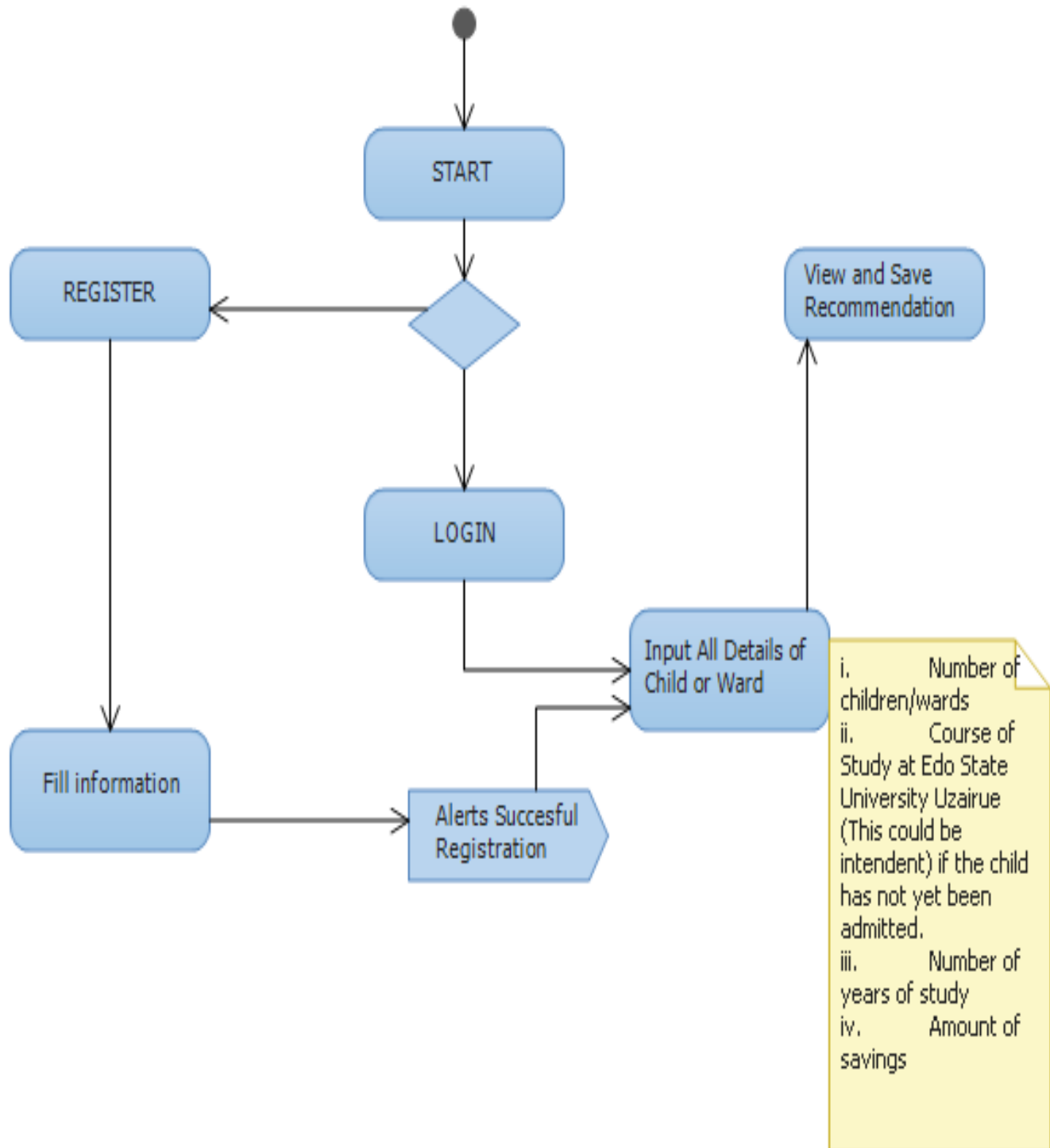


Figure 3.3: Activity Diagram

## System Sequence Diagram

A sequence diagram depicts the interactions among objects over timeframe. It is a visual overview of individual use cases, that is, the methods by which undertakings are performed among users and the systems.

