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JUDUL: EMPLOYEE ATTENDANCE SYSTEM

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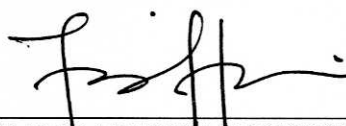
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EMPLOYEE ATTENDANCE SYSTEM

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DEDICATION

To my father for his lifelong pursuit of excellence with honesty and my mother for her selfless love, who have always stood behind me.

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ABSTRACT

Employee Attendance System (EAS) is a simple windows-based attendance system that specifically developed for small and medium companies. The software application can manage the recordings, controlling and monitoring of employee absences. The purpose is to make sure that the staffs are punctual and do their jobs on time. Currently, there is no proper system to monitor the employees' attendance at some companies. Besides, the companies still use the paper-based system to store the records of the employees. With the implementation of this system, paper-based system will be eliminated. This system can save time and minimize the manpower for manual management. The administrators can easily trace the attendance of the employees compare to manual paper recording and file keeping system. Besides, the employees' records are more secure which are saved into the database. This system is also helps to reduce clerical cost such as papers, files and stationery. As for the Employee Attendance System, Model Driven Development (MDD) will be used as the project methodology. This is because MDD minimize planning overhead and all phases are planned up front, means the project cannot become infeasible and get canceled. Besides that, requirement analysis tends to be more through and better documented in the model-driven approach. The system can be used by the system's administrator such as supervisor and the employees of the company. Each of users has their own interface through the system login. There are some of the modules included in the developed system such as admin sign in, admin sign out, view records employees, register for new employees, view employees working time, total of employees who work over time, total of employees who apply medical leave, total of employees who apply leave, list if leave applied by the employees and various reports generated, print reports as references, employee sign in and sign out their attendance, apply leave and check leave. As a conclusion, the proposed system is able to help the administrator to manage recordings, monitoring and tracking the attendance of the employees. It is also provide an accurate time management for the employees in order to sign in and sign out their attendance.

ABSTRAK

Sistem Pengurusan Masa Pekerja merupakan sistem yang mudah untuk kegunaan syarikat yang kecil. Sistem ini menyediakan satu kaedah pengurusan masa yang efektif untuk menguruskan rekod dan mengawasi masa kehadiran pekerja. Pada masa sekarang, terdapat syarikat yang tidak mempunyai sabaranng sistem untuk menguruskan masa kehadiran pekerja. Selain itu, sesetengah syarikat masih menggunakan sistem fail untuk merekod maklumat pekerja. Dengan menggunakan sistem ini, kaedah pengurusan kertas akan dihapuskan. Sistem ini dapat menjimatkan masa dan meminimumkan tenaga kerja untuk menguruskannya secara manual. Pihak pengurus dapat mengesan masa kehadiran pekerja dengan mudah berbanding dengan sistem fail. Selain itu, maklumat pekerja akan lebih terselamat kerana disimpan di dalam pangkalan data. Sistem ini juga dapat menjimatkan perbelanjaan pejabat seperti kertas, fail dan alat tulis. Sistem Pengurusan Masa Pekerja menggunakan *Model Driven Development* (MDD) sebagai projek metodologi. Ini adalah kerana MDD meminimumkan perancangan overhead dan perancangan dibuat secara tersusun. Selain itu, analysis keperluan menjadi lebih sempurna dan didokumentasikan menggunakan pendekatan *model-driven*. Sistem ini boleh digunakan oleh pihak pengurus dan pekerja-pekerja syarikat. Setiap user akan mempunyai antaramuka yang tersendiri setelah mendaftarkan diri melalui sistem login. Terdapat beberapa modul yang akan dibangunkan seperti pengurus daftar dan keluar, melihat maklumat pekerja, mendaftarkan maklumat untuk pekerja baru, melihat masa kehadiran pekerja, melihat bilangan pekerja yang bekerja lebih masa, melihat bilangan pekerja yang memohon cuti sakit, melihat bilangan pekerja yang memohon cuti, memberikan kelulusan cuti pekerja, menjana dan mencetak laporan, pekerja mendaftar untuk memasukkan kehadiran dan mendaftar keluar, memohon cuti dan memeriksa status kelulusan permohonan. Sebagai kesimpulan, sistem yang akan dibangunkan dapat membantu pihak pengurus untuk mengendalikan rekod pekerja dan mengawasi masa kehadiran pekerja. Sistem ini juga membekalkan pengurusan waktu yang tepat untuk membolehkan pekerja mendaftar masuk dan keluar apabila datang bekerja.

