# STOCK AND SALES REPORT AT CV. GOLDEN BELL

***SKRIPSI***

**By:**

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**17020009**

**INFORMATION SYSTEM STUDY PROGRAM**

**INSTITUT BISNIS IT&B**

**SEPTEMBER 2021**

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**THIS *SKRIPSI* IS DONE AS ONE OF THE REQUIREMENT TO COMPLETE THE BACHELOR DEGREE ON THE STUDY PROGRAM OF INFORMATION SYSTEM**

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**SEPTEMBER 2021**

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Degree : Bachelor Degree (S1)

Title of *Skripsi*  :

**STOCK AND SALES REPORT AT CV. GOLDEN BELL**

I confirm that the materials contained in this *skripsi* have not been published before or presented by another program or degree in a university, and materials contained in this skripsi are my own work, not a “**duplicate**” from other. Where the words of other have been drawn upon, whether publishes or unpublishes, due to acknowledgements have been given.

If there were any “**claim**” in the future any parties, it is not responsibility og the *Skripsi* advisor nor the Information System Faculty, but the writer’s sole responsibility.

With these statements, I make myself with honor and truth without anyone’s coercion.

Medan, 28th September 2021

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# LETTER OF APPROVAL \\BILLING-SERVER\Vaultz\Logo\IT&B-small.png

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| Date 28th September 2021  **FYP Advisor**  **(Dr. Thamrin Kwan)** |
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# LETTER OF VALIDITY\\BILLING-SERVER\Vaultz\Logo\IT&B-small.png

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**Acknowledged by,**

**Head of Information Systems Study Program**

**(Dr. Thamrin Kwan)**

# 

# PREFACE

First of all, the writer feels grateful to the Almighty Lord for His blessing and mercy, thus the writer has finished this *skripsi* to fulfill one of the requirements for completing the Bachelor Degree (S1) on the Study Program of Information Systems, IB IT&B.

In accomplishing this writing, the writer has found a lot of difficulties either from the limitation of ability, time or strength. Therefore, the writer would truly appreciate the help of all parties for their support, guidance, instructions, insights, encouragement, motivation, advice, and suggestions so this writing can be completed. In this opportunity, the writer would like to express the greatest gratitude to:

1. Dr. Agus Susanto as the Managing Director IB IT&B.
2. Ms. Rosita Bangun, SE., M.Si as the Rector of IB IT&B.
3. Mr. Thamrin Kwan, Bsc, MM as the Head of Information Systems Study Program IB IT&B and as the *Skripsi* Advisor who has guided and given instructions and suggestions for the completion of this *Skripsi*.
4. All staffs of IB IT&B.
5. All lecturers of IB IT&B.
6. My parents and family who have given motivation and continual support in accomplishing this *Skripsi*.
7. All of my friends in IB IT&B who have motivated and shared a lot of information for accomplishing this *Skripsi*.
8. All parties who have contributed and given the help either in the form of criticism or suggestions for the accomplishment of this *Skripsi*.

Finally, the writer realizes that this writing is still far from perfection due to the limitation of ability, facilities, time and knowledge. Therefore, it would be an honor for the writer to receive any criticisms and suggestions from readers. The writer would truly appreciate the criticism and suggestions and receive it as a good input for further improvement. Hopefully, this writing will be useful for the writer himself and the readers.

Medan, 28 September 2021

The Writer

(KELVIN KARNADI)

# ABSTRAK

**STOK DAN LAPORAN PENJUALAN DI**

**CV. GOLDEN BELL**

**IB IT&B – MEDAN**

**KELVIN KARNADI**

**17020009**

Perkembangan Teknologi Informasi saat ini membuat setiap perusahaan meningkatkan kualitas kinerja dalam upaya menghadapi persaingan global yang semakin pesat. Perusahaan dan pelanggan tidak perlu lagi datang ke perusahaan untuk melakukan transaksi, semuanya kini dapat dilakukan melalui website atau aplikasi mobile. Sebuah perusahaan dituntut untuk memiliki website untuk berkomunikasi dengan pelanggan agar dapat bersaing dengan perusahaan lain yang bergerak di bidang yang sama.

CV. Golden Bell adalah perusahaan dagang yang bergerak di bidang peralatan laboratorium. CV. Golden Bell saat ini masih menggunakan cara semi komputer, yaitu Purchase Order dan Stock Report masih menggunakan Microsoft Excel untuk input datanya. Data tersebut kemudian akan dicetak di kertas, di mana akan dilakukan pengecekan stok setiap bulannya.

