CERTIFICATION OF APPROVAL

Citizen Acceptance Towards e-Government – Department of Welfare

by

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(Ms Mazlina Mehat)

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CERTIFICATION OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project, that the original work is my own except as specified in the references and acknowledgments, and that the original work contained herein have not been undertaken or done by unspecified sources or persons.

(FARAH WAHIDA ROHAIZAT)

ABSTRACT

Nowadays, almost all countries are moving toward technology advancement and changes. With technology, complicated tasks can be simplified. However, there are also several people that do not understand the use of technology especially internet and some cannot accept these changes. Hence, many studies has been conducted to study on the impact of these technology changes whether to the people or to the development of a country. The purpose of this study is to develop an e-Government system specifically for the Department of Welfare, Perak (JKM) based on the currently used manual system. This online system is called Sistem Bantuan Jabatan Kebajikan Masyarakat, Perak (SBJKM). The objective of this project is to develop the SBJKM that will be able to generate statistical report and approval from the District Officer (DO). SBJKM will simplify the work process where the processing time can be reduced, lessen the hassle of staff handling paper-based system and reduce risk such as data loses. Besides that, this system intents to introduce the user to the e-Government concept and study their acceptance toward the newly developed system. The scope of the study for this project is on how the system manages the applications as well as providing online approval for the citizens and JKM staffs. The system includes several functions such as information provider, user registration, search and data retrieval; and application status check up. The target users for this system are the citizens and JKM staffs. The methodology being use in executing this project is incrementing prototyping, where the development of the system is based on prototype component or module per module. The result and discussions in this project has touch on the comparison between features applied in the existing JKM websites in each state. There are also snapshots of the developed system which include the citizen part and the JKM staff part. This developed system has been used in getting the citizens' data in the citizen acceptance test. The test which is conducted online using survey has return the results represented in

diagrams for their knowledge and acceptance on e-Government. However, this system also has several limitations such as the security measures, human computer interaction (HCI) point of view and the study that has been conducted. In conclusion, the system is developed to give more commodities to the user by taking into accounts the user requirements to solve their current problems in using their existing system. Thus, the system is recommended to improve and enhance its reliability in security, interactivity in HCI point of view and functionality to give the user more satisfaction in using the system.

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CHAPTER 1

INTRODUCTION

Sistem Bantuan Jabatan Kebajikan Masyarakat, Perak (SBJKM) is an e-Government system that is designed as an alternative way for the Department of Welfare, Perak (JKM) staffs in simplifying their daily work load. Besides, this system will be an alternative communication medium between the citizens and JKM. Online system has been evolved rapidly years ago, thus by having such system in one of the main government department will give more commodities to the citizens in keeping in touch with the government itself.

1.1 Background

Currently, in the JKM, Perak workflows, they are using the manual way of keeping and getting the citizens information. They use papers and forms that provided at JKM office where the citizens have to come and apply for facilities that they need. They also can apply for facilities through third parties references such as hospital, agencies, families, publics or media. These references can be sent to JKM through telephone, fax or letter.

After JKM received the applications and information, JKM will gather the details of the applicants. This includes by having an interview session and investigation. Then, JKM will check Facilities Application Index Book (Buku Indeks Permohonan Bantuan) to see whether the applicants have previously made an application or not. For a new application, the application will be filed into Facilities Application (Permohonan Bantuan) general file. Next, an acceptance admission letter will be

send to the applicant or an appointment will be made for an early investigation and the applicants will be asked to come to the JKM office.

After the interview and investigations, Form JKM 17 will then be completed and will be bring forward to Pejabat Kebajikan Masyarakat Daerah / Jajahan (PKMD/J) for next action. The application will then approve or reject by Pejabat Kebajikan Masyarakat Negeri (PKMN).

1.2 Problem Statement

This research project arises from the trouble faced by the JKM staff when they have to do all the work process manually. Besides that, the citizens also tend to have difficulties in getting information about JKM as they have to go to the JKM office to get the information. Thus, there are two perspective of problem statement that we can look at, that are from the JKM point of view and the citizen point of view.

From the JKM point of view, they tend to have difficulties in gathering the citizens' data and information as well as keeping it. By having a paper based record, several constraint may occur such as time constraint in retrieving or search for particular data, risk of data loses and also redundancy of work where the clerk will have to insert the data from the form filled by the applicants into the database. Then, the officer from each district will submit their reports to the JKM headquarter in Ipoh and the person in charge will have to do the same job again, inserting data into the database in order to produce reports and statistics.