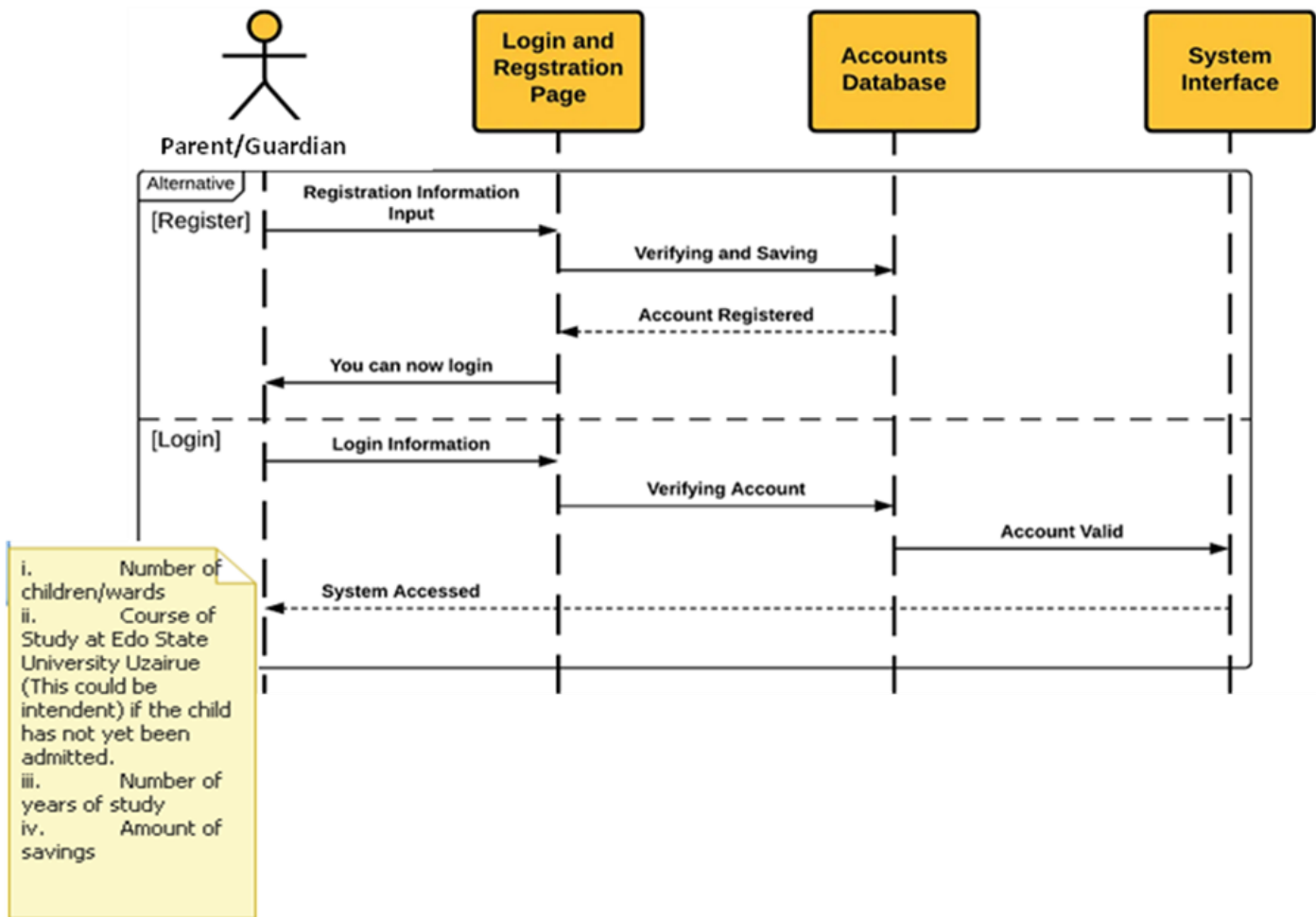


Figure 3.4: Sequence Diagram

### The components of a system sequence diagram are:

1. The action line - Shows the activities performed by an actor/system; when associated with a lifeline, it portrays the presence of cooperation between the entertainer and the system.
2. The lifeline - long spotted line joined to the actor or the system.
3. The messages – shows the subtleties of an activity.
4. The objects.

### Advantages of Proposed System

Below are the advantages of the proposed system:

- i. Ease of navigation.
- ii. Better management of student’s data.
- iii. Sensitive information is secured due to privileges set during authentication and validation.
- iv. User friendly.
- v. More focused system as it is targeted to students of EDSU
- vi. Various subsystems on a single platform.

## Model and Architecture of the Proposed System

This section indicates the architecture of the proposed system, and a component model diagram is used to depict it. Figure 3.4 depicts the component model diagram for the proposed system.