Cara ini kurang efektif baik dari segi waktu maupun biaya karena dapat terjadi ketidaksesuaian antara laporan stok dengan stok yang sebenarnya, yang berarti stok harus diperiksa setiap bulan untuk menghindari masalah. Dan juga, akuntansi selalu kesulitan dalam mencari tagihan dan faktur penting atau mencari lokasi barang yang akan menghabiskan banyak waktu.

Berdasarkan uraian di atas, penulis memutuskan untuk membuat sebuah program yang disebut “Laporan Stok dan Penjualan pada CV. Golden Bell” untuk membantu CV. Golden Bell untuk mencegah kesalahan stok, memakan waktu pencarian informasi, dan juga memudahkan pemilik untuk melihat laporan.

**Kata Kunci: Stok, Laporan Penjualan, Aplikasi**

# 

# ABSTRACT

**STOCK AND SALES REPORT AT**

**CV. GOLDEN BELL**

**IB IT&B – MEDAN**

**KELVIN KARNADI**

**17020009**

The development of Information Technology nowadays made every company improving the performance quality in effort to face the increasing rapid of global competition. Companies and customers are no longer need to go to the company in order to make a transaction, everything can now be done through the website or mobile application. A company is required to have a website to communicate with customers in order to compete with other companies that engaged in the same field.

CV. Golden Bell is a trading company engaged in laboratory equipment. CV. Golden Bell nowadays still using the semi-computer way, in which the Purchased Order and Stock Report is still using the Microsoft Excel to input the data. The data then will be printed in the paper, in which will be checking the stock every month.

This method is less effective both in terms of time and cost because there can be a mismatch between the stock report and the actually stock, in which mean the stock have to be checked monthly to avoid the problem. And also, the accounting always have the trouble in finding a bill and important invoice or search for the items location that will consume a lot of time.

Based on the description above, the writer decides to make a program called “Stock and Sales Report at CV. Golden Bell” to help CV. Golden Bell to prevent the mistakes having in the stock, time consuming of searching information, and also easier for the owner to see the report.

**Keywords: Stock, Sales Report,Application**

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# CHAPTER 1

**INTRODUCTION**

## BACKGROUND OF STUDY

The development of Information Technology nowadays made every company improving the performance quality in effort to face the increasing rapid of global competition. Companies and customers are no longer need to go to the company in order to make a transaction, everything can now be done through the website or mobile application. A company is required to have a website to communicate with customers in order to compete with other companies that engaged in the same field.

CV. Golden Bell is a trading company engaged in laboratory equipment. CV. Golden Bell nowadays still using the semi-computer way, in which the Purchased Order and Stock Report is still using the Microsoft Excel to input the data. The data then will be printed in the paper, in which will be checking the stock every month.

This method is less effective both in terms of time and cost because there can be a mismatch between the stock report and the actually stock, in which mean the stock have to be checked monthly to avoid the problem. And also, the accounting always have the trouble in finding a bill and important invoice or search for the items location that will consume a lot of time.

Based on the description above, this research will take the title "STOCK AND SALES REPORT SYSTEM FOR CV. GOLDEN BELL". This implementation of computerized system will help the owner and worker of doing the jobs, in demanding the efficiency of time and cost for the company. CV. Golden Bell is located on Jalan Timor Komplek Centre Point Block M-II, Medan. The owner plan to improve the store, so this company is really suitable for the project.

## PROBLEMS IDENTIFICATION

Problem identification is the initial step of performing a research. It is aimed to assess the problem in order to find the solution. Based on the background of the study that had been described previously, the writer has identified the problem in this research.

Based on the background, the problem identification is:

1. **Unmanageable and messy storage**. The stock of Golden Bell is really messy. It sometimes can be mismatch between the stock report and the actual stock. And even until June 2020, they never write down how many stock they have and how many stock left. Since all the employees can get into the storage and pick what they had sell without any camera or people who control it, the product could be theft by the employees. This is the critical problem because it will cause the financial lost to the company.
2. **Human Error.** CV Golden Bell is using the semi computer way, that there is no computer database in the company that can save the data. The worst thing is sometimes the invoice can be thrown away by the employee. And if any time when the employee need to check the information, they just hope from the email to search. And also, sometimes when there’s product have to be indent from the customer purchased order for a long time, the employee also can forget about the product because there’s so many purchased order to be handled.
3. **Time Consuming and hard to find certain information.** The owner and employee is really hard to find the information because they put the invoice in one folder, and when they need they find in the folder one by one. This is the worst case in CV Golden Bell because it takes time to find any information in using the printed way. And this things happen really often, where the owner is hard to find any important information or when the customer need, because it’s to many information that printed in one folder.
4. **Intangible book reports.** There’s no report that store in the owner hand. The owner doesn’t know how many transaction happened everyday, how much sales and daily profit because there’s no report of the Purchased Order to the owner. And the worst case is, sometimes the employee also doesn’t know when the customer have the payment, because of too many purchased order to proceed in one month. This is dangerous for the company because it could cause a lot of financial lost to the company.