TABLE OF CONTENTS

PROJECT TITLE.....	i
ADMISSION.....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENTS.....	iv
ABSTRACT.....	v
TABLE OF CONTENTS.....	vii
LIST OF TABLES.....	x
LIST OF FIGURES.....	xiii
LIST OF ABBREVIATION.....	xv
LIST OF APPENDIX.....	xvi
INTRODUCTION.....	1
1.1 PREAMBLE/OVERVIEW.....	1
1.2 PROBLEM STATEMENT(S).....	2
1.3 OBJECTIVE.....	2
1.4 SCOPES.....	3
1.5 CONTRIBUTIONS.....	4
1.6 EXPECTED OUTPUT.....	4
1.7 CONCLUSION.....	5
LITERATURE REVIEW.....	6
2.1 INTRODUCTION.....	6
2.2 FACT AND FINDING.....	7
2.3 CONCLUSION.....	12
PROJECT PLANNING AND METHODOLOGY.....	13
3.1 INTRODUCTION.....	13
3.2 HIGH-LEVEL PROJECT REQUIREMENTS.....	15
3.2.1 PROJECT FACILITIES REQUIREMENT.....	16
3.2.2 SOFTWARE REQUIREMENT.....	16
3.2.3 HARDWARE REQUIREMENT.....	17

3.3	SYSTEM DEVELOPMENT APPROACH.....	18
3.4	PROJECT SCHEDULE AND MILESTONES.....	20
3.5	CONCLUSION.....	22
ANALYSIS.....		24
4.1	INTRODUCTION.....	24
4.2	ANALYSIS OF CURRENT SYSTEM.....	24
4.2.1	BUSINESS PROCESS.....	24
4.2.2	PROBLEM ANALYSIS.....	26
4.2.3	PROBLEM STATEMENTS.....	31
4.3	ANALYSIS OF TO BE SYSTEM.....	31
4.3.1	FUNCTIONAL REQUIREMENT.....	32
4.3.2	TECHNICAL REQUIREMENT.....	35
4.3.2.1	SOFTWARE REQUIREMENT.....	35
4.3.2.2	HARDWARE/FIRMWARE REQUIREMENT...	36
4.3.2.3	IMPLEMENTATION/DEPLOYMENT REQUIREMENT.....	36
4.4	CONCLUSION.....	37
DESIGN.....		38
5.1	INTRODUCTION.....	38
5.2	PRELIMINARY/HIGH-LEVEL DESIGN.....	38
5.2.1	RAW INPUT/DATA.....	39
5.2.2	SYSTEM ARCHITECTURE.....	39
5.2.3	USER INTERFACE DESIGN.....	40
5.2.3.1	NAVIGATION DESIGN.....	50
5.2.3.2	INPUT DESIGN.....	50
5.2.3.3	OUTPUT DESIGN.....	53
5.2.4	DATABASE DESIGN.....	54
5.2.4.1	LOGICAL DATABASE DESIGN.....	54
5.3	DETAILED DESIGN.....	62
5.3.1	SOFTWARE SPECIFICATION.....	62
5.3.2	PHYSICAL DATABASE DESIGN.....	76
5.4	JUSTIFICATION CHANGES OF INTERFACE DESIGN.....	77
5.4.1	EMPLOYEE PROFILE	77
5.4.2	PUNCH CLOCK	77
5.4.3	PUNCH ATTENDANCE	78
5.4.4	DAILY ATTENDANCE REPORT	78
5.5	CONCLUSION.....	79
IMPLEMENTATION.....		80
6.1	INTRODUCTION.....	80
6.2	SOFTWARE DEVELOPMENT ENVIRONMENT SETUP.....	80
6.2.1	APPLICATION ARCHITECTURE.....	81
6.3	SOFTWARE CONFIGURATION MANAGEMENT SETUP.....	84
6.3.1	CONFIGURATION ENVIRONMENT SETUP.....	84
6.3.2	VERSION CONTROL PROCEDURE.....	86
6.4	IMPLEMENTATION STATUS.....	87
6.5	CONCLUSION.....	88

