

GOLDHUB (The Latest Gold Price Analysis System and Current Economic News)

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Abstract: The COVID-19 pandemic has had a significant impact on the global economy, causing inflation to emerge as a crisis for many people. As a result, some people have turned to investing in financial instruments such as the gold price market to supplement their income. Although gold is considered an inflation-proof asset, investing in the gold price market is extremely risky. Almost half of new investors lose money on their first gold investment due to a lack of information and gold investment tips. As a result, GOLDHUB (The Latest Gold Price Analysis System and Current Economic News) was created to assist investors by providing technical analysis and current economic news to make investment decisions easier. The GOLDHUB system provides investors with the latest technical analysis of the gold price that shows the gold price forecast for the future whether the price of gold rises or falls, allowing investors to make accurate investment decisions and potentially achieve profitable returns.

Keywords: Gold Price; Investment; Economic News; Investment Technical Analysis.



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1. INTRODUCTION

The COVID-19 epidemic that began in early 2020 is still being slowly overcome in the modern world. The world has been paralysed by the COVID-19 epidemic, particularly in terms of a nation's economy. Despite the fact that we have now moved successfully into the endemic phase, where the development of a vaccine has enabled us to combat the COVID-19 outbreak, there is currently a problem. The inflation issue that plagues individuals today is the crisis in question. A sustained increase in the cost of goods and services is referred to as inflation. People must therefore put in more effort in order to make enough money to maintain themselves. Investing is one of the side jobs that is beginning to draw a lot of attention in financial instruments such as the gold price market, foreign currencies or global stocks.

Investing in the gold price market is the most popular compared to other financial instruments. This is because it is widely known that gold is one of the inflation-proof assets. Nevertheless, for anyone who wants to invest in the gold price market, they do not run away from the risk of facing losses in the investment. Almost 70% of new investors in the gold price market experience losses in their investments due to lack of knowledge about current gold price movements. (INTRADAY.my, 2019)

GOLDHUB: This web-based online gold price analysis and economic news system has four main objectives, namely:

- a) Designing a system that can provide the latest analysis of gold prices to gold investors to help them make investments.
- b) Develop a system that can provide the latest economic news that will provide an indicator of the movement of gold prices to investors.
- c) Testing a gold investment calculator system that can help investors to calculate the profit and risk ratio for each gold investment.
- d) Build a system that can provide user support to system users if they need system admin help.

2. METHOD & MATERIAL

The development of a software system has several phases called the software development life cycle, there are several types of development models that can be applied in the process of developing a project. System development methodologies that are often used to develop systems are waterfall model, Rapid Application Development (RAD), prototype model and unified modeling language. Each model has its own advantages.

In developing GOLDHUB (a gold price analysis system and the latest economic news), the methodology used is a model prototype. One of the main factors in choosing this methodology to develop the Goldhub system is that this methodology only takes a short time compared to other methodologies. The construction of the system starts from the system planning to the prototype model until the final system product only takes a few months. Additionally, a prototype model is a software system development model in which prototypes are built, tested and then refined according to user requirements. There are four important phases in the prototype model which are the planning phase, the user needs analysis phase, the design phase and the implementation and development phase. These phases of the process will be repeated until the complete system is developed. This prototype model methodology applies an iterative modification process until the prototype system develops and meets the user's needs.

The four phases of the prototype model process are as follows:

- a) Planning phase
- b) Phase of analyzing user needs
- c) Design phase
- d) Implementation and development phase.

3. FINDINGS

Goldhub: The Latest Gold Price Analysis System and Current Economic News online based on the web was developed to make it easier for investors to get economic news that affects the movement of gold prices and the latest analysis of the movement of global gold prices.

This section explains the GOLDHUB system analysis study covering GOLDHUB system sketches based on diagrams such as context diagrams, data flow diagrams, flowcharts, and several sketches used to develop this system. In addition, system analysis is a method to find solutions to

existing system problems by grouping existing components into smaller ones so that the solutions found are in line with the requirements of the GOLDHUB system.