Other than that, the current work process approval for the application manually where the application form will be collected and will be investigated then will be it be send to the respective person for approval. (Refer to Appendix III)

While, on the citizens' point of view, they also tend to have difficulties in applying facilities from JKM as they have to go to the office to get information or to apply

for form and facilities. Furthermore, for those citizens who lived in a rural area where inadequate infrastructure is provided, it may be difficult for them to go to the JKM office and this will be isolated from the list of those who qualified to receive the facilities from JKM. Thus, this e-Government system is developed for their ease of use where they can access it online or even asking for somebody else to get the information for them.

1.3 Objective and Scope of Study

1.3.1 Objectives

There are several objectives of Sistem Bantuan Jabatan Kebajikan Masyarakat, Perak (SBJKM):

- To develop an online system based on the current manual system process flow

  As the current manual system bring lots of difficulties to the user especially the JKM staffs, by having a computerized system with the same process flows will reduce the complexity that the user currently facing. Besides, the user will be able to learn and adapt to the new computerized system as the flows of the manual and the computerized system is the same.

- Give more commodity to the user

  By having this online system, the user will have more commodities in accessing the system, both the citizens and also the JKM staffs. This includes the services provided in the system such as the online registration, online information, statistical report generator and many more.

- Study the citizen acceptance towards the e-Government

  Besides of giving more conveniences to the user, the system will also be a medium to study the citizen acceptance towards the e-Government system. This includes the study of how citizens' knowledge on e-Government and the impact of e-Government towards the citizens lives.

1.3.2 Scope of Study

For this Sistem Bantuan Jabatan Kebajikan Masyarakat, Perak (SBJKM), the system is developed as a computerized version with the same manual system scope.

The system has different functions for two types of user; citizens and JKM staffs. For citizens, the functions includes online registration, online information review and online file download.

Differ from the citizens; the JKM staffs have the login function which differentiates their accessibility into the system according to their position whether as a clerk, investigator, officer or administrator. The functions include database management, update, add and delete data; and statistic review.

Other than that, this system study on the acceptance of the user. This is to make a comparison and to study the effectiveness of e-Government system to their daily lives as well as how far does the e-Government meet their satisfaction.

1.3.3 Feasibility of the Project within the Scope and Timeframe

For this FYP project, students have been given 2 semesters to complete the project. Thus, in meeting the timeframe of 2 semesters, the author has come out with a Gantt chart to manage the project plan so that it will not exceed the time given. (Refer to Appendix II)

The project has been divided into 4 phases according to the SDLC (Software Development Life Cycle) that are planning, analyzing, designing and implementing. The details of each phase are being discussed in the Methodology or Project Work part. (Refer to Appendix I)

CHAPTER 2

LITERATURE REVIEW AND/OR THEORY

2.1 E-Government in Malaysia

The importance of e-Government to the community is nowadays emerging as Malaysia has come out as a developed country. Towards the mission of 2020, the country is now applying the information and communication technology as well as the information systems in moving along with the globalization era. The unlimited access to the information today has made the government move forward and trying to enhance their services electronically to accommodate community needs.

In Malaysia, there are many opinions and responses being viewed regarding to this e-Government. The development of this country towards technology and computerized system has take Malaysia one step more in becoming one of the most developed countries.

However, in achieving the mission 2020, there are several obstacles as globalization started to influence the country's development few years ago. According to Mohamad Suhaimi Mohamad Tahir, there are several global trends that have become obstacles for the government in achieving its target. Some of the trends include access to both ICT and education infrastructure remains limited in developing countries which thus, hampering e-Government initiatives. Besides, as the advanced countries are moving towards e-Government, more or less it affected the e-Government growth in Malaysia. (2005)