## THE SCOPE OF STUDY

The Scope of study in this research is the database of the company, the information of the company. After find out all the problems from the company, the author decide the scope of study is:

1. The process of search to find certain information, input, edit and delete the details of certain customer, details of the stock, product details and supplier details.
2. The process of counting and calculating every time if there’s a purchase order.
3. The process of managing the stock of the products and all the information how many in and out.
4. The process of displaying the daily report and monthly report.

## OBJECTIVES OF STUDY

Based on the problem that has been identified in this study, the objective of this study would be:

1. The storage will be clearly seen by anyone, reduce the mismatching between the stock report and actual report, and when the product is almost out of stock, the owner can see through the system and can immediately take action to restock it.
2. The risk of losing bill or invoice will be reduce because all of the information will be stored on the system.
3. It will be a lot faster on searching information about the customer, the suppliers and the product using the system. So the employee and also owner will be easy to find and take less time to find.

All the transaction details from purchase, sales, indent product etc can be seen clearly in one software. So the owner can monitoring the daily transaction and can see how much profit in daily and monthly.

## BENEFIT OF STUDY

The benefit of this Stock and Sales Report System for CV Golden Bell are:

1. For the author : The program is to accomplished the fullfillement of the final year project.
2. For the company : As an input for the company to solve the problems nd difficulties that occurred usually, like:
3. The owner can manage the storage using the program by knowing the quantity of the product that left in the storage.
4. The system will reduce some of the human error and will work faster than the semi-computer system.
5. By using the program, it will reduce the time consuming than the manual way in searching for the certain important information.
6. All the transaction can be known by the owner so the owner can know the finance of the company report daily, monthly and yearly.

For the other reader : Further researcher can use this research for this reference for further measurement of making the stock and sales report system for the company.

## **RESEARCH METHOD**

## **Research OBJECT AND LOCATION**

In this development, the developer will conduct a research at CV Golden Bell that is located in Jalan Timor Komplek Centre Point Blok M-II, Gang Buntu, Kecamatan Medan Timur, Medan 20231. The company handles a stock and purchased order using a writing hands and Microsoft Excel. The company also stored the information that have been printed in one folder.

Any Object that is used for the developing stock and sales report are:

* PC, with the minimum of Windows 7, Intel i3,and Memory 4GB
* C# for developing the stock and sales system
* SQL Server, a software product with the primary function of storing and retrleving data as requested by other software applications which may run either on the same computer or on another computer across a network

## DATA ANALYSIS

The developer collecting the primary data by going to the company to do an observation about the working process of this company.while observing the working process,the developer also need to take the database of the company to develop the software. The result of the observation will be as example, how does the company works, how long do the company recheck for the stock, and how they store the information like invoice, product list, customer list, etc.

## Data ANALYSIS METHOD

The method of conducting this development is a case study whereas the developer does not apply hypothesis. The data acquired from the company is analyze and compare with theoretical background. In this research, the developer attempts to find out how the implementation of the system will be effective to the customer instead of the manual way that company used to do. The developer will use several steps to analyze the data :

1. How do the staff work in the manual way?

2. How long do the owner need to search the certain information?

3. How the owner can calculate the profit of the company daily, monthly, and yearly?

4. How long do the company should recheck the stock and how long do employee check the stock?

# CHAPTER 2

**THEORITICAL BACKGROUND**

## INTRODUCTION TO INFORMATION SYSTEM

## INTRODUCTION TO SYSTEM

According to Jogianto (2005: 2) that the system is a collection of elements that interact to achieve a certain goal. This system describes an event that is inseparable from the components that form a complete and continuous form a flow of procedures, and functionally inseparable which makes each of these components stand on certain functions to achieve a certain goal.

Jogianto (2005: 3) suggests that the system has certain characteristics or characteristics, namely:

1. Components

A system consists of a number of components (components) that interact with each other, which means working together to form one unit.