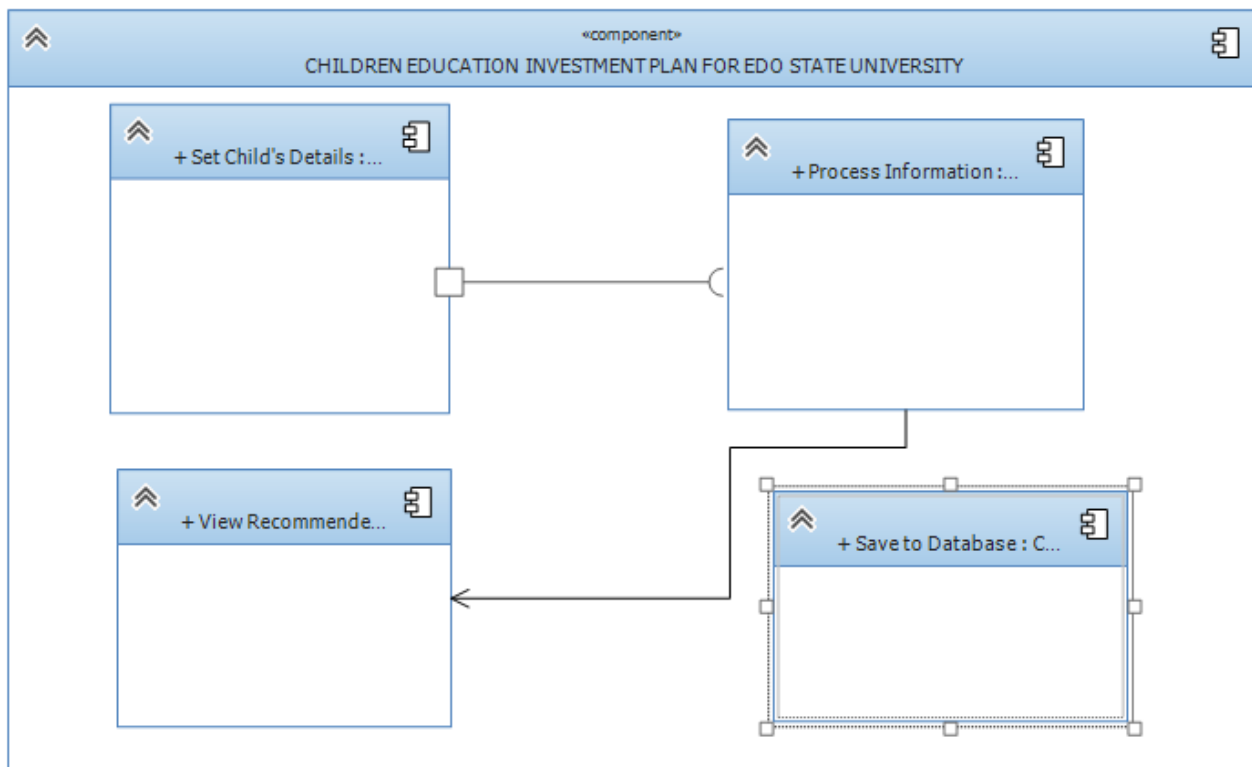


Figure 3.5: Object Component Model

### System Design

System design consists of a set of activities that assist in conveying the model of a new system. During this stage, the eventual results of the analysis of the existing system are reconsidered, particularly the deficiencies, and this helps with implementing a capable system that would improve upon the lapses that were recognized. The motivation behind the design was to build a system which would satisfy functional specification and objectives in terms of usage.

### Mathematical Model for Interest Rate

Simple and compound interest model would be adopted for this system. Simple interest will be used to calculate interest rates for the first year invested money while compound interest will be used for calculating accumulated interests.

### Simple Interest Model

**S.I. = P × R × T**, where P = Principal, R = Rate of Interest in 5% per annum, and T = Time, usually calculated as the number of years. The rate of interest is in percentage r% and is to be written as r/100.

**S.I. = P × R × T**

**Example 1.**

$P_0 = \text{\#}20,000.00$  the initial investment deposit.

$R = 5\%$

$T = 2$  year

$$= P_0 = \frac{20000 \times 5 \times 1}{100} = 1000$$

The new balance in the investment account will be **N21000.00**

**Compound Interest Model**

Compound interest is the reinvestment of interest earned annually or monthly.

$$P_N = P_0 (1 + r/k)^{Nk}$$

1.  $P_N$  is the balance in the account after  $N$  years.
2.  $P_0$  is the starting balance of the account (also called initial deposit, or principal)
3.  $r$  is the annual interest rate in decimal form
4.  $k$  is the number of compounding periods in one year
  - If the compounding is done annually (once a year),  $k = 1$ .
  - If the compounding is done quarterly,  $k = 4$ .
  - If the compounding is done monthly,  $k = 12$ .
  - If the compounding is done daily,  $k = 365$ .

