BORANG PENGESAHAN STATUS TESIS

JUDUL: DOWNTIME SYSTEM FOR PRESS SHOP DEPARTMENT (DTS)

SESI PENGAJIAN: 2007

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DOWNTIME SYSTEM (DTS) FOR PRESS SHOP DEPARTMENT

FAIZATULHAMLA BT MOHD SALLEH

This report is submitted in partial fulfillment of the requirement for the
Bachelor of computer Science (Database Management)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MELAYSIA MELAKA

DECLARATION

I hereby declare that this project report entitled

DOWNTIME SYSTEM FOR PRESS SHOP DEPARTMENT (DTS)

Is written by me and is my effort and that no part has been plagiarized without citations.

STUDENT: _____ Date: 10 NOV 07

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DEDICATION

A special dedication goes to my beloved parents Mr. Mohd Salleh bin Anang and Mrs. Rogilah bt Raja Ali because giving support in completing my final year project which is entitled Downtime System for Press Shop Department (DTS).

I also would like to dedicate to the people who help and support direct or indirect in finishing my project successfully.

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ABSTRACT

Downtime System (DTS) develop for Press Shop department at Perodua Manufacturing Sdn Bhd for easily find the data, record keeping more efficient and retrieve data faster. This system also is easily for engineer to generate calculation because through Downtime System (DTS) this calculation can generate automatically and can generate report and statistic through the data and calculation value. Downtime System (DTS) is use by three users, administrator, engineer and supervisor that have different environment interface. Each user have an own ID and password to secure the data. This system can generate calculation automatically, generate statistic, make a reporting, view a record, view the information and insert data through form record. Downtime System (DTS) give more benefit for the user especially for Press Shop department because more efficient and secure from the unauthorized people. This system may be further improved with used a web based system.

ABSTRAK

Downtime System (DTS) dibangunkan untuk Press Shop Department bagi Perodua Manufacturing Sdn Bhd yang mana ia memudahkan untuk pencarian data, data dapat disimpan dengan teratur dan data dapat dicapai dengan lebih cepat. Sistem ini juga dapat memudahkan pengguna iaitu engineer untuk membuat setiap pengiraan yang sebelum ini dilakukan secara manual kerana melalui sistem ini, pengiraan akan automatik terhasil. Selain itu sistem ini juga dapat menghasilkan report dan statistic melalui data yang direkod dan nilai hasil pengiraan tersebut. Downtime System (DTS) mempunyai tiga kategori pengguna iaitu *administrator, engineer dan supervisor* dimana setiap pengguna mempunyai antaramuka yang berbeza. Setiap pengguna mempunyai IDnya tersendiri dan juga katakunci untuk melindungi maklumat dari dicerobohi. Modul bagi sistem ini adalah seperti *generate calculation automatically, generate statistic, make a reporting, view a record, view the information and insert data through form record.* Downtime System (DTS) ini dapat memberi banyak kebaikan kepada pengguna terutama kepada Press Shop Department kerana melalui system ini data dapat disimpan dengan teratur dan segala maklumat data dapat disimpan dan dilindungi oleh kata kunci dari sebarangan orang seperti pekerja-pekerja yang lain. Sistem ini untuk masa akan dating boleh ditingkatkan dengan menggunakan *web based system.*

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LIST OF ABBREVIATIONS

NO	ABBREVIATION	WORD
1.	DT	- Downtime
2.	DCT	- Die Change Time
3.	CT	- Cycle Time
4.	GSPH	- Growth Stoke Per Hour
5.	DTS	- Downtime system
6.	PSM	- Projek Sarjana Muda
7.	SPM	- Sheet Per Minute
8.	ERD	- Entity Relationship Diagram
9.	DBLC	- Database Life Cycle
10.	DFD	- Data Flow Diagram
11.	DBMS	- Database Management System

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CHAPTER I

INTRODUCTION

1.1 Project Background

'Downtime System' is developed for Press Shop department at Perodua Manufacturing Sdn Bhd Company. The meaning of downtime is a 'period of time where production line is stopped due to problem'. The example of downtime is like dent, bump, wrinkle, scratch, misvacuum, pin hole and many more. For each downtime like dent, there is a sub downtime such as dent OP10, OP20, OP30 and OP40. Before developing this system during industrial training, the engineer at Press Shop department uses current system using Microsoft Excel to key in the daily report about downtime. Sometimes, when the user keyed in the wrong data, the formula that has been set at a column was deleted when data was deleted.

