

MONEYPEDIA: A Web-based Learning Portal for Financial Literacy

A Capstone Project Proposal

Presented to the Faculty of the

Information and Communications Technology Program

STI College Bacoar

In Partial Fulfillment

of the Requirements for Practical Research 2

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CHAPTER I

INTRODUCTION

Project Context

What is financial literacy, and why should people prioritize acquiring knowledge of financial literacy in our daily lives? The ability to comprehend and use a variety of money management capabilities is known as financial literacy. Financial literacy could help individuals become self-sufficient and achieve financial stability by preventing them from committing poor financial decisions. Banking, personal financial management, budgeting, managing debt and credit, and investing are some of the fundamentals of financial literacy and how it may be used in everyday life. Due to the constant development and improvement of financial systems, platforms, and technologies, financial literacy is a life-changing experience. Having a good relationship with money will help you to achieve financial freedom.

According to Fernando (2022), Financial literacy is the ability to understand and effectively use various financial skills, including personal financial management, budgeting, and investing. The meaning of financial literacy is the foundation of your relationship with money, and it is a lifelong journey of learning. The earlier you start, the better off you will be because education is the key to success when it comes to money.

What is a learning portal? According to Whybrow (2015), A learning portal is a

gateway to all the courses, resources, and instruments that facilitate teaching and learning. Technically speaking, it's a website that acts as a repository for teaching and learning materials. It's a place where you store all your documents, podcasts, videos, presentations, and so on.

Learning portals can also include applications that facilitate communication: Discussion forums, messaging services, email, calendars, and so on. In its simplest form, a learning portal can be a shop-front where your learners can discover or be assigned content. In its complex form, a portal can be an ecosystem for managing all teaching and learning. According to Whybrow (2015), A learning portal can do so much more than simply act as a gateway to your online courses. As part of your overall learning strategy, you'll want to be looking at value-adding as well as efficiency saving.

Learning financial literacy has a lot of benefits. It can solve various problems such as business-related problems, budgeting, investing, and many more. Learning financial literacy can also help you develop new business ideas. Ritchie (2022) Managing your money is a personal skill that benefits you throughout your life and is not one that everybody learns. With money coming in and going out, the overall responsibility of making the right decisions about major purchases and investments consistently. Managing your own money requires a fundamental understanding of personal credit and a willingness to embrace personal responsibility. You budget. You save. You protect your savings. When you spend, you spend wisely. When you make big purchases, you do so for worthwhile things.

This web-based learning portal offers an in-depth introduction to financial literacy to help users learn more about money management or put what they've learned into practice from their own experiences. With the help of the web-based learning portal, the researchers can inform the users of what the web-based learning portal is offering.

Purpose and Description of the Project:

This project developed a web-based learning portal that would encourage, help learn, and understand visitors to learn more about financial literacy. In a recent financial literacy study by the TIAA Institute (2021) Gen Z respondents averaged the lowest (43%) in answering finance-related questions correctly, on the same study just 48% of Millennials, 49% of Gen X, and 55% of both Baby Boomers and Silent Generation answered the questions correctly, those are hardly impressive numbers considering that this generation is one of the most debt-averse generations yet. Because of this, the researchers wish to help with the use of multiple modules that contain different information relevant and necessary for the improvement of our visitors in terms of managing their money.

The web-based learning portal has multiple dedicated pages that would aid the users to inform using valuable information and topics about financial literacy. With the dedicated pages, Users would see various topics on the homepage module with clickable buttons that would redirect users to separate pages containing relevant information to the topic the users chose. Utilizing the specific pages, the developers have offered the web-based learning portal would allow readers to learn more about a subject that interests them. The web-based

learning portal would also contain financial tools such as a savings calculator, and budget calculator.

Objectives of the Study:

General Objectives:

The study developed a web-based learning portal that would help the visitors to learn and understand financial literacy.

Specific Objectives:

- Developed a module that would feature pre-recorded financial talks.
- Developed a module that would feature inspiring stories from successful people like entrepreneurs, business owners, and financial advisors.
- Developed a module that would display additional features about financial literacy such as an expense calculator, savings calculator, and budget calculator.
- Developed a module that would provide quizzes for the users to answer.
- Developed a module that would provide an administrator log-in.

Scope and Limitations of the Study:

Scope

The scope of the web-based learning portal includes the following: The Homepage, About us, Financial Topics, Featured Stories, Financial Literacy Books and Videos, Financial Tools, and Contact Us modules.

Homepage - The homepage module is the landing page of users when they first open the website. This module would benefit all users who visited the web-based learning portal.

About Us - The About us module contains the researchers and the financial validators.

Financial Topics - The Financial Topics module contains financially related terms; this module also includes brief quizzes for users to test what they have learned. This module benefited teenagers and future entrepreneurs in learning the fundamentals of financial literacy. The administrators update and edit the financial terms and quizzes that are provided in the web-based learning portal.

Featured Stories - The Featured Stories contained inspiring stories coming from successful people in this kind of field.

Financial Literacy Books and Videos - The module included informative books and videos related to financial literacy.

Financial Tools - The Financial Tools module displays financially related tools such as an expense calculator, simple interest calculator, and budget calculator.

Contact Us - This module showed how the users can contact the researchers/developers if they have any concern or suggestions.

Limitations:

The following are the limitations of the developed Web-based Learning Portal for Financial Literacy:

- The web-based learning portal does not include a user log-in system for the visitors. The user log-in system is only available for the administrators only.
- The web-based learning portal displayed the same questions for each topic therefore cheating will be unavoidable.

Significance of the Study

The focus of the study is to analyze, develop, and implement a web-based learning portal for people who are interested in financial literacy. The following individuals are future entrepreneurs, teenagers, and finance enthusiasts that would most benefit from visiting the web-based learning portal:

- **FUTURE ENTREPRENEURS**

Future entrepreneurs are able to get a better understanding of financial literacy from our website which would help them learn more about money management. The web-based learning portal would also include tips and guides like how to handle business and money well, which would help them with their future businesses.

- **TEENAGERS**

Most inspiring teenagers in this current generation aim to be financially independent, the web-based learning portal helps them learn new things and improve their knowledge when it comes to financing by providing various information necessary for the introduction of financial literacy.