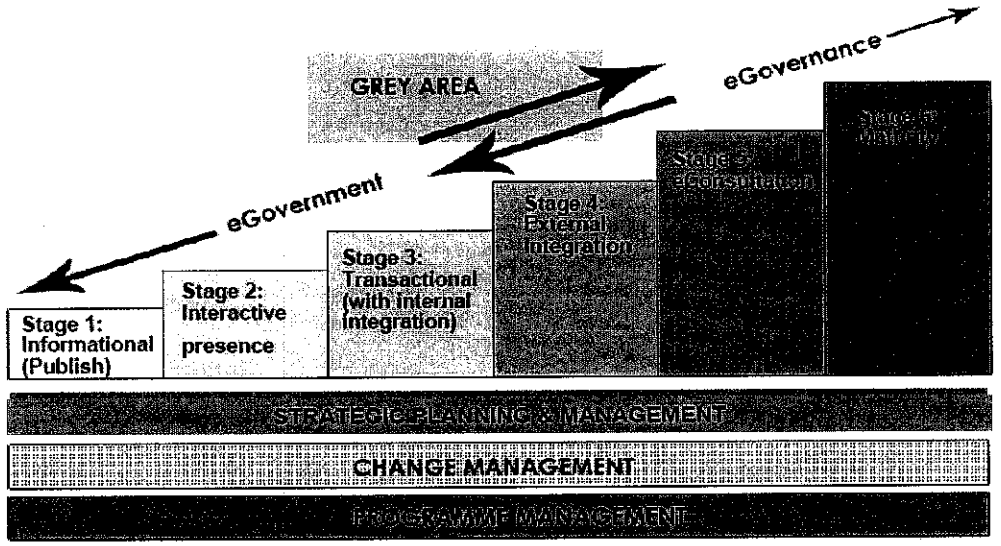
Mohamad Suhaimi also emphasized on the e-Governance that is beyond e-Government where the e-Government looks at the services delivery while the e-Governance focuses on the results or the outcomes of the services delivered. The key differences between the e-Government and e-Governance are shown in the table below:

Table 1: Key Differences of e-Governance and e-Government

eGovernment	eGovernance
PROCESS • Electronic service delivery • Electronic workflow • Electronic poll • Electronic productivity	RESULTS • Electronic consultation • Electronic controllership • Electronic engagement • Networked societal guidance

Source: Donald F. Kettl, The Transformation of Governance

Besides that, he also stated, "e-Governance can be seen as a natural evolution of e-Government. As the public gets used to electronic services delivery, the government tend to become more open and the public tend to demand greater participation in government affairs". As we can see, in Malaysia nowadays the electronic services demands is now emerging and increasing, hence this leads to the importance of the e-Government in Malaysia citizens' daily lives. Mohamad Suhaimi Mohamad Tahir has visualized this e-Governance framework as below:



Reference: MSC Technology Centre Malaysia

Figure 1: e-Governance Framework

As the Malaysia government today is putting more and effort in the information and communication technology (ICT) sector, many e-Government systems has been developed and this also aimed to achieve the vision of Malaysia that is Knowledge Economy By Year 2020 or known as K-Economy. The graph of K-Economy is shown as below:

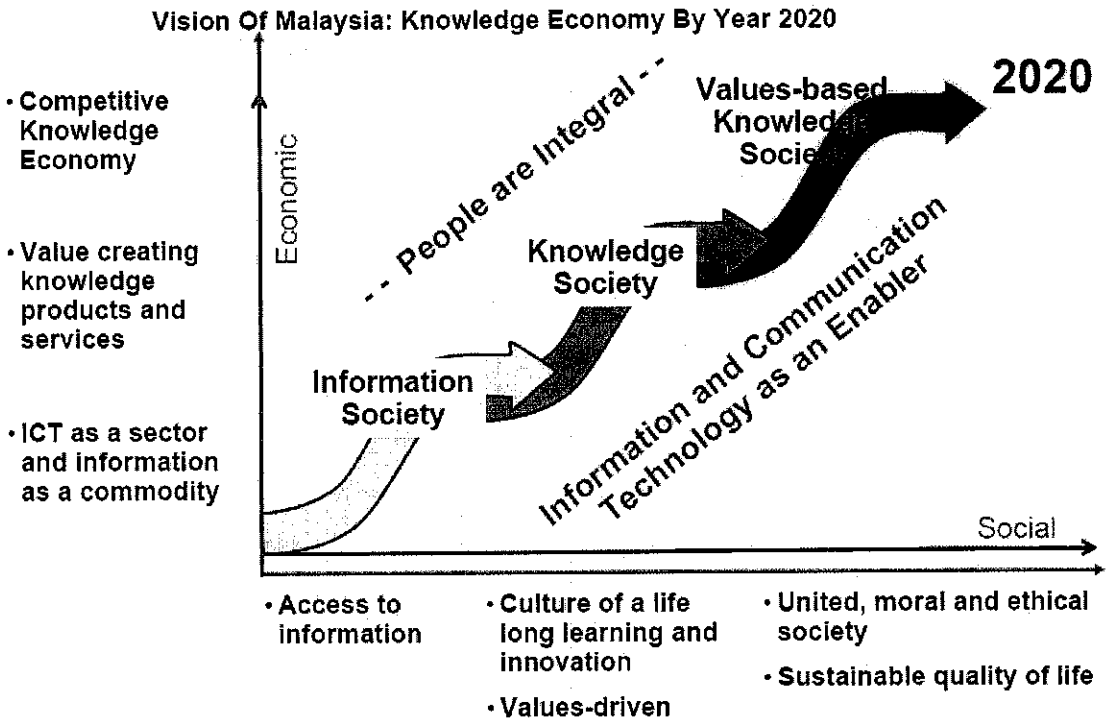


Figure 2: K-Economy

Hence, Malaysia has given so much effort in moving along with other countries by setting a target especially in achieving this K-Economy and also the Vision of 2020. This effort includes enhancing the government service by applying new technology along with the country's development.

2.2 E-Government Features

As development in technology has take place in the government sector, other countries also is experiencing the same development phase. However there are some differences that can be found between Malaysia and other countries. This includes the level of awareness of the community in that country itself towards the e-Government that has been provided. Besides, the types of functionality provided in the e-Government will be taken into account on how effective that the e-Government brings to the community; for example, by applying the appropriate human computer interactions elements into the e-Government system or site.

According to an article from the World Markets Research Centre websites, there are several features that should be included in the e-Government system. The features includes online information, services provided, privacy and top security, disability access, foreign language access, advertisements and user fees and public outreach.

Other than the features that have been aligned, the article also stated the results of the comparison made worldwide on the e-Government. From the survey made, there are several features that Malaysia did not have in its e-Government site. The features include privacy policy, security policy and also handicap accessibility.

Besides the feature, it is also important to look at the user acceptance towards this e-Government effort. Lemuria Carter and France Belanger have aligned several differences and similarities between e-Commerce and e-Government by using the role of perceived characters of innovating (PCI) in user acceptance. There is also the technology acceptance model being used in coming to some hypotheses regarding to this e-Government user acceptance (2004).

Thus, in this project, the technology acceptance model will also be used in aligning the methods and in studying the citizens' acceptance towards the e-Government that will be developed throughout this project.

CHAPTER 3

METHODOLOGY OR PROJECT WORK

3.1 Incremental Prototyping

For this system, the methodology that the author used is incremental prototyping. Incremental prototyping is an in-between approach that combines the advantage of waterfall model and evolutionary approach.

In an incremental prototyping model, the product features are added into each of several prototypes. Typically, development starts with the external features and user interface and then, adds features as prototypes are developed. Requirements and architectural design can be done up front and then each prototype developed as the project progresses. The diagram of incremental prototyping is shown as below:

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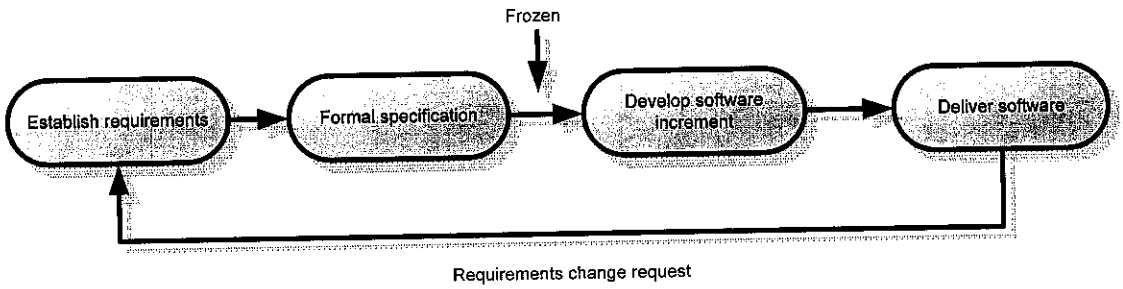


Source: Bruce R. Maxim, UM, Dearborn 1

Figure 3: Incremental Prototyping

3.2 Project Work

3.2.1 Planning

In the planning phase, the tasks involved were the project initiation where the author needs to select the project topic and come out with a project proposal. Then, then next task was the project management. This project management task includes analyzing the technical feasibility of the project as well as the organizational feasibility.

After the analysis made, the author has come out with the preliminary research work where she studied on several previous study made on the same project topic or scope that is on the e-Government system. This includes articles, journals or books on citizens' acceptance of e-Government.

3.2.2 Analysis

The next phase is the analysis phase where the tasks include developing analysis plan where here the requirements gathering took place. The user requirements were gathered in various ways such as surveys, interview or discussions. The objectives of this requirement gathering was to ensure that the project developed meet the user satisfaction as well as to see the factors that contributes to the system development.