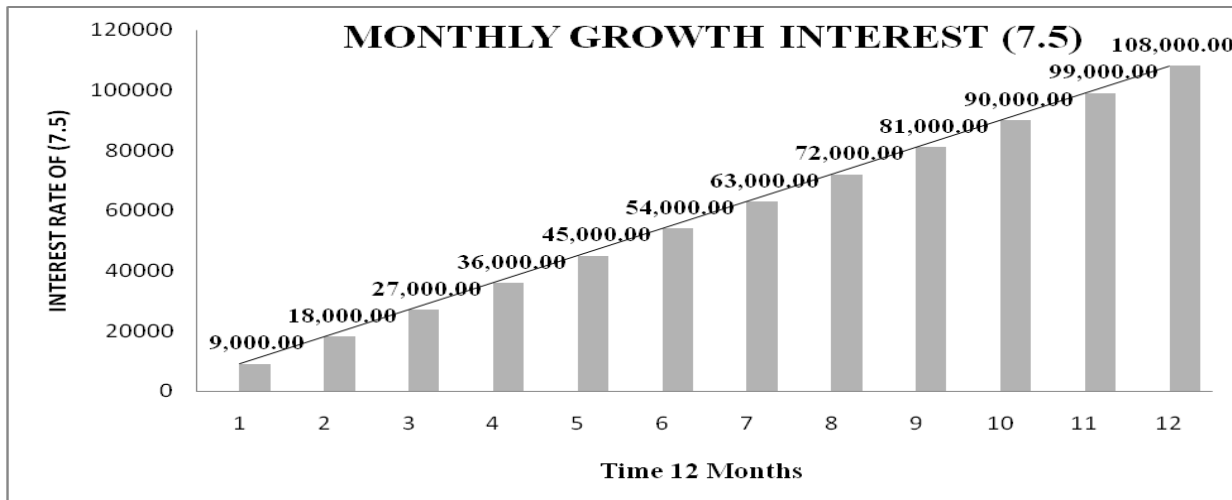
**Example 2.**

$P_0 = \text{\#}3000$	the initial deposit
$r = 0.05$	5% annual rate
$k = 12$	12 months in a year
$N = 10$	since we are looking for how much we will have after 10 years

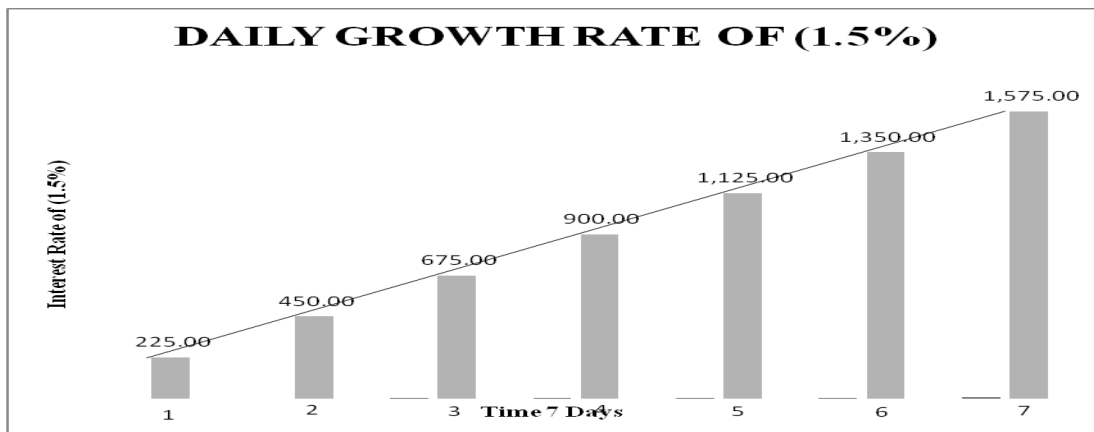
$$P_{10} = 3,000(1 + 0.05/12)^{10 \times 12} = 4,941.03$$

**Sensitivity Analysis**

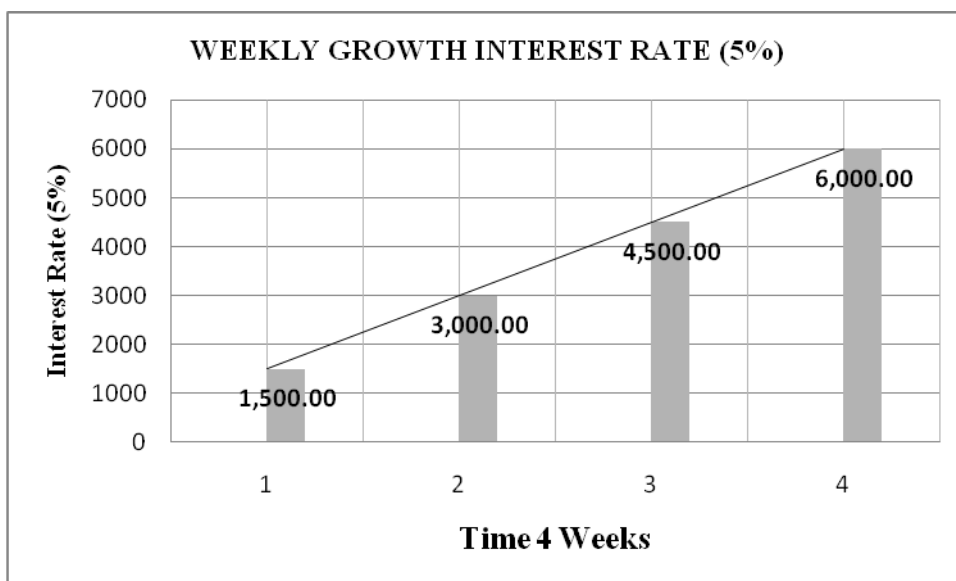
**Figure 3.8: Monthly Growth Interests of (7.5%)**



