

Web Based Claim Processing System

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Abstract

The main focus of the analysis is to develop a record management system that's ready to offer access to anyone approved anytime, any position on any device. The system instigated makes use of considerable net technology to exchange desktop application with substantial net application. The system shares the advantage of each internet application and desktop application. internet primarily based Claims process System (WCPS) can sanction to enter new claim, track the claim standing and to preserve master data. The principal users of the project area unit worker of all divisions and worker of CPD – Claim process Divisions. internet primarily based Claims process System (WCPS) is absolute finish to finish mix to wrap all aspects of online claim, approval and recompense system. during this system, worker will register, enter new claim, the admin will approve/ reject claim. worker may read their claim standing on-line and every one claims is treated as unfinished, Approved and Rejected.

Keywords: Web Based, .NET Technologies, GPRS, GSM, SMS, Transaction Tracking

1. Introduction

Web Based Claims Processing System (WCPS) is complete finish to finish answer to hide all aspects of on-line claim and compensation system. The Web Based Claims Processing System (WCPS) can allow to enter new claim, track the claim standing and maintaining master data. The most users of the project are worker of all departments and worker of CPD – Claim Process Department[1]. The advent of computer technologies have revolutionized our life in many ways. It is no longer the monopoly of the elite class, but also has reached the masses. For the haves, they may possess their own personal computers, but for the have-nots there are various ways that they can feel the touch of the computer systems such as Internet and e-mails at designated places. For some, this is the time to make lucrative business of hiring them according to hours. The impact from this explosion of new scientific knowledge in the form of computer technologies have altered the way we learn; the way we think; the way we communicate and many other behavioral traits that are completely different from the earlier generations. Thus, computer literacy is fast growing among our young citizens. Even children as early as Primary schools have been exposed to computer systems, whereby the education authorities and Parent-Teacher Associations (PTAs) have provided them with computer laboratories under the schools' computer clubs. Computer literacy now has reached an unprecedented height and has gone far beyond the boundaries of urban areas into the rural areas. In short, it will become our way of life and for those who are still computer illiterate, will feel themselves out of place in this changing world. Such is the influence and significance of computer systems for the present generation and the next ad infinitum. At the work place, computer systems are overwhelmingly essential that they cannot do without. No organisations can afford to

lag behind with the development and progress of computer technologies. They have no choice but to keep up with it sooner or later. In fact, very soon it can be predicted that administrative bureaucracies will become things of the past and ultimately be replaced by computer systems. Currently, all claims have to be made manually by filling up the claim forms by the claimants. This is a very tedious process and time consuming. It is not unusual for the claimants that they have to refer to the Treasury Circulars Malaysia to check on their entitlements that they are unsure of each time they have to make claims.

2. Problem Definition

To Provide a complete computer-based solution to claims associated with finance, as well as other important functionalities in one place over the web such as worker registration, adding of a new claim, approve/ reject claim. Workers shall read their claim standing on-line and every one's claim is treated as unfinished, approved and rejected. Employee of Claim Processing Department can add, edit employee details, all employees are identified by the employee no. Employee no will be unique throughout the system. System must store audit trail of all DML transaction, like it stores employee no, time stamp in the database for add, edit, delete operation. System ought to capture the login time for all the staff.

3. Proposed Model

Web Based Claims Processing System (WCPS) can address the subsequent use cases. The entire usage scenarios evaluate are completed throughout the information-gathering method. Use cases are created and prioritized [2]. Selected use cases are dilated into usage eventualities and options that are derived from each use cases and also the usage eventualities, as delineated within the following diagram:

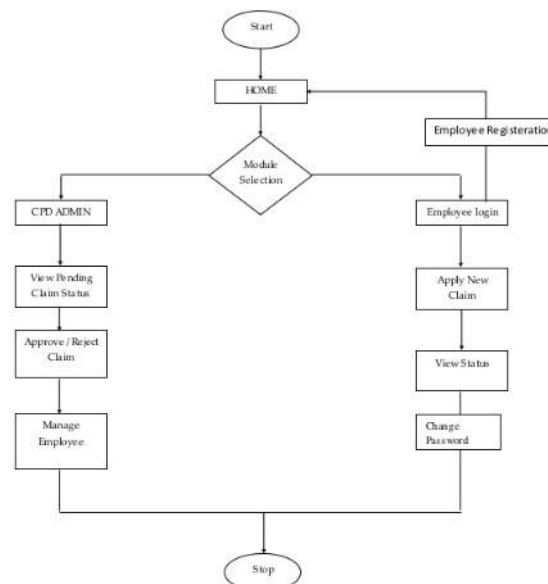


Fig 1. Flow Chart of WCPS

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Web Based Claims Processing System (WCPS) Usage Scenario – This usage state of affairs, or scenario for short, describes a real-world example of how one or more people or organizations interact with Web Based Claims Processing System (WCPS)[3]. It describes the steps, events, and/or actions which occur during the interaction. This Usage scenarios indicating exactly how someone works with the user interface, or reasonably high level describing the critical business actions but not the indicating how they're performed.

Identified Entities of the System: The following actors are defined so far in the analysis phase of the Web Based Claims Processing System (WCPS) development process [4].

3.1. Employee

Employee	
Element	Details
Description	An employee is a user of the Web Based Claims Processing System (WCPS) system.
Examples	An Employee applies for new claim and views the status of his/her own claim.

3.2. CPD - Claims Processing Department

CPD - Claims Processing Department	
Element	Details
Description	The CPD is the person who can approve / reject claim applied by the employee.
Examples	CPD updates the claim status and his/her remark for a claim.

4. Model Development

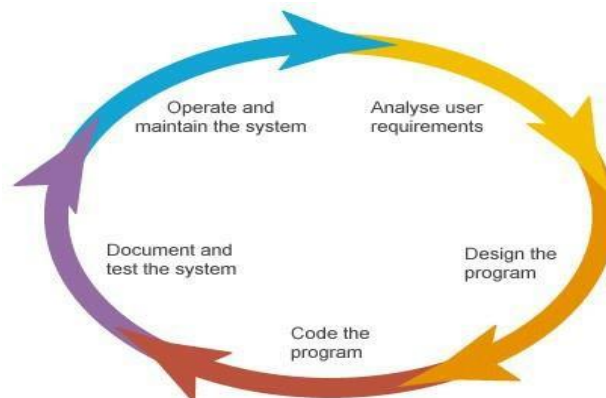
System development is the major part of this study and it is also the crux of this study. Prior to the commencement of its development, the clarity of user requirements must be first established. Therefore, the results of the analysis of user requirements and specifications must be given due considerations and top priority. In this study, the development of the system consists of designing the Architecture; the User Interface; the Process Flow Diagrams; Data Flow Diagrams and Database.

4.1. Architecture

The Web-based Claims system consists of three subsystems. There is a sub-system for the end-user namely Claimants that enables users to login to the online servers; apply for self-advances; submit travel and mileage claims in a Web-based environment. The other two sub-systems are for the end-users namely Responsibility Centres and Bursary Department, which are mainly for processing the online forms submitted. There are

three servers within the system namely Proxy Server, Web Server and File Server and the security issues over the internet are addressed [7]. The following describe each of the server's specific functions in which they perform:

- i. Proxy Server:
 1. The Proxy Server is where the Internet gets its connection. Hence, without it, the entire network in an organization will not be able to access the Internet.
- ii. Web Server:
 1. The Web Server is where the websites are hosted. It provides the necessary Web space for a website to be sited.
- iii. File Server:
 1. The File Server is where data of information is stored. It can be in a form of documents, databases, images, audios, etc.



4.2. User Interface

The user interface provides the end-users with a Graphical User Interface (GUI) to access the Web-based Claims system. Fig. 3 illustrates the diagram of the user interface for three different end-users sub-system.