System components or system elements can be a subsystem or parts of the system. Each subsystem has the properties of the system to carry out a certain function affecting the overall system process.

1. System Limits.

System boundary (boundary) is an area that limits one system to another or with its external environment. The boundaries of a system show the scope of the system.

1. Environment Outside the System.

External environment (environment) of a system is anything outside the system boundaries that affect the operation that must be considered so as not to interfere with the survival of the system.

1. System Connectors

The liaison (interface) is a medium that connects one subsystem to another subsystem which will form a single unit.

1. System Input

Input (input) is the energy put into the system. Input can be in the form of maintenance input which allows the system to operate and signal input which is energy or data to be processed into information.

1. System Output

Output (output) is the result of processed energy and classified into useful output and residual disposal.

For example, for a computer system, the heat generated is useless output and is the result of disposal, while information is the output required.

1. System Management

A system can have a processing part that will convert input into output. An accounting system will process transaction data into financial reports and other reports required by management

1. System Goals

A system must have a goal (goal) or target (objective). If a system does not have a target, then system operation will be of no use. The target of the system very much determines the required input and the output that the system will produce.

## **INTRODUCTION TO INFORMATION**

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## INTRODUCTION TO INFORMATION SYSTEM

In general, an information system is a system consisting of a series of information subsystems on data processing to produce information that has a meaning and use value in making a decision.

According to O'Brien (2006: 5), information systems are any regular combination of people, hardware, software, computer networks and data communications, and databases who collect, modify and disseminate information in an organization.

## Component of Information System

According to Mustakini (2009: 43) the information system has six components, namely input components, model components, output components, technology components, database components and control or control components.

As a system, these six components must exist together and form one unit. If one or more of these components does not exist, the information system cannot perform its function.

The following is an explanation of the components of the information system, namely:

1. Component Input

Input is data that is entered into the information system. This component needs to exist because it is the basic ingredient in information processing.

1. Model Components

Information generated by information systems comes from data taken from databases that are processed through certain models.

1. Component Output

The product of the information system is output in the form of useful information for its users. Output is a component that must exist in the information system.

1. Technology Components

Technology is an important system component in information systems. Without supporting technology, the information system will not be able to produce information on time.

1. Database Components

Database (database) is a collection of data that are interconnected with one another, stored on the computer's hard disk, and used by software to manipulate it. Data needs to be stored in a database for the purposes of providing information.

1. Control or Controlling Components

The control component is an important component and must be present in the information system. This control component is used to ensure that the information generated is strong information.

As a system, these six components each interact with one another to form a single unit to achieve its goals.

## PURPOSE OF INFORMATION SYSTEM

According to Mustakini (2009: 36), the purpose of information systems is to produce information (information) is data that is processed into a form that is useful for its users. The objectives of the information system consist of usefulness, economy, reliability, customer service, simplicity, flexibility.

1. Usability

The system must produce information that is timely and relevant to making decisions by management and operating personnel in the organization.

1. Economy

All parts of the system components including reports, controls, machines must contribute a benefit value at least equal to the cost required.

1. Reliability

The system output must have a high degree of accuracy and the system itself must be able to operate effectively even when the human component is absent or when the engine component is not operating temporarily.

1. Subscription Services

The system must provide good service or be friendly to customers.

1. Simplicity

The system should be simple enough, so that it is structured and its operations can be easily understood and the procedures are easy to follow.

1. Flexibility

The system must be flexible enough, to handle the changes that occur, its importance is reasonable in the conditions in which the system operates.

## VISUAL STUDIO 2015

Visual Studio is a suite of applications created by Microsoft to give developers a compelling development environment for the Windows and .NET platforms. (Avery,2005) Visual Studio can be used to write console applications, Windows applications, Windows services, Windows Mobile applications, ASP.NET applications, and ASP.NET web services, in your choice of C++, C#, VB.NET, J# and many more. Visual Studio also includes various additional development tools, such as Visual SourceSafe; which tools are included depends greatly on edition of Visual Studio that you are using.

They give you a solid package where you can have all the tools you need to develop a windows 10 applications. However, the colorless UI often makes you hard to locate those small icons quickly. (Binstock, 2012) Even though, it’s quite hard to locate the icons, they now offers “quick launch”, where you can see the most recent controls you’ve used, the documents you’ve opened, or menus or options you’ve selected where you will be directed with just a click. (Graham, 2012)

## **MY SQL**

Database is a collection of data arranged in such a way as to form very useful information. The database is formed from a group of data that has the same type / trait. Take, for example, data in the form of names, classes, addresses. All the data is collected into one new data group, let's call it student data.