In addition, the system analysis is also to ensure that the developed system meets the requirements of the GOLDHUB system. There are several contributing factors that the system analysis needs to be carried out, among which are:

- a) Describes the system flowchart as a guideline in developing the GOLDHUB system.
- b) Explaining the initial picture of the GOLDHUB system travel process developed to ensure the smooth running of the GOLDHUB system development process.
- c) System analysis can ensure that the development process of the GOLDHUB system can be carried out more efficiently, easily and systematically.

3.1 Analysis Phase

The analysis phase is the phase in which the study of the needs and requirements of the system before a system is built. In Figure 1 is a diagram of the analysis process. In this phase, there are four main processes used in performing system analysis of the GOLDHUB system. Among them are need modeling (software and tools), data and process modeling (Context Figure, Zero-Level Data-Flow diagram, Data-Level Flow Diagram 1), object modeling (Entity Relationship Figure), transition to system design (Data Dictionary, Flowchart, Hierarchy Chart). (Dennis,2012)

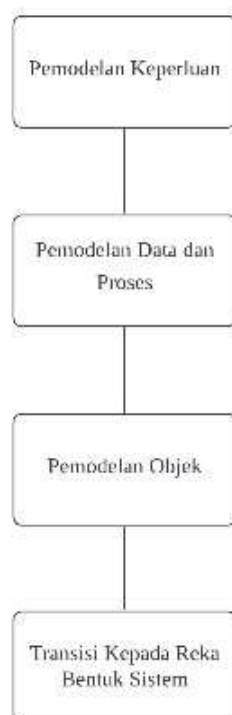


Figure 1. Analysis Phase Process

3.2 Data Modeling Phase

For the data modeling phase is used to represent each data that exists in the organization by using an entity relationship diagram. Modeling helps to give an idea and understanding of the current system to be developed. GOLDHUB (Gold Analysis and Latest Economic News) is illustrated as a symbol representing processes, inputs, databases and output. Figure 2 shows the GOLDHUB context diagram. This system will be adopted by four entities, namely: User, Analyst, Admin/Writer/News Reader, Tradingview.

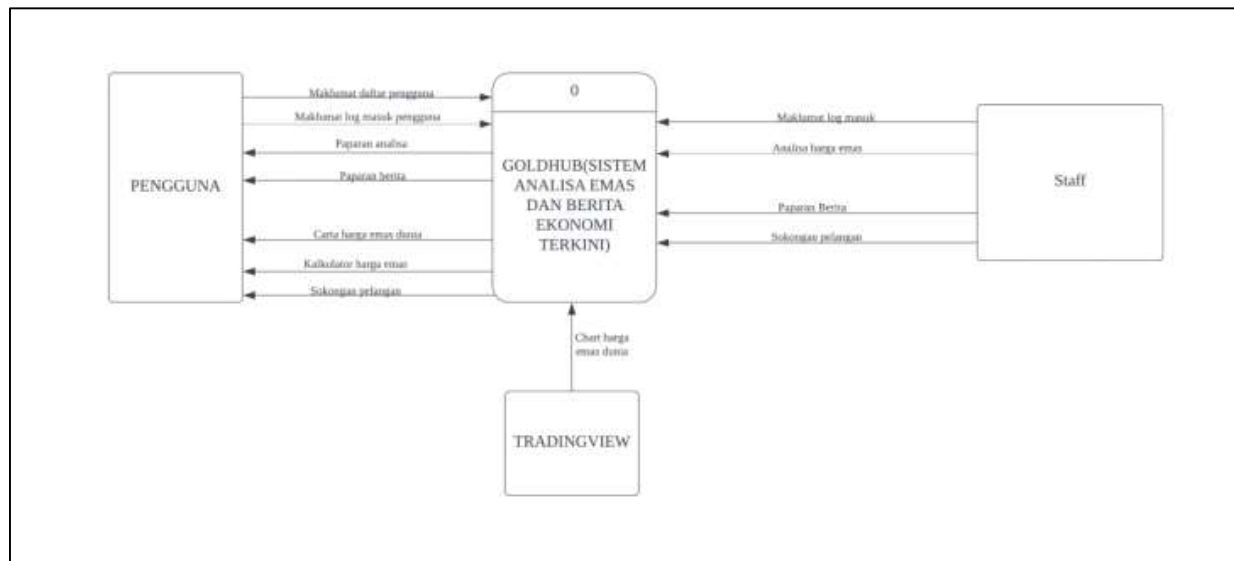


Figure 2. GOLDHUB Context Figure

3.3 Zero Level Data Flow Figure

This zero flow diagram is a continuation of the context diagram. This diagram will explain in its entirety about the GOLDHUB system. In addition, this diagram is a combination of the entire data highlight, data flow, process and external entity. Figure 3 shows the GOLDHUB zero flow diagram.