- **FINANCIAL LITERACY ENTHUSIASTS**

Financial Enthusiasts was able to view the latest news and financial statements of various companies provided in the homepage module. Financial Enthusiasts were also able to broaden their knowledge of financial literacy.

CHAPTER II

REVIEW OF RELATED LITERATURE/SYSTEMS

Review of Related Literature

Foreign Literature

Fernando (2022) Financial literacy is the ability to understand and effectively use various financial skills, including personal financial management, budgeting, and investing. The meaning of financial literacy is the foundation of your relationship with money, and it is a lifelong journey of learning. The earlier you start, the better off you will be because education is the key to success when it comes to money.

Whybrow (2015) A learning portal is a gateway to all the courses, resources, and instruments that facilitate teaching and learning. Technically speaking, it's a website that acts as a repository for teaching and learning materials. It's a place where you store all your documents, podcasts, videos, presentations, and so on. Learning portals can also include applications that facilitate communication: Discussion forums, messaging services, email, calendars, and so on. In its simplest form, a learning portal can be a shop-front where your learners can discover or be assigned content. In its complex form, a portal can be an ecosystem for managing all teaching and learning. A learning portal can do so much more than simply act as a gateway to your online courses. As part of your overall learning strategy, you'll want to be looking at value-adding as well as efficiency saving.

Lusardi (2019) argued that the financial markets are evolving quickly due to technological advancements as well as the introduction of new, complicated financial products. The variety of financial products available to people today is very different from what it was in the past, and choices made regarding these financial products have an impact on each person's well-being. These financial products vary from student loans to mortgages, credit cards, mutual funds, and annuities. The degree of a person's financial literacy is a crucial determinant of that person's capacity to make financial decisions. It's crucial to know whether people are prepared to successfully manage the maze of financial decisions they encounter every day in light of the quick changes and ongoing advancements in the financial sector and the larger economy.

According to Borg (2017) literacy is a fundamental requirement for human growth. Being financially educated benefits not only the individual but also favorably affects the efficient operation of a society's economic stability and development in today's increasingly complicated financial environment. Literacy is essential for human development. Being financially literate does not only benefit the individual but also makes positive contributions to the functioning of a society's economic stability and development. Entrepreneurs must make difficult choices throughout their business careers. Therefore, it is thought that giving them financial literacy training can help them have a better awareness of available financing options and financial support services.

Erhomosele and Obi (2022) stated that the pursuit of the expansion goal is the best survival strategy for small enterprises. Their research aims to determine whether there is

or is not a connection between financial literacy and small business success. According to their research, entrepreneurs with a higher level of financial literacy are more likely than those with a lower level to be successful in expanding their businesses. Therefore, financial knowledge, financial conduct and financial attitude are crucial resources for developing small businesses. To ensure the continuation and expansion of small businesses, they advise focusing efforts on the development of entrepreneurs' human capital.

McGurran (2021), stated that consumers who are financially educated are better equipped to handle life's inevitable ups and downs because they know how to avoid problems before they happen and how to deal with them when they occur. When you are financially literate, you know how to divide your money between several objectives at once, including savings, debt repayment, and an emergency fund in addition to regular expenses. With the right resources, you can properly investigate and assess loan, credit card, and investment alternatives; hence, it leaves us a message to be well educated on finance to avoid problems.

Ritchie (2022) Managing your money is a personal skill that benefits you throughout your life and not one that everybody learns. With money coming in and out, with due dates and finance charges and fees attached bills and with the overall responsibility of making the right decisions about major purchases and investments consistently. Managing your own money requires a fundamental understanding of personal credit and a willingness to embrace personal responsibility. You budget. You save. You protect your savings. You do so for things that are worthwhile.

Local Literature

According to BUSINESSMIRROR(2022), economic growth and financial literacy go hand in hand. This is particularly true for developing nations like the Philippines. To ensure an economy's long-term viability, financial literacy is essential. We must arm ourselves with knowledge of financial matters and information that can enable us to be empowered and enable us to make the appropriate financial decisions and protect our investments in light of the different market forces that are affecting the global and regional economies. Studies and surveys on financial literacy in the Filipino population have generally found that the majority of Filipinos lack a firm understanding of money management.

According to Spotted Ph Team (2018), not all Filipinos are financially aware. According to BSP data from May, barely 2% of adult Filipinos are financially literate. Most Filipinos would rather spend money than save it. They save based on what is left over after receiving what they are given; if there is nothing left over, there is nothing to save. As a result of their lack of financial education, people end up having no savings and are dependent on others for financial support. Every Filipino may learn financial responsibility through financial education, which will help them make better decisions regarding their spending habits and budgeting. It instills discipline in everyone so they can achieve their financial goals by setting aside money first and only using what is left over.

Gatchalian (2022) stated that “Providing financial education to the younger

generation is essential to ensure their security and well-being in the future. A financially literate Filipino youth will be able to make well-informed financial decisions that will positively impact their financial circumstances, empowering them to take better advantage of economic opportunities,” said Gatchalian, Chairman of the Senate Committee on Basic Education. He also observed that 89% of Filipino youngsters rely on their parents' financial knowledge. The Global Financial Literacy Survey found that only 25% of Filipinos are financially knowledgeable. This indicates that 75% of Filipino adults lack financial literacy.

According to Mylenko (2015), a recent survey on financial capability and inclusion, conducted by the World Bank in collaboration with the Bangko Sentral ng Pilipinas (BSP), for the first time provides data on household financial behavior decisions and knowledge of financial concepts. The survey results indicate that 55% of respondents in the Philippines report not having enough money to pay for food or necessities, and 26% say that this is a regular occurrence. Estimates derived from the survey data indicate that about 23 million adults making financial decisions face this situation.

Zaldarriaga (2022) stated that Filipinos will be able to make wise financial decisions, stay out of debt, and reach their financial goals with the help of an excellent financial literacy program. Understanding how money is effectively managed was especially highlighted during the pandemic, when people encountered unforeseen financial difficulties brought on by, among other things, medical issues, job losses, and business closures. Those who understood finances and were ready for any situation were able to

survive and even thrive. In addition to providing enough education, the government must establish a sound regulatory framework for the new financial technology to eliminate uncertainty and, most importantly, safeguard consumer welfare. Many Filipinos are still learning the fundamentals of money management and could become victims of scams masquerading as technological advancements.