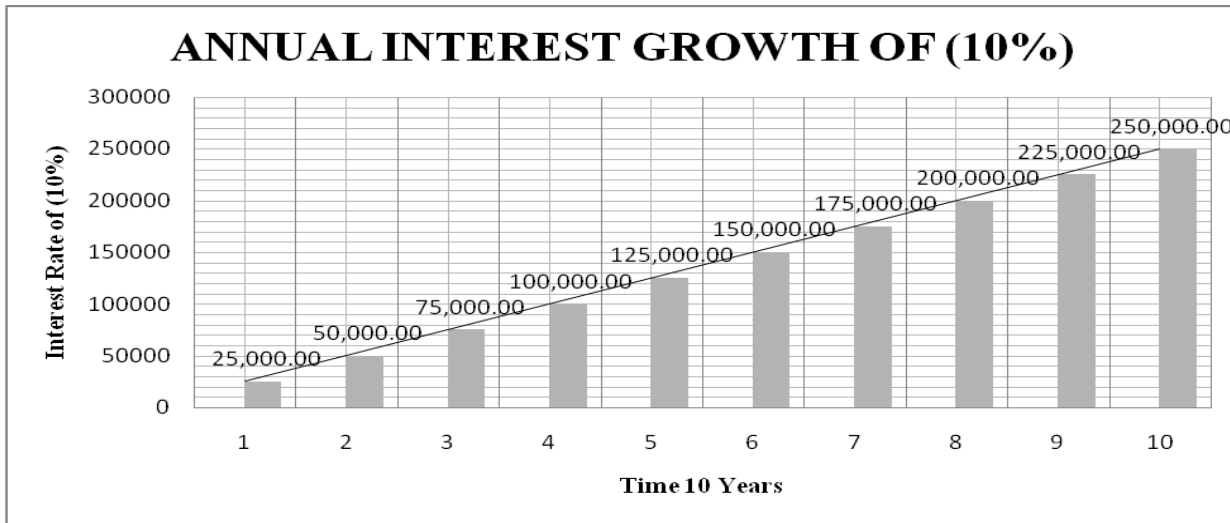
**Figure: 3.6 Daily Growth Interest of (1.5%)**



**Figure: 3.7 Weekly Growth Interests of (5%)**



**Figure: 3.8 Annual interest growth of (10%)**



### Implementation, Testing and Integration

#### System Implementation

The implementation phase of the systems development life cycle (SDLC) is usually the most time-consuming period of the entire life cycle. In fact, implementation is the accomplishment of a technical specification or algorithm and software module, through computer programming and deployment. At the stage, the physical design specifications were transformed into a working computer code. After which the code passed through the testing stage until the vast majority of the errors and bugs were distinguished and rectified, the system is then installed. Even after this, new highlights and more business rationales would be included due to likely of bugs which clients might experience as they utilize the system. In this study, three design tasks were identified. They were:

- i. The web application design;
- ii. The database implementation;
- iii. The testing of the software.

#### Web Application Development

The web application development is a process of turning the physical plan specifications into a working computer program that runs on the web. The programming of the application was done alongside testing, as each programming module was made, it was tested independently. The model view controller (MVC) approach was utilized during the program execution. It made it feasible for the application programming and database environment to be done on a similar coordinated improvement condition. The model unit was utilized to execute the database; the regulator modules were utilized to actualize the business rationale and data access layer rationale, while the user interfaces were rendered utilizing the views.

#### Principal Features

The Spring/Spring Boot technology was adopted for the following reasons:

- 1. Productivity
- 2. Scalability.
- 3. Security.
- 4. Performance

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## Building the Model and the Data Access Layer

While actualizing this model, the code-first methodology was utilized. In this methodology, the focal concentration and the essential driver behind all that would be considered during the program advancement was the application model. The database schema was then created from the model. The generated schema was utilized to make a database and the related entities (tables, relations, and so forth.). First, the classes, which show the database tables, were created. The model classes are presented in the Appendix A of this study.

### Software Requirements

The software requirements for implementing the database were:

1. A Relational Database Administration System with Object-Relational Capability.

The MySQL Server 8.0 was selected as the database server for implementing the database. This software is stacked with important tools such as: MySQL Workbench CE.