After the requirements gathering, the next task was the use-case modeling. This includes developing uses cases, structural model and developing the behavioral model. (Refer to Appendix VI - X)

Those models and diagrams are used to understand the system flow and also to determine the object and the interaction of the object with each function. This also used as guidelines in developing the system.

3.2.3 Design

In the design phase, the programming part took place but before that, the first task that being completed was the system architectural design. This includes developing the design strategy, the infrastructural design such as the system network model, the hardware and software specifications and also the security plan for the system.

Then, the next task was the user interfaces design which then followed by the programming management. This has taken quite some time as the building source code takes place. After that, the database design took place where the functions in the system were linked to build a complete system.

3.2.4 Implementation

The final phase is the implementation phase. In this phase, testing has been conducted to test the reliability of the system. Then, modification takes place if there is any to be made.

Finally, the system is assessed and the study of the user acceptance was made after the system is completed and tested.

3.3 System Flow

In the system, first the citizen will register whether online or manually. Then, the information will be inserted directly to the database. The citizen can choose the appropriate types of facilities and they can also apply more than one facility but with different types of facilities with maximum number of four times of application.

After the registration, the information will be checked by the officer and the clerk. Then, the officer will allocate investigators according to the district to investigate the applicants to see whether they are qualified enough to get a facilities or not. This includes determining the amount of facilities that will be given.

Then, after the investigation, the applications will be checked again by the officer and will be sending to the JKM headquarters to be approved. After the status has been known and the certification from the District Officer has been gained, the applicants will informed about their application status.

The developed system flow chart is shown in Appendix IV while the UML diagram is shown in Appendix V.

3.4 Development Tools

For this project, the development tools that the author used are the PHP scripting with MySQL database and Apache server.

This is because, both Apache, MySQL and PHP are open source and it is reliable and easy to maintain while for the browser, it is recommended that the user use the Internet Explorer v.6 and above.

CHAPTER 4

RESULTS AND DISCUSSIONS

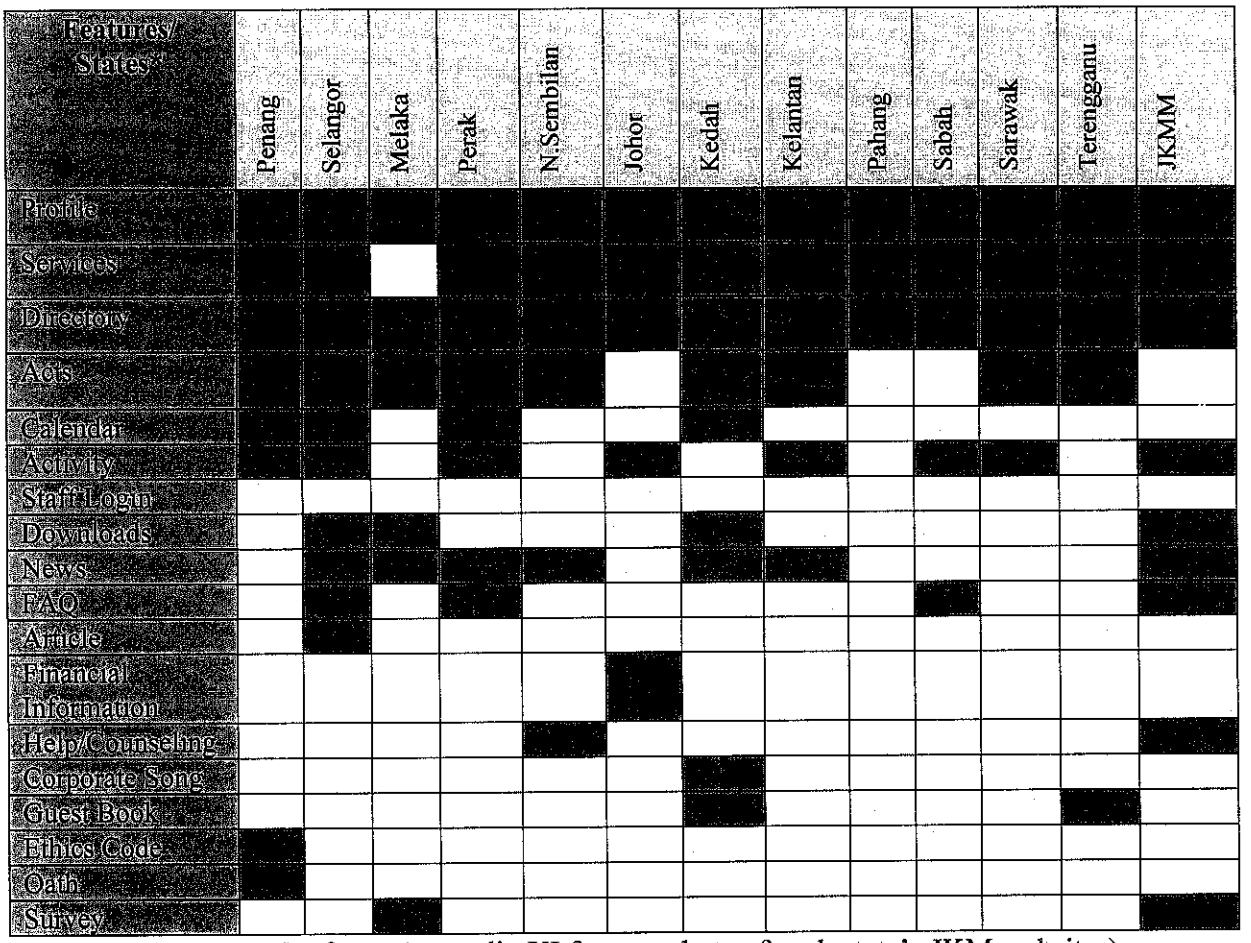
For this project, web host has been rented for one semester duration and for testing purpose in order to let the citizen test the system. These citizens can also access the system wherever they are as long as there is internet connection and the author is also looking forward to have good feedback from the user during the testing part.