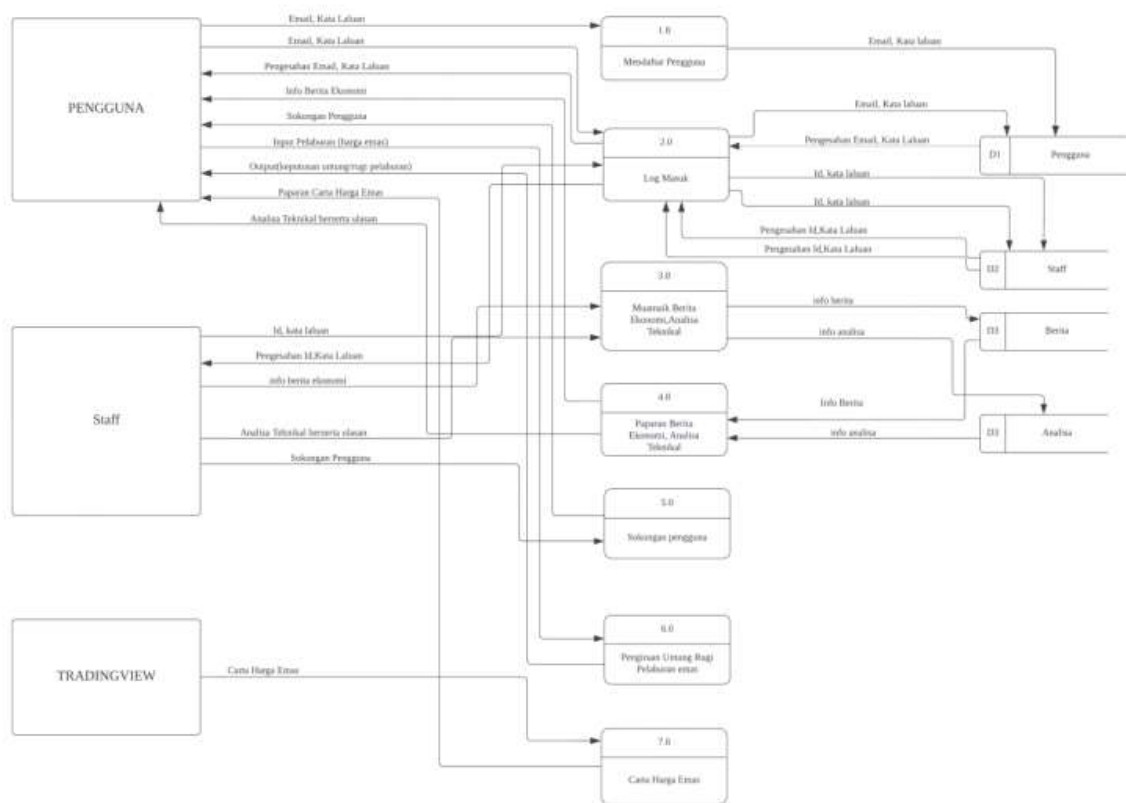


Figure 3. GOLDHUB Zero Level Flow Diagram

Figure 3 illustrates the entire process involved in enabling users to access the GOLDHUB website and obtain gold technical analysis and the latest economic news. GOLDHUB staff consisting of Analysts, Admins, Writers, Newsreaders will upload news info such as the latest economic news, economic news podcasts and technical analysis of gold prices. Then, users need to log into the GOLDHUB system to get a view of economic news and technical analysis of gold prices or listen to the latest economic news podcasts. GOLDHUB staff such as Analyst, Admin, Writer, Newsreaders also need to log into the system to check the content of economic news, technical analysis of gold prices and podcasts in the GOLDHUB system. In addition to read economic news and technical analysis of gold prices, users can also make a profit and loss calculation of gold investments to plan a profitable gold trading plan. Users can also access the latest gold price chart to get an overview of the current gold price movement.