According to Perna (2022), With 84% of Gen Z relying on family members for the "how-to" of money management, parents must have the right answers. Financial literacy is not as straightforward to teach as something like math or history. Maman believes that money is not talked about enough in households. "A lot of parents tend to struggle with talking about money/finance with their teens, as they don't entirely know where to begin, and what the exact curriculum looks like," he says.

Like investors of any age, teen investors come in all types, from the timid to the brash. Neither approach is a recipe for financial success. Here again, awareness of financial structures is paramount both in encouraging the hesitant and tempering those who err on the side of boldness. What should a timid investor invest in first? "A very basic strategy that I have is to always put aside some money into the S&P, and then really invest in companies that I like that make products that I use," Maman says. "With the economy being so fast-changing, there's no better time to educate yourself on what's going on, and what's causing certain things," he also says. "Our message first is always education and safety. Through proper education, teens can understand why things are happening; for example, what it means when inflation is at a high."

In finance, as in so many areas of life, knowledge is power. Building strong financial literacy at a young age will set Gen Z up to find their strength, weaknesses, and “sweet spot” not just in the stock market, but in every dream they want to pursue in the present and as well as the future.

Related Studies and/or Systems

Other existing similar systems from other local financial websites were also used as the basis for the proposed system. These systems include financial information and tools that can help users establish a unified and understandable financial literacy.

Foreign Systems

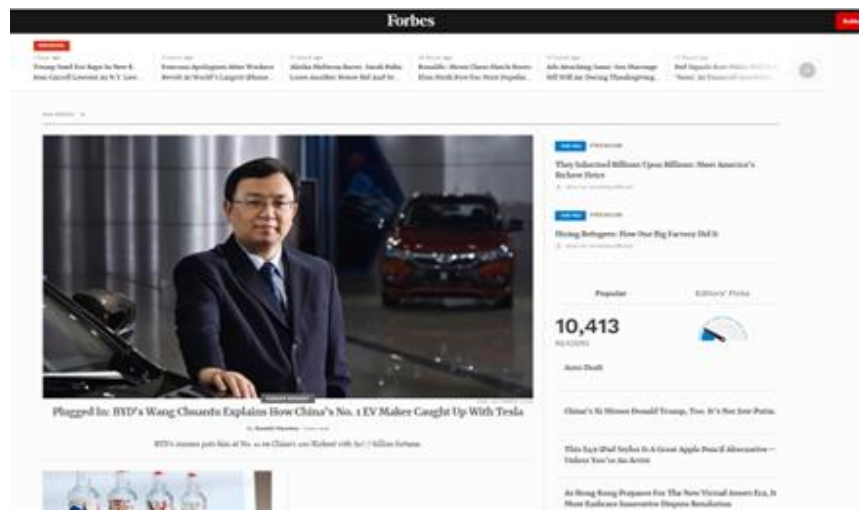


Figure #1 Forbes

Forbes is a business publication in the United States that is owned by the Forbes family and Integrated Whale Media Investments it gives both visitors and marketing partners a richer and deeper experience in finance. The company was founded in 1917 by Bertie Charles Forbes and was taken over by Steve Forbes in 1980. The company offers periodicals and stories that are centered on entrepreneurship, leadership, technology, business, and investing. The company is also known for its magazines and lists that rank everything from billionaires to college.

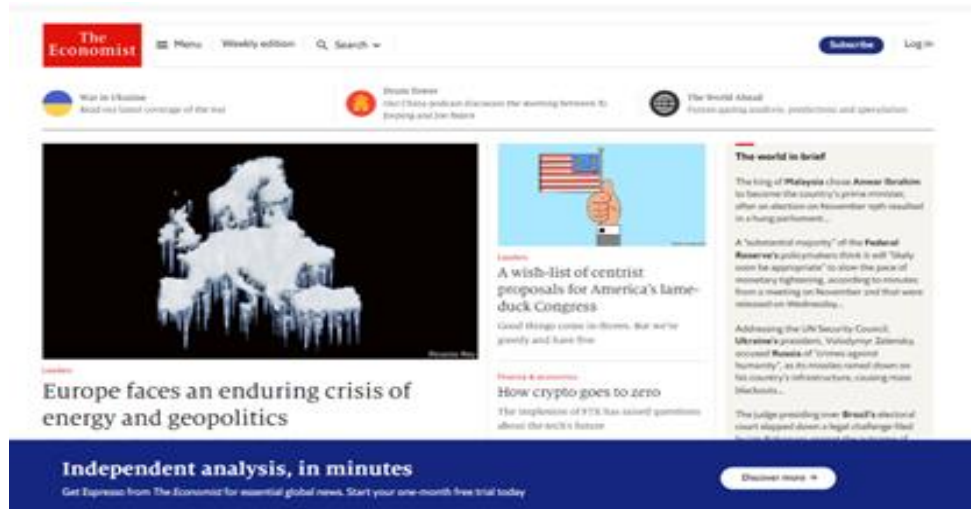


Figure #2 The Economist

The Economist which was founded by a Scottish businessman named James Wilson offers a digitally published weekly newspaper that is printed in demi tab format. It also offers a magazine printed on glossy paper and has been publishing every month since September 1843. About half of its average weekly sales as of 2007 were in North America with a circulation of over 1.3 million copies. It informs both visitors and buyers about international news, politics, business, and finance.

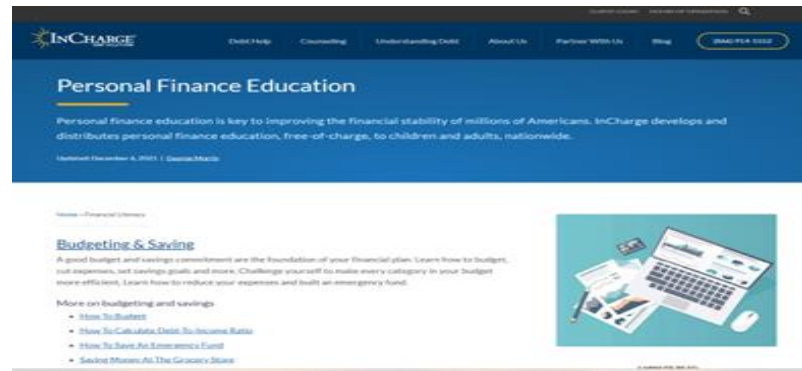


Figure #3 InCharge Debt Solutions

George Morris is the author of this given website. His work has been honored with awards from the Louisiana Press Association, the Louisiana-Mississippi Associated Press and the Society of Professional Journalists. He is more than willing to offer advice on how you can do the same so he designed a website that consists of personal finance education. It informs the reader on how to improve his/her financial stability such as budgeting and saving, hence gives the reader an idea of how important financial literacy is.