This e-Government should be interactive and effective enough in simplifying the manual work load as well as running smoothly in providing information to the citizens and a system to complete the daily routine work load of the JKM staffs.

4.1 Overview on Available JKM (Department of Social Welfare) Websites

JKM is one of the most important departments in Malaysia and thus, all states have the facilities of providing the JKM website to their citizen except for Perlis which does not has specific JKM website. However, there are several differences in terms of functions and layout in each of the states' JKM websites. Below is the table that summarizes some of the differences of each state's JKM websites:

Table 2: Differences of Features on JKM websites



(Refer to Appendix XI for snapshots of each state's JKM websites)

4.2 Developed System

The system developed has been divided into two parts that are Citizen's part and Staff's part where the Citizen's part focus more on the user acceptance of the e-Government while the Staff's part more focus on computerizing the current manual system.

4.2.1 Sistem Bantuan Jabatan Kebajikan Masyarakat for Citizens

For this part, a site for the citizen has been developed in order to do the user acceptance and also to meet one of this project's objective. The snapshots of the citizen part are as below:

4.2.1.1 Main Page

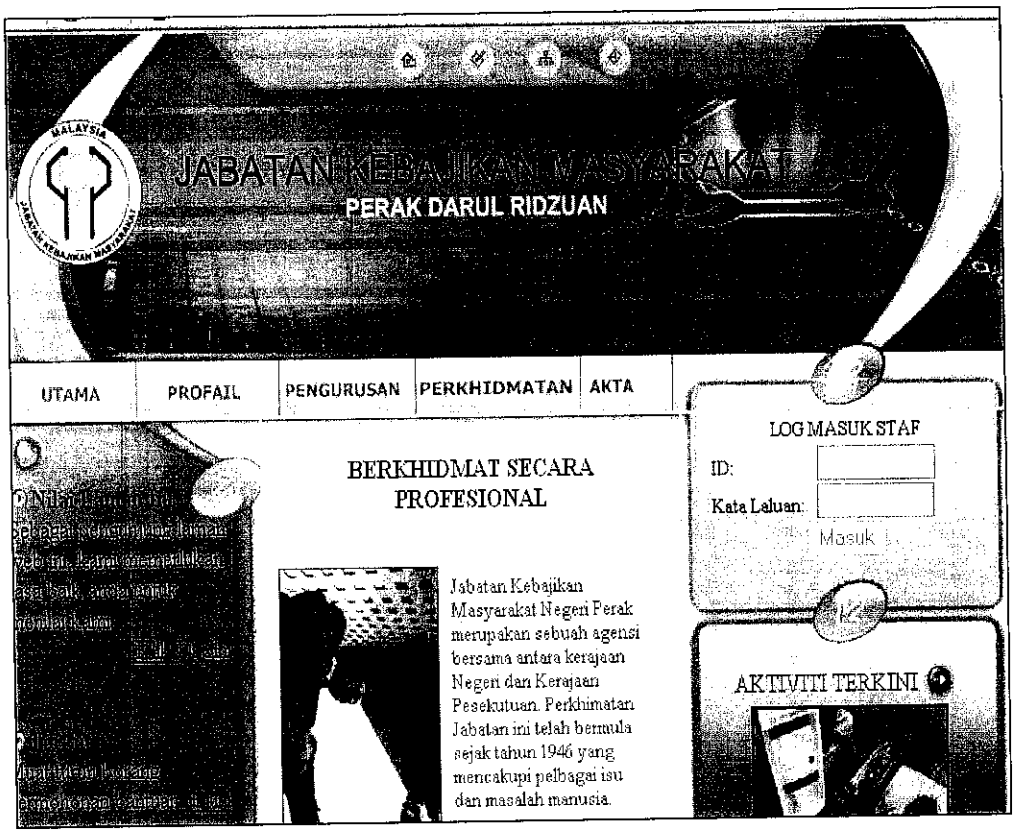


Figure 4: Snapshot of Main Page

The main page of the SBJKM contains the information on JKM, Perak and their motto. Besides that, it also has the links where the user or citizen can do the online user acceptance test, go to the download page and also link for the citizen to apply for aids online.

4.2.1.2 Profile

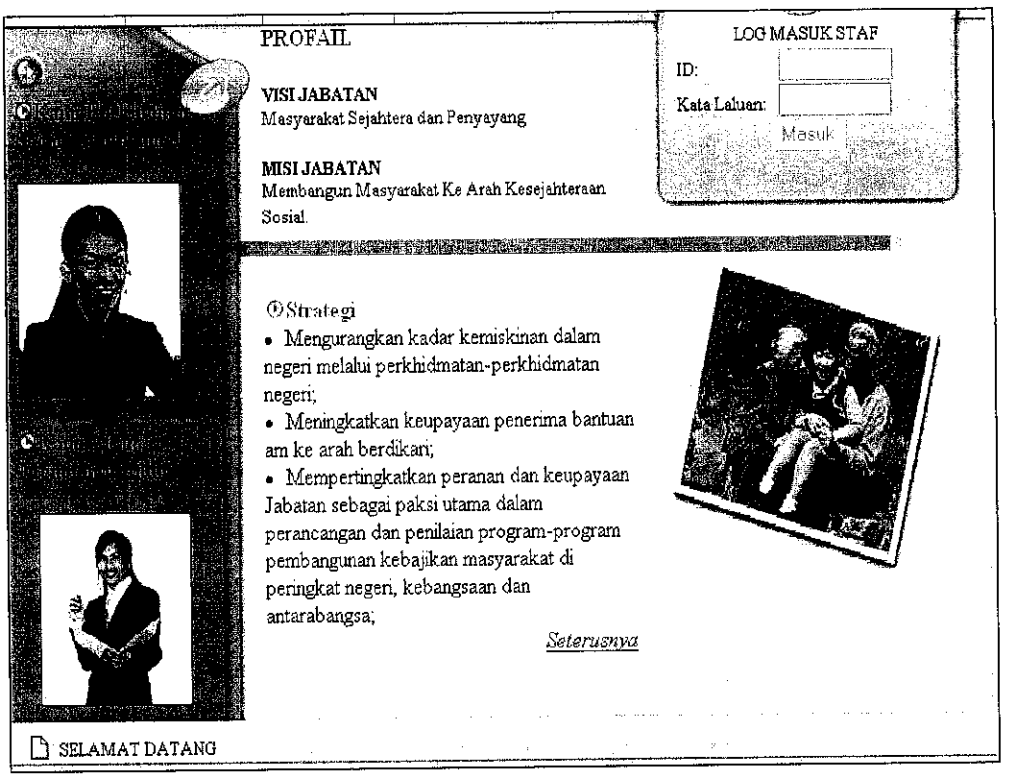
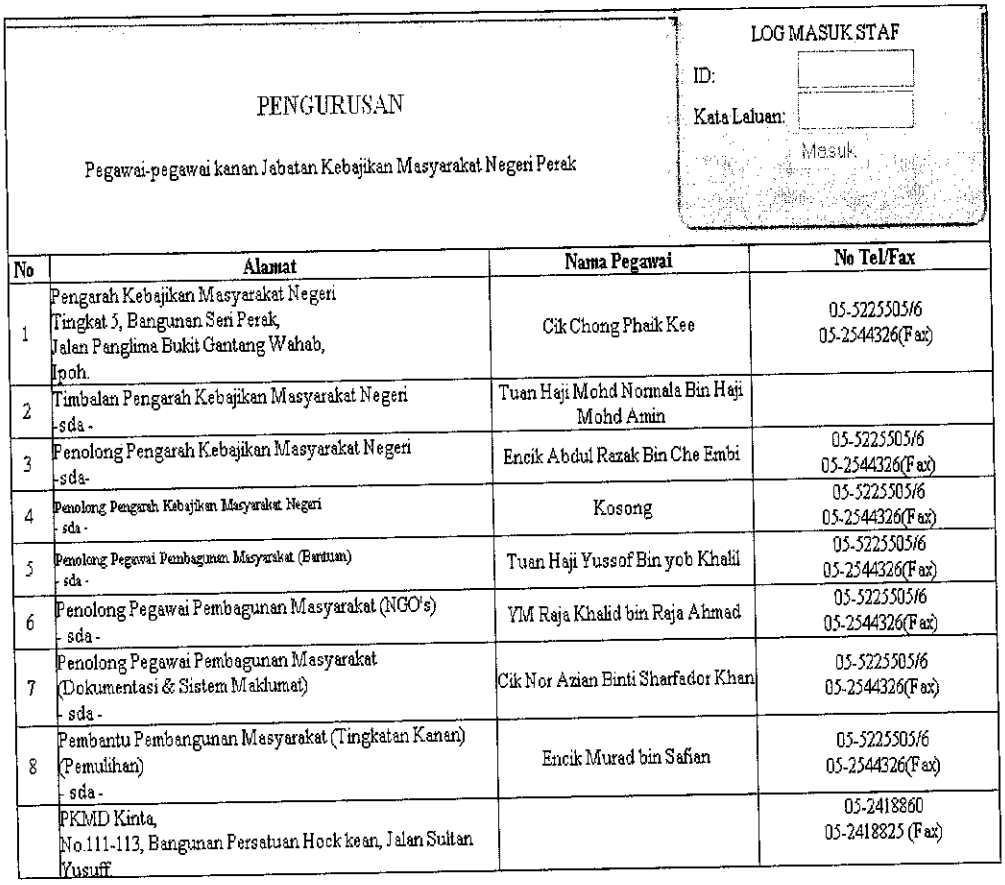