TESTING.....	89
7.1 INTRODUCTION.....	89
7.2 TEST PLAN.....	89
7.2.1 TEST ORGANIZATION.....	90
7.2.2 TEST ENVIRONMENT.....	90
7.2.3 TEST SCHEDULE.....	90
7.3 TEST STRATEGY.....	91
7.3.1 CLASSES OF TESTS.....	93
7.4 TEST DESIGN.....	93
7.4.1 TEST DESCRIPTION.....	94
7.4.2 TEST DATA.....	106
7.5 TEST CASE RESULTS.....	111
7.6 CONCLUSION.....	114
PROJECT CONCLUSION.....	115
8.1 OBSERVATION ON WEAKNESSES AND STRENGTHS.....	115
8.2 PROPOSITIONS FOR IMPROVEMENT.....	116
8.3 CONCLUSION.....	117
BIBLIOGRAPHY.....	119
APPENDIX.....	121

LIST OF TABLES

TABLE NO.	TITLE	PAGE
5.1	Splash Screen EAS	41
5.2	System Login EAS	41
5.3	Employee Login Interface	41
5.4	Punch Clock Interface	42
5.5	Punch Attendance Interface	42
5.6	Apply Leave Form Interface	43
5.7	Check Leave Interface	43
5.8	Employee Change Password Interface	44
5.9	Administrator Login Interface	44
5.10	Main Menu for Administrator	45
5.11	Attendance Control Interface	45
5.12	Leave Control Interface	46
5.13	Employee Profile Interface	46
5.14	Reports Interface	47
5.15	Daily Attendance Report Interface	47
5.16	Monthly Attendance Report Interface	48
5.17	Employee Attendance Analysis Interface	48
5.18	Generate Warning Letter Interface	49
5.19	Admin Change Password Interface	49
5.20	Admin Login	50
5.21	Attendance Control	51
5.22	Leave Control	51
5.23	Employee Profile	51
5.24	Daily Attendance Report	51
5.25	Monthly Attendance Report	52
5.26	Employee Attendance Analysis	52
5.27	Admin Change Password	52
5.28	Employee Login	52
5.29	Punch Clock	52
5.30	Apply Leave	52
5.31	Employee Change Password	53
5.32	Daily Attendance Report	53
5.33	Monthly Attendance Report	53
5.34	Employee Attendance Analysis	53
5.35	Administrator Login Use Case Diagram	63
5.36	Update Leave Records Use Case Diagram	63
5.37	Search Employee Personnel Records Use Case Diagram	63
5.38	Update Attendance Records Use Case Diagram	63

TABLE NO.	TITLE	PAGE
5.39	Generate Report Use Case Diagram	63
5.40	Generate Warning Letter Use Case Diagram	64
5.41	Register New Employee Records Use Case Diagram	64
5.42	Change Password Use Case Diagram	64
5.43	Employee Login Use Case Diagram	64
5.44	Punch Clock Use Case Diagram	65
5.45	Sign In Use Case Diagram	65
5.46	Sign Out Use Case Diagram	65
5.47	Apply Leave Use Case Diagram	65
5.48	Check Leave Use Case Diagram	65
5.49	Change Password Use Case Diagram	65
5.50	Administrator Login Sequence Diagram	66
5.51	Update Leave Records Sequence Diagram	66
5.52	Search Employee Personnel Records Sequence Diagram	66
5.53	Update Employee Attendance Records Sequence Diagram	67
5.54	Daily Attendance Report Sequence Diagram	67
5.55	Monthly Attendance Report Sequence Diagram	67
5.56	Attendance Analysis Report Sequence Diagram	67
5.57	Generate Warning Letter Sequence Diagram	67
5.58	Register New Employee Record Sequence Diagram	68
5.59	Employee Login Sequence Diagram	68
5.60	Punch Clock Sequence Diagram	68
5.61	Sign In Sequence Diagram	68
5.62	Sign Out Sequence Diagram	69
5.63	Apply Leave Sequence Diagram	69
5.64	Check Leave Sequence Diagram	69
5.65	Change Password Sequence Diagram	69
5.1	Software tools used for developing the Employee Attendance System	85
5.2	Implementation Status of Each Module	87
7.1	Hardware and Software Configurations	90
7.2	Employee Attendance System Test Schedule	91
7.3	Unit Testing for Administrator Login	94
7.4	Unit Testing for Employee Login	95
7.5	Unit Testing for Administrator Change Password	95
7.6	Unit Testing for Employee Change Password	96
7.7	Unit Testing for Employee Profile	97
7.8	Unit Testing for Punch Clock	97
7.9	Unit Testing for Punch Attendance	98
7.10	Unit Testing for Apply Leave Form	99
7.11	Unit Testing for Leave Control	99
7.12	Unit Testing for Attendance Control	100
7.13	Unit Testing for Attendance Analysis	101
7.14	Unit Testing for Daily Attendance Report	101
7.15	Unit Testing for Monthly Attendance Report	102
7.16	Unit Testing for Generate Warning Letter	103
7.17	Module Testing for Employee Attendance System	104
7.18	System Integration Testing for Employee Attendance System	105
7.19	Test Summary Report	105
7.20	Test Record	105