Figure #4 Reuters

Paul Julius Reuter, a former bank clerk at its beginning, founded a company focused on providing commercial news services located in London where it served banks, brokerage firms, and top corporations. They provide capable financial news and the latest stories about business. They also have the ability to be the first to report on stories of international importance making them one of the most reliable websites.



Figure #5 The Wall Street Journal

Charles H. Dow of Dow Jones & Company established The Wall Street Journal in order to cover business and financial news. On July 8, 1889, the first issue was released. The newspaper gained respect and success right away thanks to its veracity and the depth and range of its reporting. The Journal's framework has been in place for a long time and it includes comprehensive tables that incorporate all financial and stock market activities for the day prior as well as in-depth reports and analyses of current business themes.

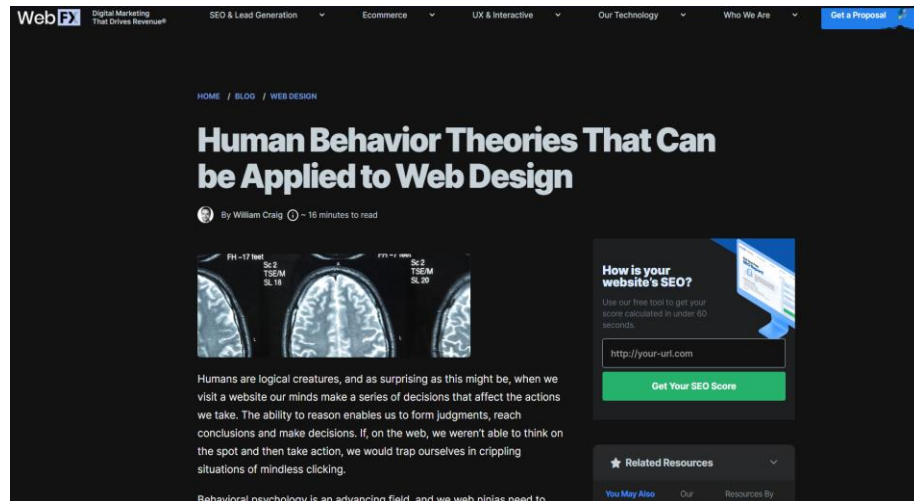


Figure #6 WebFX

Attractiveness bias theory specifies that the “wow” factor is the reason for creating a visual appeal. If you’re a well-known individual you can make the system ugly as much as you like and the visitors will still be \numerous. The impression that the viewer got from visiting your website is always important, for the reason that they’ll be satisfied, and comfortable, and it will increase the probability that they’ll visit again. The attractiveness of humans in terms of beauty that is occurring naturally is the principle that is responsible for this theory.

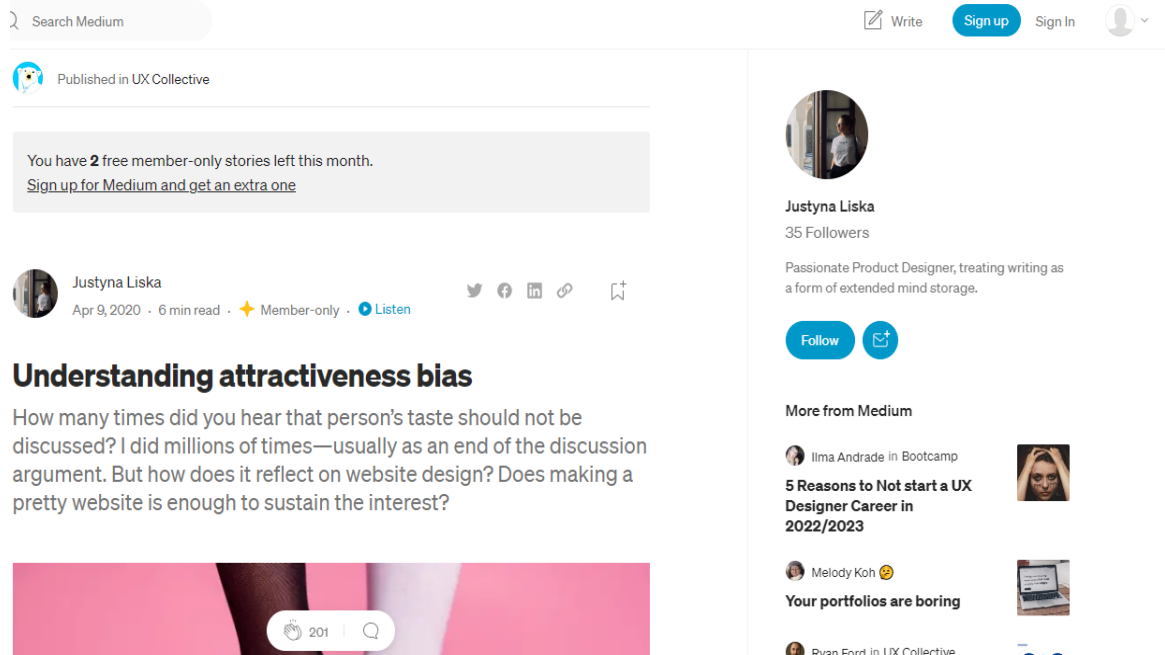


Figure #7 UX Collective

A person with an exceptional taste in fashion will draw our attention towards them, it can be a reason to socialize with that person, yet, if that person does not contain other values, such as having a great personality, we will that undivided attention towards that person, and eventually move forward on interacting with other people. That is a clear context on what will happen on a website if the aesthetics are beautiful, but its structure is poor, or the content is irrelevant, then the user will move to another website

What is the use of Login Page?

In this tutorial we are going to discuss the use of Login Page in web applications and see its important features.

What is the use of Login Page?

Login

User Name

Password

Log In

What is the use of Login Page?

Login Page: What is the use of Login Page?