This system is used by engineer which is to be easy for key in the daily report from each line and each shift. Downtime System (DTS) will be help to calculate automatically for percentage repair and reject parts, total downtime, production minute and gsph (growth stroke per hour). Beside that, this system will be help to make reporting for display monthly and yearly, generate statistic by descending and make graph by line, shift, partname and downtime and view about information of Press Shop department. To upgrade this system, use Visual

Basic 6.0 as an interface. For the database are using Microsoft SQL Server because the current system when doing during industrial training using Microsoft Access.

1.2 Problem statement

Basically there have a few of problem statement to used current system like:-

- Data not efficient and messy

  Using the current system, the data that was keep is not efficient and so messy because used many sheet, file and folder. Probability to lost the data is high because just keep in folder at PC.

- Create calculation by manually

  Data that was key in sometime need to used calculation to get the value like total downtime, production time, gsph, percentage repair and reject. Engineer need to generate the formula for total downtime, production time, gsph, percentage repair and reject by manually. Its will be a take time and the calculation process are slower. Some time when one of the data is deleted, then the formula will also be deleted.

- Waste time

  When using current system, engineer just used Microsoft Excel and all form must create by own before key in the data. Sometime if the data change or deleted, engineer need to make correction and it make a waste time to make another work.

- All line, shift and statistic create in different sheet and folder

When using Excel platform more sheet that have need and more file has generate because has key in the data for each line, shift, day, month and year. To generate graph also have problem because need to generate manually after data was key in and need to create at different sheet.

- Lack of data security

  All data that was key in is not give a protection and can access of any body. Probability the data change and delete is high because there no have a security that protects the data.

1.3 Objectives

Basically, there is having several problems before create this system. After make researching, its get some objectives which are:

- More data can keep in the database because used large capacity storage.
  - Microsoft SQL Server is large capacity storage. In this department, they need to key in data between 100 until 150 per day for each line and shift. So they need to use the strong database.
- To make record keeping more efficient and secure from the unauthorized people
  - Problem the data deleted will be solve through this system and data more secure than using current system
- Help to retrieve data more faster

- This system can retrieve data faster than current system because they can search what the data need.

- All the data can be stored in one place and can be authorized by certain people by using password

  - Not all staff can use the system. To make system secure, create password and the system can access by line engineer and manager only.

- User friendly because easy to use for user manual

  - System that will develop must be simple and user friendly because this system will be used by operator, beside that engineer and manager.

- Save time to key in the data and show or find the data

  - Before build the system used Microsoft Excel. So, before key in data have been generate new form or new sheet that different shift to key in data.

1.4 Scope

1.4.1 User

The primary target user of this project is the engineer to insert daily data report from each line for both of shift like shift A and B.

1.4.2 Module

1. Calculate automatically data about percentage repair, percentage reject, total downtime, production time and gsph (growth stroke per hour)
    - Data about percentage repair, reject, total downtime, production minute and gsph (growth stroke per hour) automatically calculate when the data insert.
2. Generate statistic
    - All production needs to generate a graph. The graph can display after the data was key in. When graph generate by line, shift, partname and downtime its make be easy to manager show the higher problem that occurs.
3. View the record
    - Admin can view a record that was key in but cannot update and delete the record and can search the data that they need.
4. Make a reporting
    - Report can generate by monthly and yearly for give to the manager and to show at the meeting.
5. View Press Shop Information
    - Staff at Press Shop can view all information about Press in this system but cannot login to because there not have permission to login the system.
6. Backup and Recovery
    - When the system suddenly shutdown, data that was key in still be safety.

1.5 Project Significance