TABLE NO.	TITLE	PAGE
7.21	Administrator Login Test Data	106
7.22	Employee Login Test Data	106
7.23	Admin Change Password Test Data	106
7.24	Employee Change Password Test Data	107
7.25	Employee Profile Test Data	107
7.26	Punch Clock Test Data	107
7.27	Punch Attendance Test Data	108
7.28	Apply Leave Form Test Data	108
7.29	Leave Control Test Data	108
7.30	Attendance Control Test Data	109
7.31	Daily Attendance Report Test Data	109
7.32	Monthly Attendance Report Test Data	109
7.33	Attendance Analysis Report Test Data	110
7.34	Warning Letter Test Data	110
7.35	Administrator Login Test Summary	111
7.36	Employee Login Test Summary	111
7.37	Administrator Change Password Test Summary	111
7.38	Employee Change Password Test Summary	112
7.39	Employee Profile Test Summary	112
7.40	Punch Clock Test Summary	112
7.41	Punch Attendance Test Summary	112
7.42	Apply Leave Form Test Summary	113
7.43	Leave Control Test Summary	113
7.44	Attendance Control Test Summary	113
7.45	Reports Test Summary	113

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE
3.1	Model Driven Development (MDD)	18
4.1	Relationship among the Entities	30
5.1	Two Tier Architecture	40
5.2	Splash Screen EAS	40
5.3	System Login EAS	41
5.4	Employee Login Interface	41
5.5	Punch Clock Interface	42
5.6	Punch Attendance Interface	42
5.7	Apply Leave Form Interface	43
5.8	Check Leave Interface	43
5.9	Employee Change Password Interface	44
5.10	Administrator Login Interface	44
5.11	Main Menu for Administrator	45
5.12	Attendance Control Interface	45
5.13	Leave Control Interface	46
5.14	Employee Profile Interface	46
5.15	Reports Interface	47
5.16	Daily Attendance Report Interface	47
5.17	Monthly Attendance Report Interface	48
5.18	Employee Attendance Analysis Interface	48
5.19	Generate Warning Letter Interface	49
5.20	Admin Change Password Interface	49
5.21	Navigation Flow	50
5.22	Overall Employee Attendance System Class Diagram	54
5.23	Registration Class Diagram	55
5.24	Login-Admin Class Diagram	55
5.25	Generate Report Class Diagram	56
5.26	Employee Information Class Diagram	56
5.27	Update Attendance Records Class Diagram	57
5.28	Update Leave Records Class Diagram	57
5.29	Apply Leave Class Diagram	58
5.30	Check Leave Class Diagram	58
5.31	Change Password Class Diagram	59
5.32	Punch Clock Class Diagram	59
5.33	Sign In Class Diagram	60
5.34	Sign Out Class Diagram	60
5.35	Login-Employee Class Diagram	61
5.36	Generate Warning Letter Class Diagram	61
5.37	Use Case Diagram for Administrator	63
5.38	Use Case Diagram for Employee	64
5.39	Login Admin Activity Diagram	70