Login Page is very common among any type of secured applications and its widely used on the internet for authenticating the user before presenting the secured pages of the web applications. For example to use Facebook you have to get authenticated by the Facebook before they give you access to their platform. The user authentication is done through a special web page called Login Page. The Login page asks you to enter your credentials which is then validated by the application and after

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Figure #8 Rose India

The Login Page is a common feature that is present in a website, or in any secured applications, and it is always used all around the internet to verify the user before showing the secured contents of the web applications. Facebook is an example of a platform that has a Login System feature. A user needs to get authentication and validation from Facebook before giving the user the access to see the contents of their platform. Same goes with Android, and iOS applications the Login Page is used to validate the user with the system before giving access to it.

Local Systems

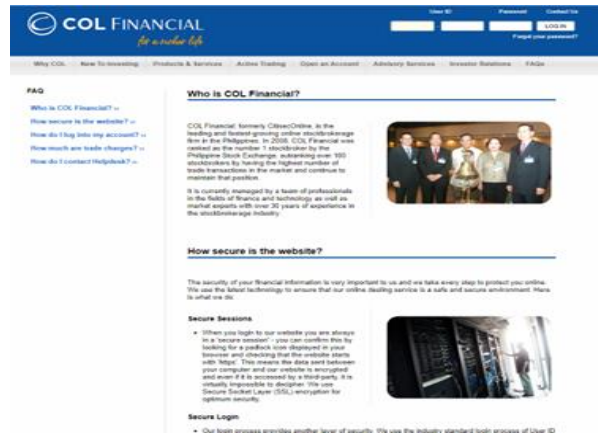


Figure #9 The COL Financial

With the goal of providing low-cost and convenient access to investing in the Philippine Stock Market, COL Financial was founded in 1999. Additionally, it enables real-time trade execution, which is the industry standard in local online trading. COL Financial is well-positioned to lead the development of the online trading investor market in conjunction with the increased penetration of internet access, broadband services, and an increasingly tech-savvy investing public thanks to its experience in servicing experienced investors looking for more convenient ways of stock trading. It also provides the best online platform, delivering essential research and analysis as well as direct access to market data to keep you updated.

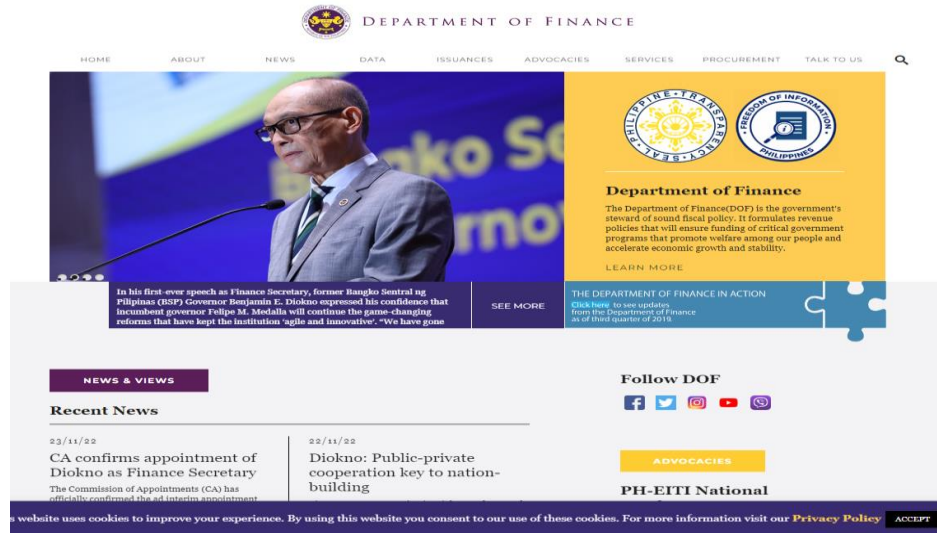


Figure #10 Department of Finance

The Revolutionary Government formed the Department of Finance on April 24, 1897. Although the DOF has undergone numerous structural and functional updates, it continues to be an important division. The Department of Finance is responsible for all crucial activities related to resource mobilization, income creation, and fiscal administration. This website primarily focuses on recent financial news and updates readers every day, keeping them informed of the most recent financial news.



Figure #11 MoneyMax

Through their free, unbiased platform that enables users to compare, pick, and apply for the appropriate products they are looking for online, Moneymax inspires Filipinos to lead healthier financial lives. Through educational content on their blog, email list, and social media platforms, Moneymax also assists people in making the best financial decisions. By locating the finest offers, they hope to help you manage your money more wisely by assisting you in making smarter financial decisions.

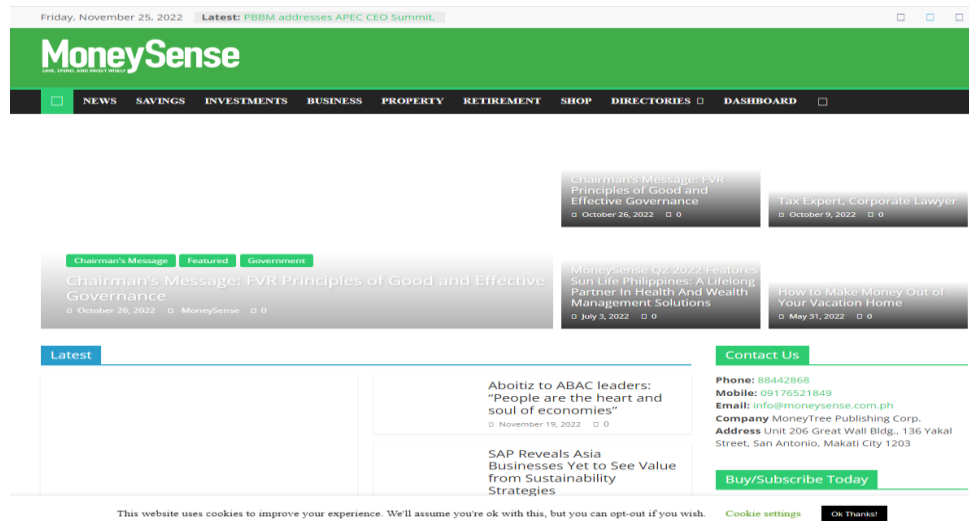


Figure #12 MoneySense

MoneyTree Publishing Corporation, which publishes MoneySense, was established by a group of seasoned business and finance journalists. They have nearly 50 years of combined editorial and publishing expertise. The readers with middle- and upper-middle-class incomes who read MoneySense want to make, save, spend, borrow from others, invest, and protect their money. The website consists of news, savings, investments and many more which can help and educate readers on how money works.



