

SMART ATTENDANCE RECORD SYSTEM FOR STUDENTS AND STAFF

This thesis is presented in partial fulfillment for the award of the Bachelor of Electrical
Engineering (Honours)

UNIVERSITI TEKNOLOGI MARA
MALAYSIA



HAFIZA BINTI MOHAMAD

2006130645

B. ENG (Hons.) ELECTRICAL

Faculty of Electrical Engineering

ACKNOWLEDGEMENTS

First and foremost, I would like to express my greatest gratitude to Allah S.W.T, Lord of Universe who has enable me to complete this project and thesis by the given of such strength and ability required. All perfect prices belong to Allah S.W.T. May his belong upon the prophet Muhammad S.A.W and members of his family and companions.

Firstly, I would like to express my sincere gratitude and appreciations to Miss Nani Fadzlina Bt Naim for her continue support, generous guidance, help patience and encouragement in the duration of the thesis preparation until its completion.

My gratitude also goes to all my friends and my family who were involve directly and indirectly in giving invaluable assistance, support, encouragement and understanding during this project. I could have never done all these without the assistance and support from all the parties.

CHAPTER 1

1.0 ABSTRACT

An Access database system provides automatic record of the student's attendance. This paper presents a system to record attendance. This proposed system can be applied to any institution in order to replace the conventional way in taking students and staff attendance. This access database system is reliable and practical as only needs a PC with Microsoft Access to be implemented. The results show that the proposed system is capable in detecting and recording the students and staff attendance accurately. This system is suitable to be applied in school and higher institution or company. Microsoft Access is use for the attendance record Microsoft specified the minimum hardware requirement for Access v2.0: Microsoft Windows version 3.1 with 4 MB of RAM required, 6 MB ram recommended; 8MB of available hard disk.

1.1 OVERVIEW

Microsoft Access is a powerful tool to create and manage databases. It has many built in features to assist in constructing and viewing information. Access is much more involved and is a more genuine database application than other programs such as Microsoft Works.

Access is the system that can manage user to store data in database and construct the information. The system will help student to automatically key in details and identify the user's data. A report will be generated after all data has been recorded. This attendance system will make attendance process more efficient instead of using the conventional way.

TABLE OF CONTENT

1.0 ABSTRACT.....	3
1.1 OVERVIEW	3
1.2 SCOPE OF WORK.....	4
1.3 OBJECTIVES.....	4
CHAPTER 2.....	5
2.0 LITERATURE REVIEW	5
2.1 FUNDAMENTAL OF MICROSOFT ACCESS.....	5
2.2 HISTORY	5
2.2.1 Uses 7	
2.2.2 Development.....	9
2.2.3 Version	11
2.3 Advantages and disadvantages:.....	12
3.0 METHODOLOGY	14
3.1 Blank document.....	14
3.2 Tables	15
3.3 Entering Data.....	16
3.4 Manipulating Data	17
3.5 Relationships	19
3.5.1 Types of table relationships.....	20
3.5.2 Purpose of creating relationship.....	22
3.5.3 Understanding referential integrity.....	23
3.5.4 View table relationships	24
3.5.5 Edit Relationships.....	26
3.5.6 Clear Layout.....	26
3.5.7 Relationships Report	26
3.5.8 Create a table relationship.....	27
3.5.9 Create a table relationship by using the Field List pane.....	29
3.6 Record data.....	32
Step 1: Add timestamp fields to a table.....	33
Step 2: Create a macro that records the date and time.....	34
Step 3: Add the fields and the macro to a data-entry form	34
3.6 Form	35
3.7 Reports.....	38
3.7.1 Choose a record source.....	38
3.7.2 Create a report by using the Report tool.....	38

Another system is also developed to record the staff attendance. Basically it uses the same method as the student attendance. For staff Attendance system the attribute used was added in term of time in and time out. The data will then appear in the report form. From the report, the overall data such as the lecturer's name, time in, time out and the data needed will be shown.

1.2 SCOPE OF WORK

Access 2007 is the database software in the Microsoft 2007 Office Suite.[2] It allows to order, manage, search, and report large amounts of information. This paper will show how to build a database from scratch, including how to plan and set up tables and fields, create and use forms to enhance data integrity, design and run meaningful queries, and create useful and attractive reports. Access 2007 is a program that allows us to create and manage databases. [2] A database is a place where can store information related to a specific topic. This paper presents how to establish relationships between the tables in an Access 2007 database. It shows the usage of Primary and Foreign keys, relationship types, and about referential integrity. [3]

KEYWORDS: Foreign keys, relationship types, referential integrity.

1.3 OBJECTIVES

- To develop a system that can manage user to store data in database
- To design an attendance record that is more reliable and practical.
- Analyze the information that has been obtained