Likewise, a collection of student data, lecturer data, financial data and others can be collected again into large groups, for example polytechnic data electronics. Even in its development, these data can take various forms kinds of data, for example it can be in the form of a program, sheets for entry (enter) data, reports. All of them can be collected into one which is called database. One of the most popular database languages is SQL.

MySQL commonly read mai-es-ki-el or mai-se-kuel is a software relational database (Relational Database Management System or RDBMS) such as Oracle, Postgresql, MS SQL and so on.

SQL or an abbreviation of Structured Query Language is a syntax of commands particular or programming language used to manage a database. So, MySQL and SQL are not the same. In short, MySQL is the software and SQL is command language.

When comparing MySQL with other database systems, it is necessary think about what is most important as needed. Is the display, support, SQL features, security conditions in the license, or price issues. With these considerations, MySQL has many things to offer, including:

1. Based on the speed, many experts give an opinion that MySQL is fastest server.

2. MySQL has high performance but is a simple database that makes it easy setup and configured.

3. MySQL tends to be free for certain uses.

4. MySQL understands SQL (Structured Query Language) which is the system's choice modern database.

5. Many clients can access the server at one time. They can use a lot database simultaneously.

6. MySQL databases can be accessed from any place on the internet with certain permissions.

7. MySQL can run on many Unix variants just as well, as well as when running on non-Unix systems.

8. MySQL is easy to get and has source code that can be distributed so can be developed further.

9. Can be connected to C, C ++, Java, Perl, PHP and Python.

If the above are the advantages possessed by MySQL, then MySQL too has disadvantages such as:

1. For connection to visual programming languages ​​such as Visual Basic, Delphi, and Foxpro, MySQL is less supported. Because this connection causes the fields to be read must match with the connection from the visual program. And this is why MySQL is rare used in visual programs.

2. The data handled is not that big.

## CRYSTAL REPORT

According to Atmoko (2013: 3) "Crystal Report is a component that will we use to create a report or a report from the program that we are going to create, in order to be understood by the user, which the report is taken from collection of data from tables stored in the SQL Server database ”.

Meanwhile, according to MADCOMS (2010: 10) "Crystal Report is a a separate program from the Microsoft Visual Basic 6.0 program, however both can be linked (linkage) ”.

In business and enterprises of all kinds, organizing and presenting information has traditionally been the job of documents called reports. These documents generally comprise multiple pages that can include text, numbers, charts, maps, and illustration. The best reports convey the facts needed to make the best decisions, unobscured by a clutter of data irrelevant to the task at hand. (Beaulieu. A, 2009)

Based on the above understanding, Crystal Report is a component used in creating reports from programs created from Microsoft Visual Basic 6.0 so that it can be understood by users, based on data stored on SQL server.

## **DEVEXPRESS**

DevExpress is a leading supplier of ASP.Net controls which are used in ASP.Net sites and are used to add features, ease tasks and save users time in creating programs. It is an additional application for Visual Studio which contains controls that will help to create a professional application (from in terms of user interface), more complete features, and faster data management.

DevExpress also offers a set of presentation and reporting components and adds several functions, which is why every website that uses ASP.Net uses this application a lot because of its ease of beautifying its appearance without entering a lot of coding. (Vbulletin, 2010)

## DATA FLOW DIAGRAM (DFD)

Ladjamudin (2013: 64), Data Flow Diagram (DFD) is a model of system to describe the division of the system into smaller modules.

The most basic diagram on data flow diagram is called as context diagram, a drawing pattern which is to show how information system interact with their surrounding where the system is placed.

In context diagram, there are few things that need to be noted (Oetomo, Perencanaan dan Pembangunan Sistem Informasi, 2002):

1. User, Internal or External of the company or the development which is used the system, where the system is going to be placed must be identified in detail.
2. Processes, which is going to happen inside the system, must be identified completely.
3. Direction of the arrowhead, must not be inverted to give proper explanation to the whole system proper explanation to the whole system processes that will be created.
4. Any event or processes drawn in simple textual shape and easy to understood of the system maker.