Hi, I'm Izza!

I help Filipinos bridge the financial literacy gap one content at a time.

I write on the core concepts of personal finance – budgeting, saving money, investing in the Philippines, retiring young, and making extra income with a full-time job.



Figure #13 SavingsPinay

SavingsPinay is managed by Izza Glino, who is a financial advocate. SavingsPinay is about managing your finances and making your money grow. SavingsPinay is here to help you to make your financial decisions right in order to save up. The knowledge of the readers of this blog about finances will be boosted. By deeply understanding this blog you will be aware of the importance of managing your money in the right way.

Synthesis

The articles cited in this research show the potential of an established web-based learning portal for Financial Literacy. Having a learning portal that features Financial Literacy shows that there is a mutual relationship between Future Entrepreneurs, Teenagers, and Financial Literacy Enthusiasts. Understanding and effectively using different financial skills, such as investing, budgeting, and personal financial management, is known as Financial Literacy. The foundation of your relationship with money is laid out

by Financial Literacy, which is a lifelong learning process. You will be better off starting earlier because education is the secret to financial success. (Fernando, 2022).

A learning portal is a gateway to all the courses, resources, and instruments that facilitate teaching and learning. Technically speaking, it's a website that acts as a repository for teaching and learning materials. Beyond serving as a portal to your online courses, a learning portal is capable of much more. (Whybrow, 2015).

The financial markets are evolving quickly due to technological advancements and the introduction of new, complicated financial products. The variety of financial products available today is very different from what it was in the past, and choices made regarding these financial products impact each person's well-being. These financial products vary from student loans to mortgages, credit cards, mutual funds, and annuities. An important factor in determining a person's ability to make sound financial decisions is their level of financial literacy. Because of the recent changes and ongoing progressions in financial literacy and the bigger economy, it is essential to understand whether people are capable of successfully exploring the importance of financial decisions they encounter every day. (Lusardi, 2019).

Financial literacy has advantages for both the individual and society as a whole, contributing to the growth and stability of the economy. Throughout their business careers, entrepreneurs must make challenging decisions. As a result, it is believed that providing them with financial literacy training can help them become more aware of the financing options and available financial support services that are available. (Borg, 2017)

The pursuit of the expansion goal is the best survival strategy for small enterprises. Their research aims to determine whether there is or is not a connection between financial literacy and small business success. According to their research, entrepreneurs with a higher level of financial literacy are more likely than those with a lower level to be successful in expanding their businesses. As a result, having sound financial knowledge, good financial habits, and a positive financial attitude are essential for growing small businesses. They recommend concentrating efforts on the growth of entrepreneurs' human capital to ensure the continuation and expansion of small businesses. (Obi, 2022)

Consumers who are financially educated are better equipped to handle life's inevitable ups and downs because they know how to avoid problems before they happen and how to deal with them when they occur. Knowing how to organize your money among several goals at once, such as savings, debt repayment, and an emergency fund in addition to regular expenses, is a sign that you are financially literate. With the right tools, you can properly research and evaluate your loan, credit card, and investment options. As a result, it sends a clear message that you should be financially literate to prevent problems. (McGurran, 2021)

Managing your money is a personal skill that benefits you throughout your life and is not one that everybody learns. With money coming in and going out, with due dates and finance charges attached to invoices and bills, and with the overall responsibility of making

the right decisions about major purchases and investments consistently. A basic understanding of personal credit and a willingness to accept personal responsibility are basic requirements for managing your finances. You set aside money for savings and safeguard them. When you spend, do so responsibly. You only spend a lot of money on worthwhile things when you make large purchases. (Ritchie, 2022).

CHAPTER III

TECHNICAL BACKGROUND

Overview of Current Technologies Used in the Current System

The following are the concepts used in the current system in MoneyPedia: A Web-Based Learning Portal for financial literacy:

- **Web-Based Learning**

Web-based learning is a style of education in which different learning tasks are carried out using the Internet as a means of delivering instruction. Depending on the needs and requirements of the curriculum, it can either take the form of (1) pure online learning, where the curriculum and learning are implemented online without face-to-face meetings between the instructor and the students, or (2) a hybrid, where the instructor meets the students half of the time online and half in the classroom. (Kidd, 2008)

The following are the concepts used to accomplish the objectives of the study and the developed system:

- **Online Financial Calculators**

The researchers/developers implemented an online calculator that focuses on solving financially related problems. According to (Ugur, 2019) an online calculator is an interactive software tool that is designed to process a predefined set of mathematical functions in order to simulate a business process.

- **Online Quizzes**

After reading and studying financially related terms and pieces of information, the users have access to online quizzes to assess what they have learned. An online quiz is an excellent way to evaluate a student's knowledge. It is very effective in the online learning process. The questions are provided by the developers and are inspected before being implemented by the validators/financial experts. In a study done by (Dobson, 2018) It was concluded that the formative online quizzes did enhance summative exam performance and that the online quizzes were valid predictors of exam performance.

- **Administrator Log-in**

The web-based learning system includes an administrator-only log-in feature wherein only those who are authorized are permitted to edit information on the website. A Login Page takes user input and passes the data to the server-side program. The authentication is done by a server-side program and authentication results (message) are displayed to the user on the website site login form.

- **Embed Youtube Videos**

The embedded videos are youtube videos created by the researchers and are posted on the website's official Youtube channel, with this the web-based learning system will be able to reach a larger audience.

Theoretical Framework

The study and development of the system adopted the Attractiveness Bias Theory as the main Web-based learning portal's idea in which the main thought of the researchers is Once viewers get over their first impression (which is always important), they'll be content and comfortable, and that will increase the likelihood that they'll visit again. The principle behind this theory is that humans are naturally attracted to beauty. And yet, content (the personality) is what matters — it's the foundation of your long-term relationship with visitors — but the attractiveness of the design (the exterior) is what will get you noticed. Some believe that design does not affect the overall impression made by a website, but attractiveness bias theory indicates that, while the content of a website is important to regular visitors, the “wow” factor is responsible for creating initial appeal. (Craig, n.d)

Websites need to be designed well, they need to look well, and be pleasing and simple. Today no one likes to interact with a bad design website, and that results in very low traffic which eventually can lead to the collapse of a business.