This database server was selected for the following reasons:

- i. The data security and support for transactional processing can greatly benefit any business logic.
- ii. It offers unequalled scalability to assist in data management.
- iii. It highlights a particular storage engine structure that encourages system administrators to arrange the MySQL database server for a perfect performance.
- iv. It could satisfy even the most demanding applications while guaranteeing ideal speed, full-text indexes and unique memory stores for high performance.
- v. It offers a wide scope of high accessibility solutions like specialized cluster servers and master/slave replication configurations.

2. An operating system which is compatible with the database server software.

3. Web Browser.

### Hardware Requirements

The following are the hardware requirements for implementing the database:

- i. Stable internet connection.
- ii. A network-ready PC/Server with at least, a core i5 processor with 2.5 GHz processor speed, 4-8GB RAM and 500GB storage.

### Implemented Modules

The web application as implemented with several modules, here we present more details about these modules as shown in figure 4.1



Figure 4.1: Home page

The home page of the application also serves as the landing page of the application. This is the first page the user interacts with. The page presents four main modules; these are:

1. The Signup
2. The Login
3. About Us
4. Feed Back

### The Signup

This module allows first timer to create user account and submit necessary information. Figure 4.2 shows the registration form.

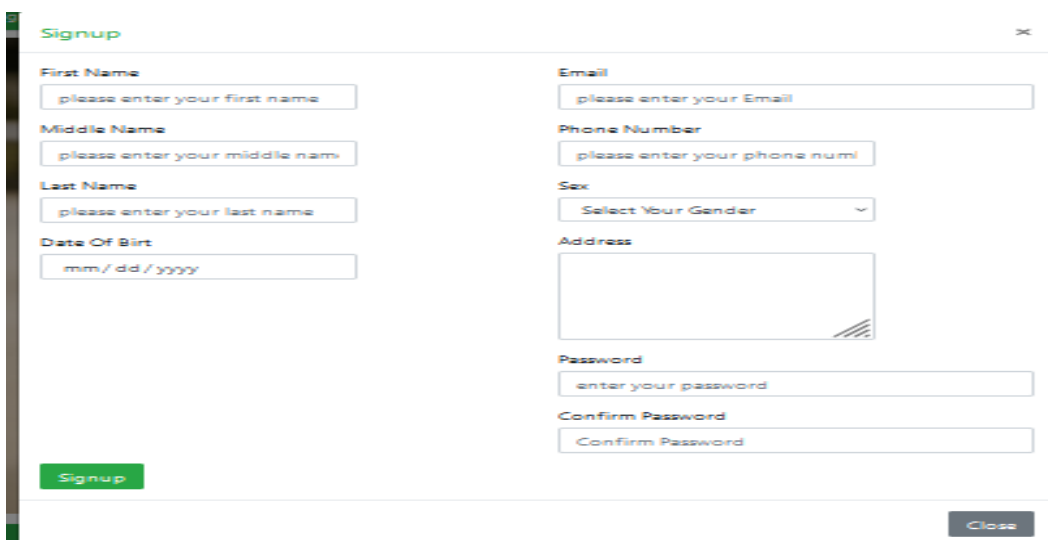
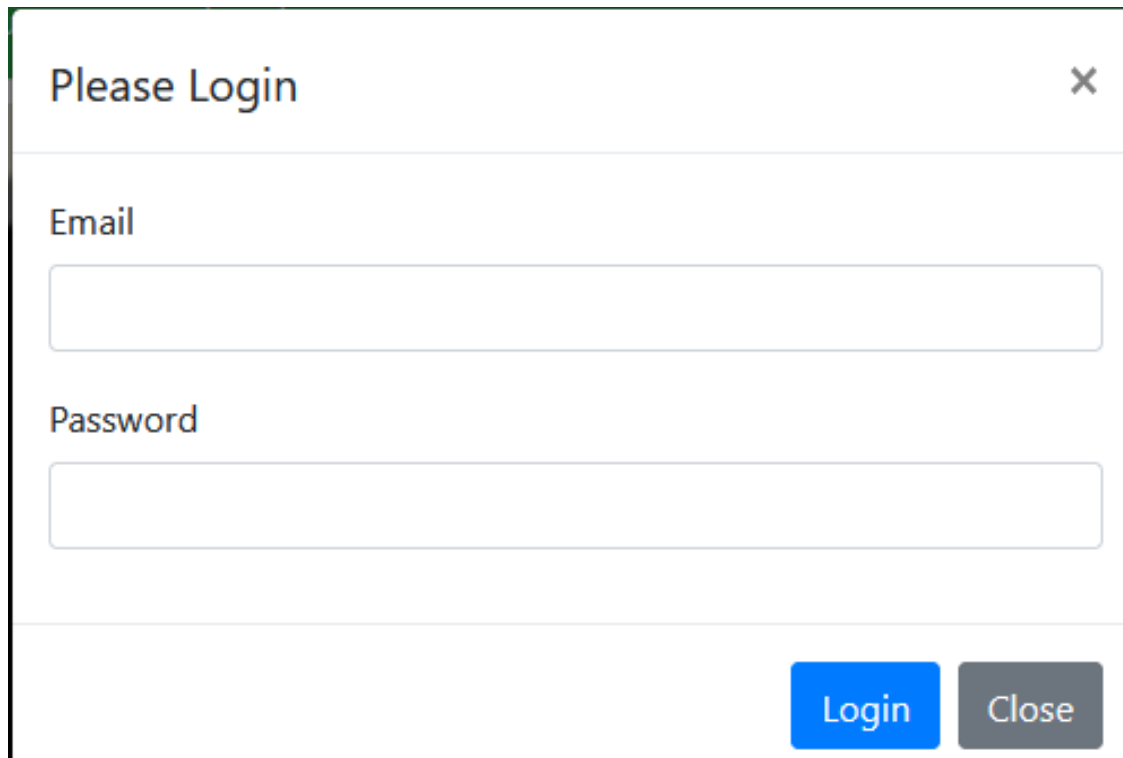