3.4 Transition Phase to System Design

This phase is the final stage for the process of switching from data modeling and processes to actual design. Among the methods and methods that can be included in this phase are hierarchical charts, data dictionaries, and flowcharts. Methods and entities are chosen because they can explain the development of the system in more detail so that the journey of developing this system can be done in a more orderly manner.

3.5 Hierarchy Chart

Figure 4 shows the hierarchical chart of GOLDHUB. This chart illustrates the overall design of the developed system. The GOLDHUB system is divided into 3 entities, namely Users, Staff and one

external entity, Tradingview as the data provider for the current gold price chart. Staff will log into the system first and will upload technical analysis, Economic News and User Support. For Users, new users need to register user information first and then log in GOLDHUB system. For existing users, users only need to log into the GOLDHUB system. Then, Users can choose whether to view the technical analysis display, display economic news, make a profit and loss calculation of gold investments and gold price chart. Staff can also update any notifications in the system if there is any information they wish to communicate to the user.

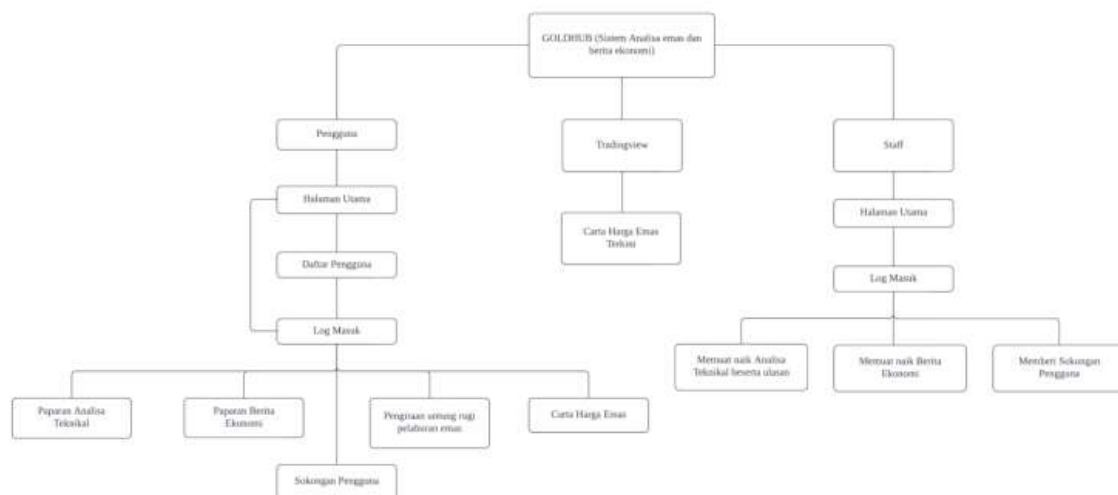


Figure 4. GOLDHUB System Hierarchy Chart Diagram

3.6 Flowchart

The course of the entire system is described as a flowchart below. Figure 5 describes the flowchart of the user process sequence. Figure 6 shows the staff's flow in the system.