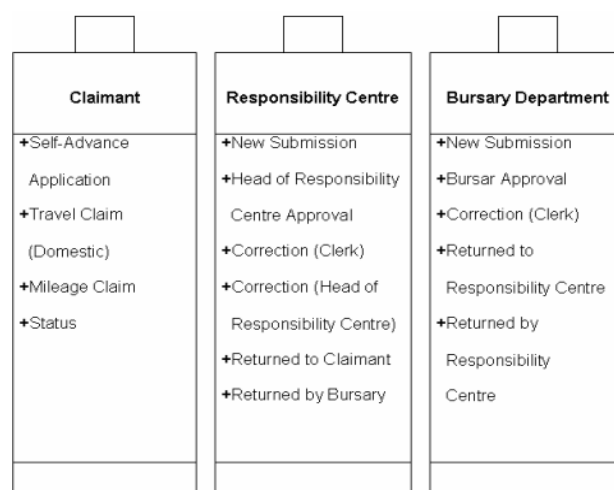


Fig. 3 End-users Sub-systems User Interface Diagram

4.3. Process Flow

The Process Flow Design is the designing of a diagram with a set of process steps and order for performing the process steps to produce a desired result [2]. In the case of the Web-based Claims system, the process flow is the flow of the three forms namely Self- Advance Application, Travel and Mileage Claims. Firstly, the user must select a task in which to perform. Once a task has started, the process must end in one complete loop. If the user is stuck somewhere along the process due to the inability to comply, the user can either start the process from the beginning or rectify the problem(s) of the current stage before the user can proceed any further. If the user fails to identify and rectify the problem(s), the user then must return to the initial stage and begin all over again. The Process Flow diagram has been designed in the manner of symbols namely rectangle represents processing and the diamond shape represents decision making (an if-else statement).[7] Even though, there are three forms that are being processed, in actual fact, there are only two process flows. The Self-Advance Application process flow diagram is illustrated in Fig. 4, whereas the Travel and Mileage Claims are combined because they share the same process flow and this is illustrated in Fig. 5.

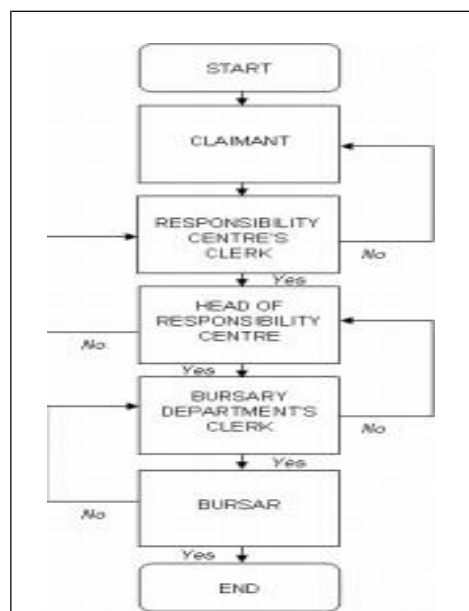


Fig. 4 Self-Advance Application Process Flow

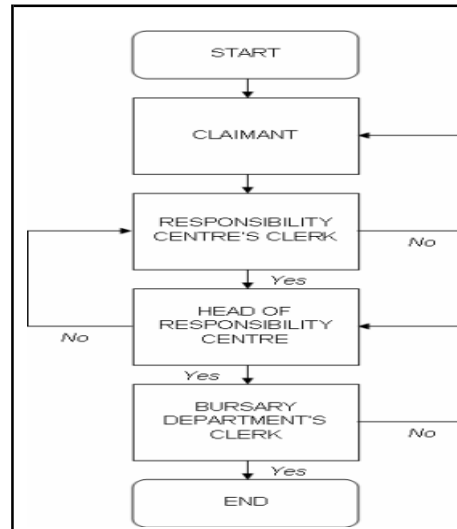


Fig. 5 Travel and Mileage Claims Process Flow Diagram

4.3. Database

For this academic exercise, the database to be used in the development of this system is the Microsoft Access that enables to store data, where all users' identification and password details are kept inside. Apart from the staff's personal information database, it also contains the database of all the staff's entitlements. If in future, should the Ministry of Finance, Malaysia revise the entitlements or any other directives pertaining to claims, it can be updated or amended easily by just changing the respective parts. This process of data amendments will not affect other parts of the information that have been kept. The database also allows all claims' information to be inserted and stored.