FIGURE NO.	TITLE	PAGE
5.40	Update Attendance Activity Diagram	70
5.41	Update Leave Activity Diagram	71
5.42	Registration Activity Diagram	71
5.43	Generate Warning Letter Activity Diagram	72
5.44	Punch Clock Activity Diagram	72
5.45	Sign In Activity Diagram	73
5.46	Sign Out Activity Diagram	73
5.47	Apply Leave Activity Diagram	74
5.48	Check Leave Activity Diagram	74
5.49	Change Password Activity Diagram	75
5.50	Generate Report Activity Diagram	75
5.51	Deployment Diagram of EAS	76
5.52	Employee Profile Interface	77
5.53	Punch Clock Interface	77
5.54	Punch Attendance Interface	78
5.55	Daily Attendance Report Interface	78
6.1	2-tier architecture	82
6.2	Basic Component of ADO	84

LIST OF ABBREVIATION

TERM	DEFINITION
EAS	Employee Attendance System
KUTKM	<i>Kolej Universiti Teknikal Kebangsaan Malaysia</i>
MDD	Model Driven Development
UPO	<i>Unit Pengurusan Organisasi</i>

LIST OF APPENDIX

APPENDIX	TITLE	PAGE
A	Gantt Chart <i>Projek Sarjana Muda</i>	121
B	Organization Chart of KUTKM	123
C	Sequence Diagrams of Employee Attendance System	124
D	Data Dictionary Showing Description of Entities, Relationships and Attributes	133
E	Sample Coding	140
F	User Manual	143
G	Interview Questions	151
H	Forms and Material Gathering	

CHAPTER I

INTRODUCTION

1.1 Preamble/Overview

Employee Attendance System (EAS) is a simple attendance that specifically developed for small or medium companies where about 50 employees have. The purpose is to make sure that the employees are punctual and do their jobs on time. With this system, the administrator may save their time to observe the employees.

This system provides easy to use and reliable employee attendance tracking and reporting. It allows employee to clock in and clock out using the PC keyboard with the lock program. The employee also can apply leave and check leave through the system. The system will monitor the employees working time. Besides, the system can store the records for employees such as their personal details information. The system will calculate the amount of employees who works over time, coming late and apply leave for certain purpose. Based on the calculation of the above categories, the system is able to generate various reports such as attendance record, monthly attendance record and employee attendance analysis.

Currently, there is no proper system to monitor the employees' attendance at some industry companies. Besides, the company still uses the paper-based system to keep tracks the records of the employees. As a solution, the system will be developed to overcome the problems that stated above and provide an effective way to monitor the employees' attendance. This system will provide a user-friendly interface to make the system easy to use.

There are some types of methodologies that can be used to develop a project. As for the Employee Attendance System, Model Driven Development (MDD) has been chosen as project methodology.

1.2 Problem Statements

After visiting some industry companies, there is no proper system to monitor the employees' attendance. Some companies still using log book to keep track the employees' attendance. This attendance records are not precise. Besides, the company still uses the paper-based system to keep tracks the records of the employees. This method is not secure because the records may lose. It is also hard to find certain records using paper-based system.

1.3 Objective

There are several objectives that identified in this system. These objectives are listed as below:

- Able to keep track the attendance and records for the employees such as their personal details information.
- Able to calculate the total working day of the employees, total of the employees who work over time, total of the employees who are coming late and total of the employees who apply leave.
- Able to generate various reports such as daily attendance record, monthly attendance record and employee attendance analysis.
- Can improve the efficiency and systematic of company for recording and managing employees' record.
- To provide a paperless environment by using a computerized system that can save a lot of time.

- To eliminate need for expensive time clock hardware. The program is intuitive and easy to use where can do everything just by pointing and clicking the mouse.

1.4 Scopes

The system can be used by the system's administrator such as supervisor and the employees of the company. Each of users has their own interface through login. The project focused more on a small company or subsidiary company or factory or independently owned company where about 50 employees have. This is because it is easy to monitor and maintain. This system is running on Windows platform.

It is a simple window based attendance system developed for office use.