The process can be expanded can be done if we need to explain in-depth about some processes. (Oetomo, Perencanaan dan Pembangunan Sistem Informasi, 2002)

Below is the symbol Data Flow Diagram

Table 2.1 Data Flow Diagram Symbols

| Notation | Reperesent |
| --- | --- |
|  | External Entity |
|  | Process |
|  | Data Store |
|  | Data Flow |

The explanation of the symbols:

1. Rectangle represent External entity or input (input) or output (output) or people who wears / interacts with software that is modeled or other systems associated with data flow of the system being modeled.

Note: The name used on input (input) or output (output) usually a noun

1. Oval or circle represent Process or function or procedure; on modeling software to be implemented by programming structured, then this notation modeling which should be a function or procedure in the program code.

Note: The name given to a process is usually a verb

1. Two parallel lines represent Files or databases or storage (storage); on modeling software which will be implemented with structured programming, then modeling this notation should be made into database tables needed, these tables must also match designing tables in the database ERD, Conceptual Data Model (CDM), Physical Data Model (PDM).
2. Arrow shows Data streams; represents the data sent between processes, from storage to process, or from process to input or output (output).

Note: That name used in data streams usually in the form nouns, can be preceded by a data word for example "student data".

# CHAPTER 3

**RESEARCH METHODOLOGY**

Research refers to a search for the knowledge. Once can also be define as a scientific and systematic search for the information on a specific topic. Research Methodology means the process used to collect information and data for the purpose of making business decisions. This methodology may include publication research, interviews, surveys and other research techniques, and could include both present and historical information. The benefit of research methodology is that it enriches practitioner and his practices; Provide chance to study a subject in depth; Enable us to make intelligent decisions; Understand the material which no other kind of work can match etc.

## **RESEARCH OBJECT AND LOCATION**

The object of this research focused on CV Golden Bell that located in Medan, North Sumatra. CV Golden Bell nowadays use the semi-computer system that done by the director and employees. The location of this research is at Jalan Timor Komplek Centre Point Blok M-II.

## DATA ANALYSIS

The approach that will be used to gather the information that is needed is by doing an interview and doing an observation.

## DATA COLLECTION METHOD

There are two ways of data collection the research will use:

1. Observation

The researcher will use observation to the current business flow and method in CV Golden bell to see the process of the business, because it is necessary to gain enough information for this thesis writing about inventory system. From observing the previous business flow and method, information about how the company actually works and what was lacking. These information then become review to create a better system and environment for the company. The observation will be done at work time from 8.30 AM in the morning until 5 PM in the afternoon within a week from Monday to Friday.

1. Interview

The researcher use the interview method to gain the information directly regardings the relevant subject to understand the flow of the company more efficient and effective.

Below are the subject that will be interview:

1. Director

The director know all the business data flow in CV Golden Bell, so overview of the information about the company such as what is happening inside the company that can be gained.

Expected Information: The flow of the CV Golden Bell

1. Warehouse Staff

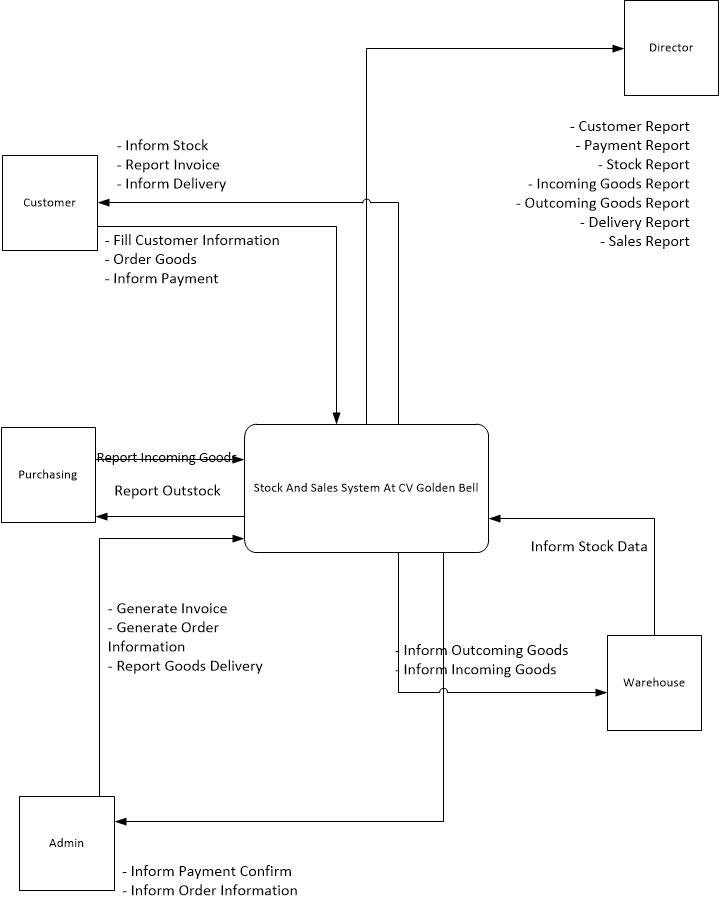
Warehouse staff is the one that update stock and ensure stock amount daily that really time consuming, often makes them had to do overtime.