Figure 4.2: Registration Form

## Login

This module allows user to sign in into the account created with email and password.



The login interface is a modal window titled "Please Login" with a close button (X) in the top right corner. It contains two input fields: "Email" and "Password". Below the input fields are two buttons: a blue "Login" button and a grey "Close" button.

Figure 4.3: Login Interface

## About Us

This module contains the vision and mission of university.

## Feed Back

This module allows user express their satisfaction and dissatisfaction of the system.

## User Profile Details

The user profile comprises of sub-modules that provides user the followings:

1. Logout
2. Apply
3. Monthly payment
4. Payment history

Logout allows user to exit from the page.

Apply allows the user to select proposed course of study with the summary of the course he/she has selected in the course selection module. The module displays full details of the investment plan.

### Child Education Investment

Guidian Income	<input type="text" value="parent/guidian's monthly"/>
Child's Full Name	<input type="text"/>
Course Duration:	<input type="text" value="4"/>
Course Of Study	<input type="text" value="Accounting"/>
Email	<input type="text" value="ola@yahoo.com"/>
Monthly Payment	<input type="text" value="NGN36,899.29"/>
Intrest Rate	<input type="text" value="5"/> %
Yearly Interest	<input type="text" value="NGN64,291.46"/>
Yearly Payment	<input type="text" value="NGN442,791.46"/>
Grand Total	<input type="text" value="NGN1,771,165.86"/>
<input type="button" value="Apply Today"/>	

Monthly payment module enables the user to perform transactions through automated machine (ATM) card by supplying the card number, card expiry date and CVV



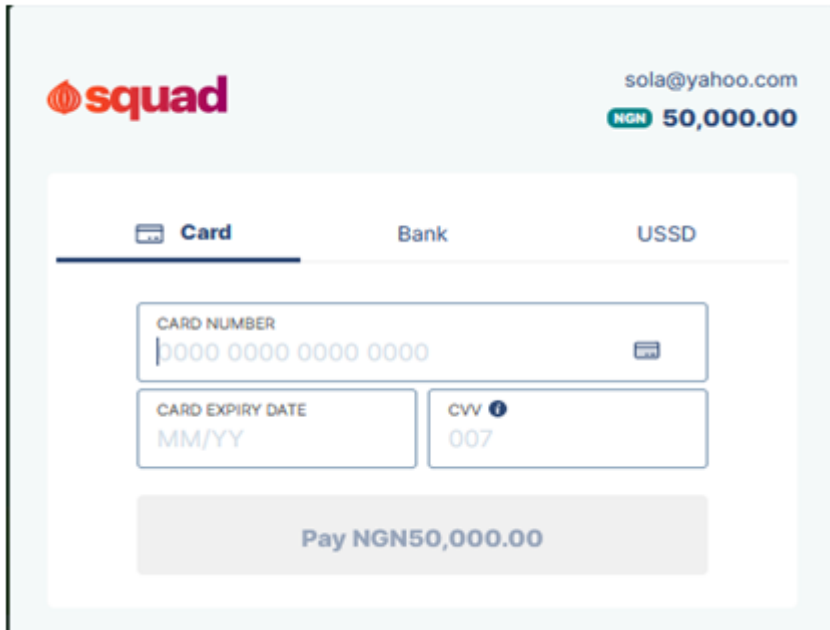


Figure 4.5: Payment Interface

Payment history allows user to view previous transaction details.