There are some of the modules included in the developed system that listed as below:

- Admin sign in and sign out
- View records employees
- Registration form for new employees
- View employees working time, total of employees who works over time, total of employees who are coming late, total of employees who apply leave, list of leave applied by the employees and various reports generated.
- Print reports as reference
- Admin change password
- Employee sign in and sign out
- Apply leave and check leave
- Employee change password

1.5 Contributions

The developed system can trace the attendance of the employees while they are coming and leaving for work. The employee can apply and check leave through the system. Besides, the system is able to calculate the total working day of the employees, total of the employees who work over time, total of the employees who are coming late and total of the employees who apply leave and also able to generate reports regarding the attendance of the employees.

With the report, the administrator can easily analyze and detect the performance of the employees in the company. Besides, the system can keep track the records about the employees such as their personal details information. The administrator can view those records easily through this system without have to find among the files.

With the implementation of this system, the paper-based system will be eliminated. This system can save time and minimize the manpower for manual management. The administrator can easily trace the attendance of the employees compare to manual paper recording and file keeping system. Besides, the employees' records are more secure which are saved into the database. This system is also helps to reduce clerical cost such as papers, files and stationery.

1.6 Expected Output

The developed system will help the administrator to manage recordings, monitoring and tracking the attendance of the employees. The administrator also can control the leave that applied by the employees and manipulate employee profile. Besides, this system is also can be used by the employees to sign in when starting to work and sign out when leaving for work. The employee also can apply and check leave through this system.

The most important thing of having the system is to maintain an accurate and precise time management to track the attendance of the employees. Besides, the system is able to calculate the total working day of the employees, total of the employees who work over time, total of the employees who are coming late and total of the employees who apply leave and also able to generate reports regarding the attendance of the employees.

1.7 Conclusion

The suggested project is to develop a system that can keep track the attendance of the employees. The project can be used in small company or subsidiary company or factory where have about 50 employees. The system can be used by the system's administrator such as supervisor and the employees of the company. Each of users has their own interface through login. There are some of the objectives that need to be accomplished while developing this system. These objectives are important because it can ensure the system functions developed are fulfilling the needs and demands which required. The developed project can improve the efficiency and systematic of the organization or company and also can solve the problems raised in manual way and thus can bring convenient to the employees in order to complete the company tasks.

CHAPTER II

LITERATURE REVIEW

2.1 Introduction

Chapter I discussed the overview, problem statements, objectives and scopes, contributions and expected output of the project to get a better understanding of doing this project. This chapter will describe on research and case study regarding the attendance system in the industries.

Literature review is the process of reviewing the current state of knowledge about the topic under discussion. The main purposes of literature review is to let the developer perform some study and analysis on the similar previous or current existing system, get a better understanding about the features offered in these system and thus let the developer to gather valuable information and ideas from the existing system.

There are some research studies and other types of literature that used to collect the related information for the project. The raw of material and resources are based on reviews, theoretical articles, case studies, journal articles, books, Internet (electronics journal), interview and document sampling.

The sources such as reviews, theoretical articles, case studies and journal articles can offer a relatively concise, up-to-date format for information about the time and attendance system, and because all reputable journals are referred.

The reference books do offer a good starting point from which to find more detailed sources such as provides some URL address as a link to the related website. There are some useful knowledge findings about the attendance system such as theories descriptions, diagrams, information needs and system process can be found through the reference books.

Electronics journal is the fastest-growing source of information on the Internet they always are up-to-date. There are some of the samples software system and information finding about the time and attendance system can be found easily from the Internet.

An interview session has been carried out with some of the officers in KUTKM. Through the interview session, the user responses about this time and attendance system can be referred and it is a useful feedback from them that can helps to develop better time and attendance system. There are some of the findings includes reports, organization chart, policy manuals, job descriptions and documentation of existing system that can help for better understanding the organization and its business objectives.

Document sampling can find out the information requirements that people have in the current system. It is also can provide statistical data about volumes of transactions and patterns of activity. There are some findings obtained such as copies of related documents about the attendance system and can view the screenshots of existing computer systems for the attendance management.

2.2 Fact and Finding

Time and attendance software system is software to manage or monitor the time worked by employees for the purpose of efficiently processing payroll. These systems may be integrated with existing payroll processing software. Also, these systems may track labor distribution, building security, and personnel scheduling. These systems usually are able to give reports of overtime/docking of non-exempt employees.