Let's take an academic background for example. You would think, that in such an environment attractiveness would be your last concern — wrong. According to Talamas(2016) in his study *Blinded by Beauty: Attractiveness Bias and Accurate Perceptions of Academic Performance*, physically attractive students are in favor of receiving better grades than their less-attractive peers, partly because perceived as more intelligent, which is not always the case. More than that—the more attractive students are, the more chances they have to get a place in the university, eliminating less attractive candidates during interviews. A badly designed website or any product, in contrast, will not attract the user's attention even if it is an excellent product.

According to [Justyna Liska](#) (n. d.), We may not like judging something on its appearance, but it doesn't mean we should avoid our inner bias and pretend it doesn't exist. That is why we should all use the opportunity of hearing feedback, especially when it comes to the structure of a website and its UX, to make it better for users and eventually the products themselves.

Conceptual Framework

The conceptual framework, the researchers highlighted 2 user levels of the system, the admins and visitors. The framework also showed what parts of the website they can freely use. The front end of the website, included the admins and visitors. They can freely browse through the web-based learning portal, and freely click the modules they want to use. The user log-in can only be accessed by the admins. The user log-in system allows the administrators to edit information on the website. The user log-in system is necessary for maintaining the website's functionality and also in maintaining its contents.



Figure 14. Conceptual Framework for The Visitors of MONEYPEDIA: A Web-based Learning Portal for Financial Literacy



Figure 15. Conceptual Framework The Administrators of MONEYPEDIA: A Web-based Learning Portal for Financial Literacy

Calendar Of Activities

Three project proposals were presented by the researchers in the first week of September 2022. The topic, "Financial Literacy," was approved by the panelists after they defended all three of the proposals. Beginning with the project proposal, there were numerous adjustments, and by the third week of September, the researchers had completed the revisions to the thesis proposal.

By the first week of October, the researchers started chapter 1 and had completed by the end of October, which outlines the purpose and description of the project, objectives of the study and scope and limitations of the study. The researchers spent a significant amount of time checking and deciding on numerous modifications.

The researchers made the decision to create chapter two as soon as chapter one is finished, which covers the review of related literature and related systems. The researchers took a long time and had completed by the third week of November as they made numerous errors, particularly while looking for related literature.

The researchers began drafting chapter 3 as soon as chapter 2 was complete. Because the researchers didn't know the template, they had to base their work on the works of others, which was challenging and confusing. The second week of December was when they began production, and the first week of January was when they concluded. As soon as chapter 3 was complete, the researchers worked on chapter 4, which includes requirement analysis and design of software, system, product and procedure. Although the process was difficult and didn't get much sleep during the process, it was all worthwhile when the research was completed.

MONTH ACTIVITY	September				October				November				December				January			
Project Proposal																				
Revision of Thesis Proposal																				
Chapter 1: Introduction																				

Purpose and Description of the Project																			
Objectives of the Study																			
Scope and Limitations of the Study																			
Chapter II. Review of Related Literature/ System																			
Review of Related Literature																			
Related Studies and/or Systems																			
Chapter III: Technical Background																			
TECHNICAL BACKGROUND																			
Theoretical Framework																			
Conceptual																			

Framework																			
Calendar of Activities																			
Chapter IV Methodology Results and Discussions																			
Requirement Analysis																			
Design of Software, System, Product and/or Processes																			

Table 2. Calendar of Activities for MONEYPEDIA: A Web-based Learning

Portal for Financial Literacy

Resources

Hardware

The researchers accomplished the project with the use of the following specific minimum hardware requirements.

	MINIMUM	RECOMMENDED
RAM	2 GB	4 GB or higher
Processor	Intel Core 2 Duo E8400 / AMD Athlon 200GE.	AMD Ryzen 3 3200g
Graphics Display	AMD Radeon HD 7660G or equivalent	AMD Radeon HD 7670M, equivalent or higher
Monitor & Screen Resolution	12", HD (1660 x 1050) LCD Monitor	19", HD (1920 x 1080) LCD Monitor
Hard Disk Capacity	100 GB or more	1 TB or more
Network Speed	25Mbps	50Mbps

*Table 1. Minimum and Recommended Hardware Specifications for MONEYPEDIA: A
Web-based Learning Portal for Financial Literacy*

Software

The researchers accomplished the project with the use of the following specific minimum software requirements.

- **Hypertext Markup Language (HTML)**

The HyperText Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets and scripting languages such as JavaScript. The researchers used HTML in constructing the structure of the web-based learning portal. HTML was also used in constructing the main interface of the website. The paragraphs, headers, hyperlinks, and all of the contents of the web-based learning portal were made using HTML.

- **Cascading Style Sheet (CSS)**

Cascading Style Sheets is a style sheet language used to describe a document's presentation in a markup language such as HTML or XML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript. This design language is crucial for researchers as much as HTML. It provided the themes and designs of the elements that were made using HTML. It made the elements appealing to the users and also helped in controlling the element's consistency.

- **Javascript (JS)**

JavaScript, often abbreviated as JS, is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS. The researchers used JavaScript to utilize the functionalities of the elements when the users interact with it. JavaScript was used to manipulate and control the various actions or events that the web-based learning portal will do when a specific action is done.

CHAPTER IV

METHODOLOGY, RESULTS, AND DISCUSSIONS

Requirements Analysis

The MONEYPEDIA: Web-based Learning Portal for Financial Literacy addresses the following needs of Future Entrepreneurs, Teenagers, and Finance Enthusiasts:

- **Who**

The Web-Based Learning Portal is created especially for the people who are interested in Learning Financial Literacy. The users that have access rights to managing and updating the Learning Portal are the Administrators only. Users that have no access rights can only interact with the website.

- **What**

Users of the system have different activities and functions which they can interact with while using the system. The Administrators always have access to organize all the users in the system for instance by adding and updating the Financial Literacy Information on the web-based learning portal. But in terms of control, the Administrators can fully control all the features and functionalities of the web-based learning portal. Moreover, all users can easily interact, view, and read all financial literacy information.