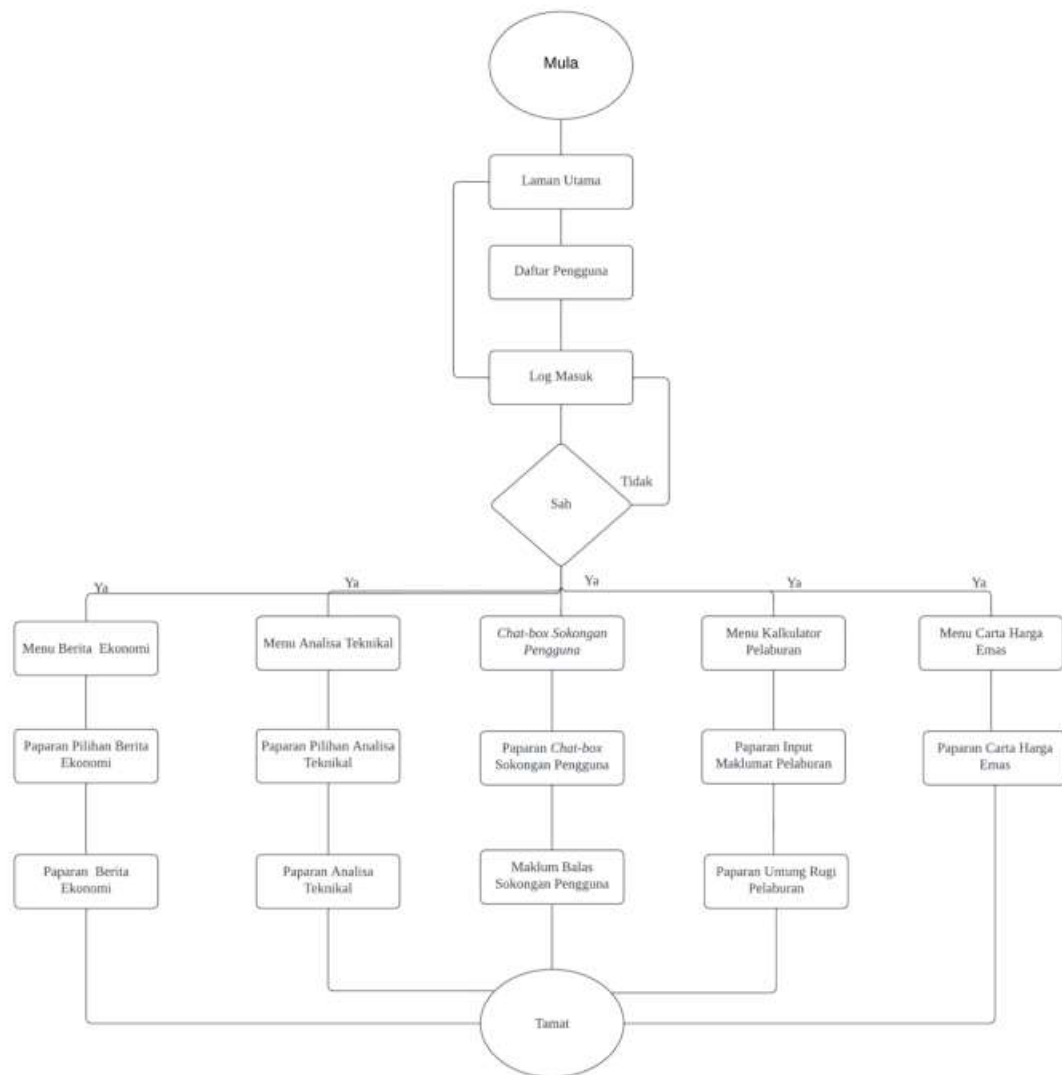


Figure 5. GOLDHUB System Flowchart – User

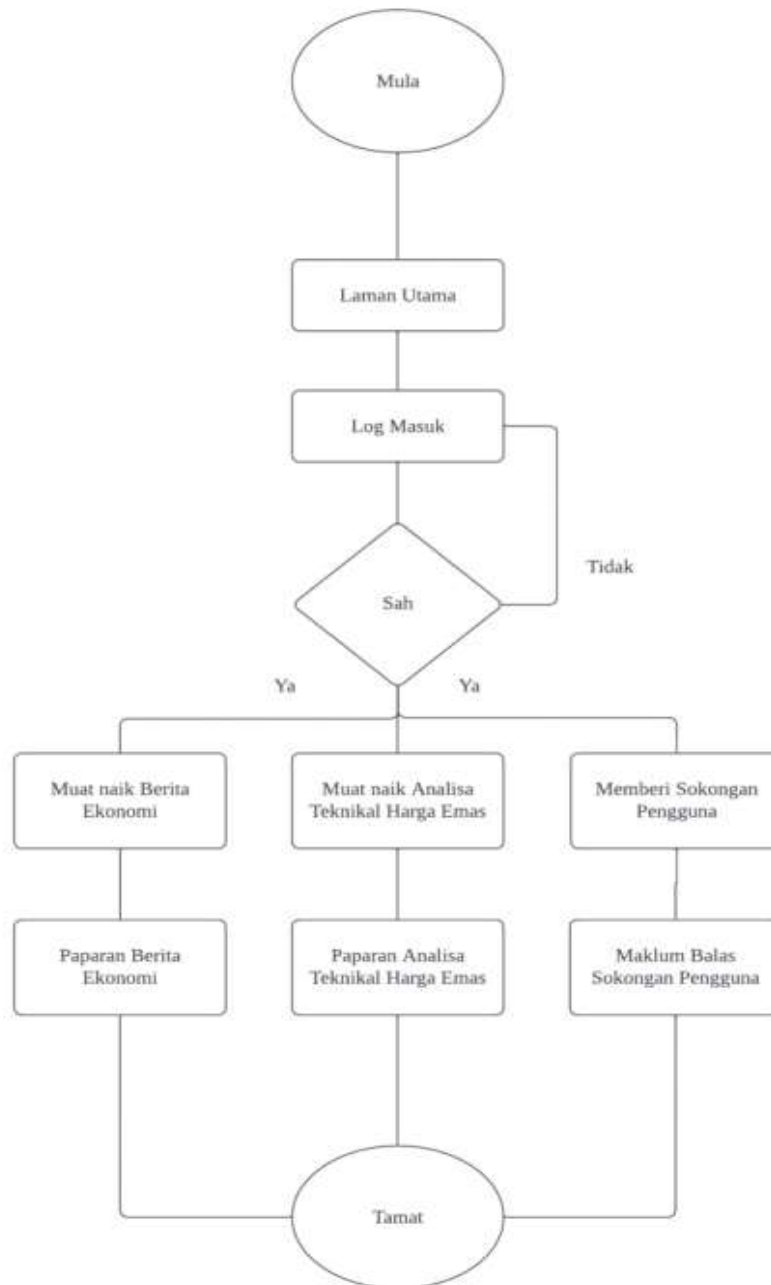


Figure 6. GOLDHUB System Flowchart – Staff

3.7 Interface

Figure 7, 8, and 9 shows the interface design of the developed system.



Figure 7. GOLDHUB Homepage Interface



Figure 8. GOLDHUB Economic News Interfaces



Figure 9. GOLDHUB Technical Analysis Interfaces



Figure 10. GOLDHUB Technical Analysis Interfaces

4. DISCUSSION

The Goldhub has 3 novelties and uniqueness. First, the novelty is about the technical analysis of the gold price chart that uses the Elliot wave theory. This theory has been applied for almost 100 years by stock market experts to predict the world stock market. Secondly, the gold economic news released is a summary of the world economic news and data released by the bank which is difficult for new investors who have no knowledge base in economics to understand. The third is an investment profit and loss calculator that helps investors to make profit projections for their gold investments.

Goldhub opens a new opportunity for people to get to know more deeply about the world of gold investment. Previously, only individuals with knowledge in the field of financial investment were aware of the role and importance of gold in investment and not as jewelry only. Goldhub will also assist new investors in building a more profitable investment portfolio with the help of technical analysis of the gold price that provides gold price predictions for the next few months ahead.

Goldhub is the first website in Malaysia that provides the latest content on world gold prices. Goldhub has the potential to become one of the investment websites that focus on gold investment because existing websites focus more on stock investments.

5. CONCLUSION

In conclusion, GOLDHUB is a website that will bring changes to the style of gold investors doing gold price analysis and getting current economic news. Each analysis of the system's advantages and disadvantages as well as problems and constraints encountered throughout the development process is discussed in detail. There are also some suggestions for future improvements. It is intended that this system can be upgraded and can function effectively.

The GOLDHUB system has been successfully developed. There are several achievements that can be measured through the stated objectives. The objectives of this system were successfully achieved which are:

- a. The result is a system called the GOLDHUB system to make it easier for gold investors to get economic news input to help make decisions in gold investment.
- b. The existence of a system that will provide technical analysis of gold prices to gold investors. This technical analysis can help gold investors in finding opportunities to invest in gold at a low price.
- c. This system provides a gold investment calculator that helps investors calculate the risk and profit for each of their gold investments.

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