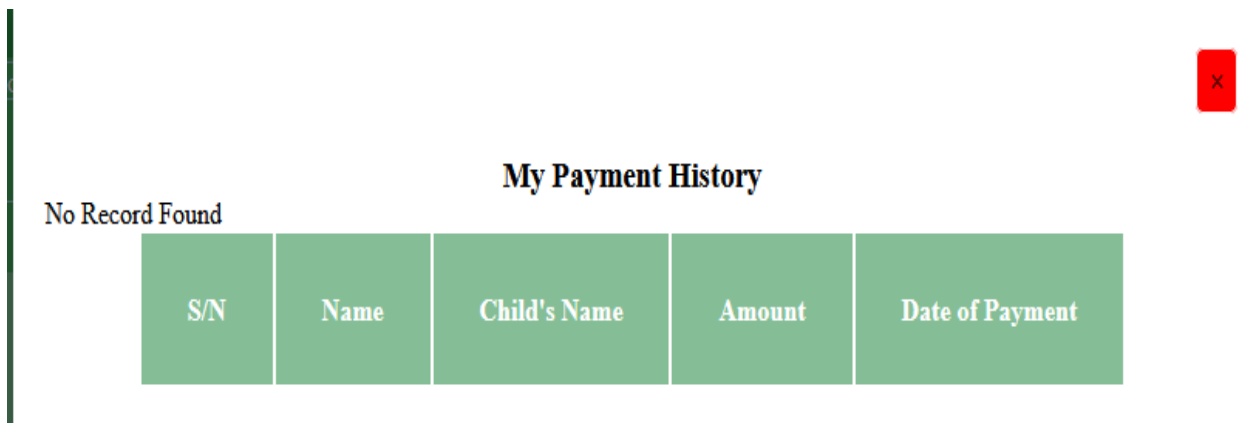


Figure 4.6: Payment History Interface

### System Testing

Testing is a method to check whether the actual system matches expected requirements. The purpose of software testing is to identify errors, gaps or missing requirements in contrast to actual requirements. Testing demonstrates that the software functions appear to be working according to specification, that behavioral and performance requirements appear to have been met. In addition, data collected as testing is conducted provide a good indication of system reliability and quality as a whole.

Testing should begin in the small and progress toward testing in the large. 80 percent of all errors uncovered during testing will likely be traceable to 20 percent of all program components. The components would be isolated and thoroughly tested. Testing ensures that internal operations are performed according to specifications and all internal components have been adequately exercised. The type of testing carried out was unit testing which involves testing the various modules separately.

## Unit Testing

THE TEST DATA	EXPECTED TESTED RESULT	ACTUAL TEST RESULT
<b>Home Page</b>	Expected to signup and login into the account created.	When the software runs, the home page displayed with background pictures and modules
<b>Signup</b>	The module expected to receive correct data input from the user and stores it directly to the database.	The data supplied by the user stored into the database.
<b>Login</b>	The Login Module expected user to input username and password to take the user to user profile	It re-directed the user to the userprofile inorder to make payment, payment history or logout
<b>Monthly Payment</b>	Expected user to make transactions through ATM successfully.	Transaction were done
<b>Logout</b>	Expected to exit user from userprofile	It exited user from the userprofile.
<b>My Payment History</b>	Expected user to view transaction details	Transaction details were viewed.

**TABLE 4.1 Unit Testing**

## Integration

System integration is the successful putting together of the various components, assemblies and subsystems of a system and having them work together to perform what the system is intended to do. The modules was merged together to make up the complete system. Integration follows the coding phase in the development life cycle, as shown in below and is intertwined with the testing.

<b>Requirements</b>	<b>Design</b>	<b>Coding &amp; Unit Test</b>	<b>Integration &amp; Test</b>	<b>Acceptance</b>
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**Table 4.2: Integration's Place in the Development Life Cycle**

## SUMMARY, CONCLUSION AND RECOMMENDATION

### Summary

This system is designed to enable high income earners, middle income earners as well as low income earners to secure the tertiary education plan for their child/ward. What is novel in this research is the conclusion of interest rate and total amount needed for the proposed tertiary course of study. Parents/guardians are encouraged to follow a saving plan so as to be able to meet up with the demands of the investment package. This system will enable them to secure a complete education fund for their child/ward in a school like Edo State University Uzairue.

## Conclusion

This project's aim was the design of a students' education finance plan, this was name Education Investment Plan for Nigeria University. To achieve this, Java, HTML, PHP, CSS and Javascript programming languages were used for the implementation. The outcome of the project work is a web based application that meets the stated objectives

The new system is implemented mainly with Java programming Language, which makes the user interface program easy to understand. However, to be able to use the program, the user training program is required. And to ensure that the new system reaches the maximum capability, an evaluation of the performance of the new system is needed at a period of time. This can be done by making an inquiry among the end-users and management stratification. And then the comparison between the new and old system can be made.

## Recommendation

It is recommended that this application undergoes a rigorous testing and be incorporated to the website of EDSU to guide parents and first timers in making the right decisions when choosing University.

## Limitation of the Study

This research intends to explore more than one higher institution of the three senatorial districts in Edo State of Nigeria, the time and the manpower was not enough; hence, only a single institution was used. This institution was specially selected because of the superior standard it has within the selected environment and beyond.

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