Expected Information: What is the problems, what is the solution in the staff opinions.

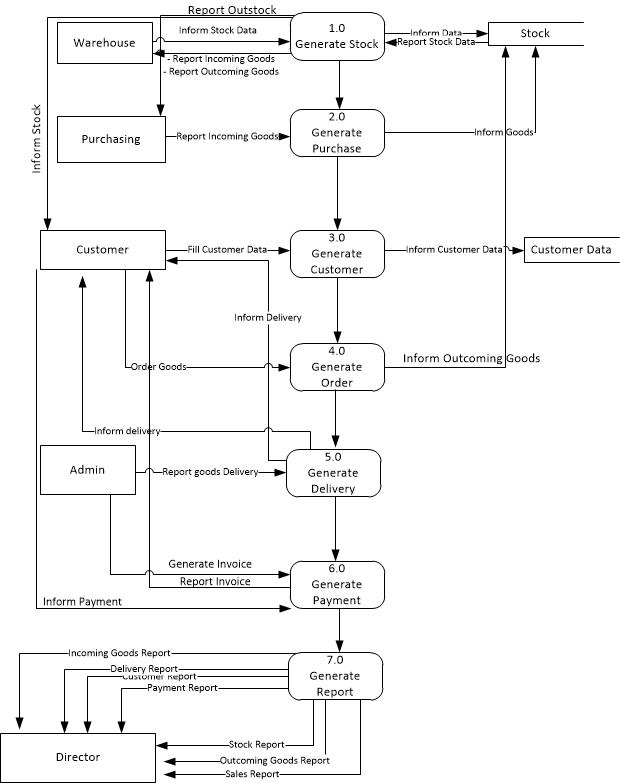
## DATA ANALYSIS METHOD

The research will be using Data Flow Diagram (DFD) to draw the business flow of CV Golden Bell that will give better understanding. The DFD will be expanded until level 0 of certain process in order to make it detailed and easily understood by the directress.

Instead of giving the directress a whole written proposal of the current flow of the system and the proposed which can be confusing the directress because of some technical words that some businessman cannot fully understand. DFD is different, there are not technical words that only technical people can understand. Since it show the flow from outside environment or entity to inside or vice versa, the DFD shows exactly the flow of the company and the managers will definitely understand it because they are quite aware with what’s going on their company system.

**Figure 3.1 Context Diagram CV. Golden Bell**

**Figure 3.2 Diagram Zero CV. Golden Bell**



# CHAPTER 4

**RESULT AND ANALYSIS**

## RESULT

## PROPOSED SYSTEM DIAGRAM

## CONTEXT DIAGRAM

**Figure 4.1** *Context Diagram of Proposed System*

## LEVEL ZERO DIAGRAM

**Figure 4.2** *Level 0 of Proposed System*

# DATABASE STRUCTURE

**TABLE 4.1 MASTER ITEM**

| **Fieldname** | **Type** | **Size** | **Index** |
| --- | --- | --- | --- |
| Id | Integer | 11 | Yes |
| Name | Varchar | 100 |  |
| Uom | Varchar | 50 |  |
| barcode | Varchar | 50 |  |
| created\_at | Timestamp | - |  |
| updated\_at | Timestamp | - |  |

**TABLE 4.2 USER**

| **Fieldname** | **Type** | **Size** | **Index** |
| --- | --- | --- | --- |
| id | Integer | 11 | Yes |
| username | Varchar | 32 |  |
| name | Varchar | 50 |  |
| password | Varchar | 255 |  |
| created\_at | Timestamp | - |  |
| updated\_at | Timestamp | - |  |

**TABLE 4.3 CUSTOMER AND SUPPLIER**

| **Fieldname** | **Type** | **Size** | **Index** |
| --- | --- | --- | --- |
| id | Integer | 11 | Yes |
| name | Varchar | 100 |  |
| address | Text | - |  |
| type | Varchar | 10 |  |
| created\_at | Timestamp | - |  |
| updated\_at | Timestamp | - |  |