- **Where**

The Web-Based Learning Portal for Financial Literacy was implemented in STI college bacoar specifically developed for Future Entrepreneurs, Teenagers, and Financial Literacy Enthusiasts. The researchers are focusing on creating a Website for informing all users about the importance of Financial Literacy. This includes creating Financial Tools, validated Financial Literacy articles, and money management applicable to all users.

- **When**

A proposal was created, the research started in September of 2022, and its development was approved and started on the first of October 1 of the same year. Development of the system has been continuous since then until December 2022.

- **How**

The Web-based Learning Portal provides pieces of information about Financial Literacy for the current procedure that aims to inform all users that are visiting the web-based learning portal through reading financial literacy information and the development of Financial Tools.

Design of Software, System, Product, and/or Processes

Software Development Life Cycle (SDLC) is the process of creating the highest quality and lowest cost software in the shortest amount of time. It also provides a well-structured phase flow that helps enterprises quickly create high-quality software that is well-tested and ready for production use. The proponents have utilized the Waterfall Model as the design process for the development of the web-based learning portal due to its sequential flow of events. In a waterfall model, each phase must be completed before moving on to the next, and the phases do not overlap. The first Process Model to be introduced was the Waterfall Model. A linear-sequential life cycle model is easy to comprehend and use.

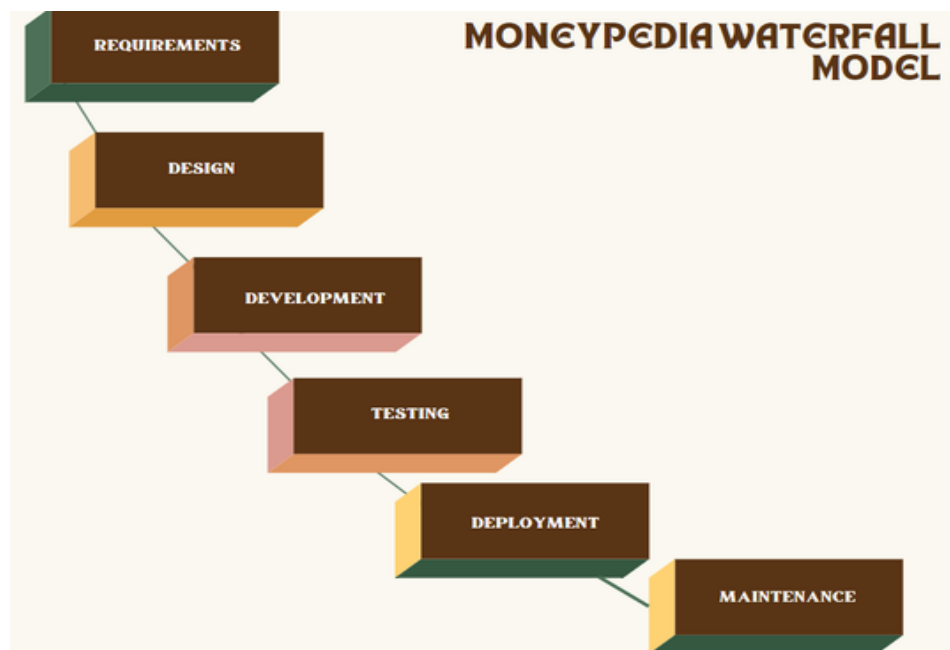


Figure 16. Waterfall Model for MONEYPEDIA: A Web-based Learning Portal for Financial Literacy

- **Requirements**

At the beginning of the project, the researchers conducted a project proposal to gather necessary information and requirements pertaining to the development of the website. The result of the project proposal has led the proponents to develop a web-based learning portal for financial literacy which is primarily focused on building MONEYPEDIA: Web-based learning portal.

- **Design**

In this step, the researchers designed the framework from the preceding steps. For the system construction, the system design will be assisting in defining requirements, for-instance programming languages, and hardware specifications.

- **Development**

This requires employing a specified syntax for encoding web structures or a programming language in a formal language in computer files, the implementation process parallels software development. Although automated technologies exist to assist with the creation of HTML documents, a solid understanding of HTML enhances the web implementor's knowledge. Verifying the ability of the system to be utilized is the responsibility of the next phase.

- **Testing**

This phase is where the website's functionality is tested. This phase will help the programmers know what kind of errors or bugs are present on the web-based learning portal. Failures and bugs were taken into consideration and fixed after the testing was pointed out by an IT professional and the researchers themselves.

- **Deployment**

After installation, if the preceding step was completed successfully, and the system was free of problems and errors. The MONEYPEDIA: Web-based Learning Portal is deployed on the Internet as a website for full accessibility and convenience to the users.

- **Maintenance**

Finally, following the deployment phase, the next step is to provide software support and maintenance to ensure that it functions smoothly. The major goal of this stage is to resolve any problems, faults, or bugs that the web-based learning portal and users encounter during use.

APPENDICES

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EVALUATION TOOL OR TEST DOCUMENTS

Capstone Project Evaluation Form from IT Professional

MONEYPEDIA: A Web-based Learning Portal for Financial Literacy

Full Name:

Profession:

Metrics	Question	1	2	3	4	5
Quality and Design	<ul style="list-style-type: none"> The design and function objectives of the team have been fully met. 					
	<ul style="list-style-type: none"> The system is visually appealing, easy to navigate, and implements clear module terminologies. 					
	<ul style="list-style-type: none"> The system looks accurate and complete 					
Technicality	<ul style="list-style-type: none"> The system is technically difficult and complex 					
	<ul style="list-style-type: none"> The developers were able to display their programming prowess through the system and has complete knowledge of its inner workings. 					
	<ul style="list-style-type: none"> The logic used within the system makes it evident that the proponents were able to apply their knowledge of math, engineering, and programming to solving the intended problem and developing system design. 					
Overall	<ul style="list-style-type: none"> The system is feasible and was able to do its intended objectives. 					
	<ul style="list-style-type: none"> The final presentation is accurate and complete. 					
	<ul style="list-style-type: none"> I am genuinely satisfied with the experience of the system and believe that it brings potential benefit to the client and parties it was made for. 					

Table 3. Capstone Project Evaluation Form from IT Professional for MONEYPEDIA:

A Web-based Learning Portal for Financial Literacy

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