4.4. Coding

Computer programming, which is often shortened to programming or coding of a system, is the process of writing, testing, debugging or troubleshooting and maintaining the source code of computer programs. Without all these, a system is not a system, as it will not have any functionality at all, therefore it is considered as the core of the system. The script writing consists of series of codes in lines and will perform as intended. As a system developer or programmer, taking into consideration of the end-user specifications and requirements of a system as desired by executing scripts the way they wanted it. The framework for this will be implemented in ASP, which is a Web programming language that had been mentioned earlier.

Once the system has been inserted with the coding, it has to be run and tested to make sure that it is in working order and performs as the end-users' intention. Should there be any error(s) in the coding, it must then be debugs or troubleshoot in order to find out which are the line(s) that are causing the error(s). The programmer must identify and fix the error(s) by performing the whole testing process once again to ensure that it is error- free.

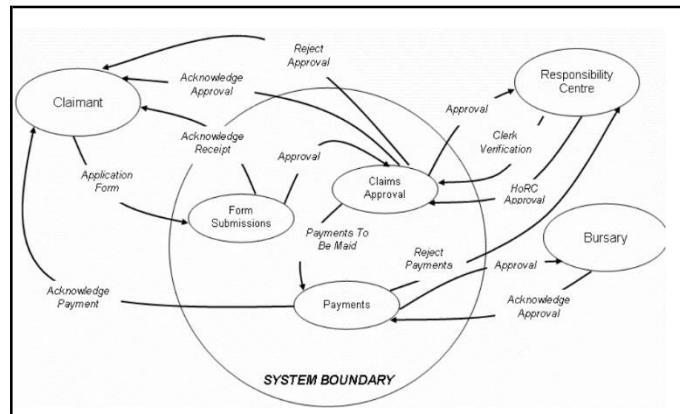


Fig. 6 Web-based Claims System Data Flow Diagram

5. Acknowledgments

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6. Conclusion

The conceptualization of this study was to discover a method or an instrument that could replace the traditional method of filling up the forms each time when staff have to perform official duties outstation or attending courses. As stated earlier, the main objective of this study was to do away with administrative bureaucracies and adopt a computer system that could perform the same function in an efficient manner resulting in fast, accurate and free from human errors. The Web-based Claims system that had been developed without doubt has been proven that it can function in the manner that had been expected. After going through the test and by comparison with simulated claims, which had gone through the traditional method, the overall result was quite astonishing. From the simulated samples that had been tested, the system picked up 30 % of the manual claims, which had mistaken of some sort. It was obvious that these were not due to the system's inaccuracy, but in actual fact was due to human errors in the current practice of claiming manually. Hence, the system is able to detect and overcome flaws [8].

This could not have happened had the claims been processed by the system which is very much faster and more efficient than processing through the traditional manual method, hence the system saves a lot of their time. Thus, the major objectives among others that have been set at the beginning of this study have been met.

7. Future Work

The future scope of this project, Intranet mail system is very wide. There are many additional features, which are planned to be incorporated during the future enhancements of

this project. Although all the main objectives according to SRS document have been achieved but still there is for enhancement.

- a) This software can be easily upgraded in the future. And also include many more features for existing system.
- b) It is connected to the network for easy retrieval of data and many more location or many districts or cities in different states.
- c) All the information can be easily accessed by the employee like their details, departments. It can be modified and the other details can be easily provided to customer.
- d) If anyone wants to combine all the departments of organization through internet then he can easily do this with the help of this technology called .NET.
- e) Providing the Short Message Service (SMS) alerts facility to users to remove the dependency on email account respectively.

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