**TABLE 4.4 ITEM TRANSACTION MASTER**

| **Name** | **Type** | **Size** | **Index** |
| --- | --- | --- | --- |
| Id | Integer | 11 | Yes |
| User\_id | Integer | 11 |  |
| Total | Decimal | 10 , 0 |  |
| Type | Text | - |  |
| Date | Timestamp | - |  |
| Note | Text | - |  |
| Bp\_id | Int | 11 |  |
| Created\_at | Timestamp | - |  |

**TABLE 4.5 MASTER ITEM**

| **Fieldname** | **Type** | **Size** | **Index** |
| --- | --- | --- | --- |
| Id | Integer | 11 | Yes |
| Master\_id | Integer | 11 |  |
| Item\_id | Integer | 11 |  |
| Item\_name | Varchar | 100 |  |
| Quantity | Decimal | 10,0 |  |
| Price | Decimal | 10,0 |  |
| Total\_price | Decimal | 10,0 |  |

# Test Case

**TABLE 4.6 TEST CASE**

| **Test Case ID** | **Test Data** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| --- | --- | --- | --- | --- |
| **TC 001** | Import Database | Import Database Success | Import Database Success | Pass |
| **TC 002** | Execute Program | Login Form Appear | Executed Succesfully, Login Form Appear | Pass |
| **TC 003** | Login with valid password | Login successful and enter main menu | Login successful and enter main menu | Pass |
| **TC 004** | Login with invalid password | Login fail and show error message | Login fail and show error message | Pass |
| **TC 005** | Add new item | Add successful and enter the item list | Add successful and enter the item list | Pass |
| **TC 006** | Edit item details | Edit successful and enter to item list | Edit successful and enter the item list | Pass |
| **TC 007** | Delete item details | Delete successful and enter to item list | Delete successful and enter the item list | Pass |
| **TC 008** | Insert Customer Details | Click Customer button, Add successful and enter Customer list | Click Customer button, Add Successful and enter Customer List | Pass |
| **TC 009** | Edit Customer Details | Edit Successful and enter Customer List | Edit Successful and enter Customer List | Pass |
| **TC 010** | Delete Customer Details | Delete Successful and enter Customer List | Delete Successful and enter Customer List | Pass |
| **TC 011** | Add New Supplier | Click Supplier button, Add successful and enter Supplier List | Click Supplier type, Add successful and enter Supplier List | Pass |
| **TC 012** | Edit Supplier Details | Edit Successful and enter Supplier List | Edit Successful and enter Supplier List | Pass |
| **TC 013** | Delete Supplier Details | Delete Successful and enter Supplier List | Delete Successful and enter Supplier List | Pass |
| **TC 014** | Insert Sales | Insert Successful and enter sales detail | Insert Succesful and enter sales detail | Pass |
| **TC 015** | Show Sales | Show Sales Success and Showing sales Detail | Show Sales Success and Showing sales Detail | Pass |
| **TC 016** | Print Sales Preview | Print Sales Preview Success and enter Word | Print Sales Preview Success and enter Word | Pass |
| **TC 017** | Insert Receive | Insert Successful and enter receive detail | Insert Succesful and enter receive detail | Pass |
| **TC 018** | Show Receive | Show Receive Success and Showing receive Detail | Show Receive Success and Showing receive Detail | Pass |
| **TC 019** | Print Receive Preview | Print Receive Preview Success and enter Word | Print receive Preview Success and enter Word | Pass |
| **TC 020** | Show Sales Report | Select Date, Report successful | Select Date, Report Successful | Pass |

# CHAPTER 5

**CONCLUSION AND SUGGESTION**

# CONCLUSION

Based on the research that have been made, the conclusion that can be taken from Inventory and Sales report on CV. GOLDEN BELL is that:

* + - 1. The system developed is to help on decreasing the human errors and inefficiency in running the business process
      2. Synchronized system automatically reduce time wasting in looking and checking of the stock in the warehouse
      3. Sales report can be seen from monthly to annually so that the owner or the director could know the profit that have been made in the company

# SUGGESTION

By completing this Final Year Project, the author may suggest that CV. GOLDEN BELL should shatar to use the current system that has been developed even though the program is not really perfect yet. However, the current functionality of the system is now applicable to be used by the company to solve the problems of time wasting and human error. The next step the author will take is to complete the incomplete features and fixes any bugs that will occur on the run time.

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