Figure 5: Snapshot of Profile webpage

In the profile page, it contains the information on the vision, mission and objectives of JKM and also the strategy of the department. In every page of this website, the JKM staffs can login in order to get access to the system.

4.2.1.3 Management



PENGURUSAN

Pegawai-pegawai kanan Jabatan Kebajikan Masyarakat Negeri Perak

LOG MASUK STAF

ID:

Kata Laluan:

Masuk

No	Alamat	Nama Pegawai	No Tel/Fax
1	Pengarah Kebajikan Masyarakat Negeri Tingkat 5, Bangunan Seri Perak, Jalan Panglima Bukit Gantang Wahab, Ipoh.	Cik Chong Phaik Kee	05-5225505/6 05-2544326(Fax)
2	Timbalan Pengarah Kebajikan Masyarakat Negeri -sda -	Tuan Haji Mohd Normala Bin Haji Mohd Amin	
3	Penolong Pengarah Kebajikan Masyarakat Negeri -sda-	Encik Abdul Razak Bin Che Embi	05-5225505/6 05-2544326(Fax)
4	Penolong Pengarah Kebajikan Masyarakat Negeri - sda -	Kosong	05-5225505/6 05-2544326(Fax)
5	Penolong Pegawai Pembagunan Masyarakat (Bantuan) - sda -	Tuan Haji Yussof Bin yob Khalil	05-5225505/6 05-2544326(Fax)
6	Penolong Pegawai Pembagunan Masyarakat (NGO's) - sda -	YM Raja Khalid bin Raja Ahmad	05-5225505/6 05-2544326(Fax)
7	Penolong Pegawai Pembagunan Masyarakat (Dokumentasi & Sistem Maklumat) - sda -	Cik Nor Azian Binti Sharfador Khan	05-5225505/6 05-2544326(Fax)
8	Pembantu Pembangunan Masyarakat (Tingkatan Kanan) (Pemulihan) - sda -	Encik Murad bin Safian	05-5225505/6 05-2544326(Fax)
	PKMD Kinta, No.111-113, Bangunan Persatuan Hock kean, Jalan Sultan Yusuff.		05-2418860 05-2418825 (Fax)

Figure 6: Snapshot of Management webpage

In the management page, the contact numbers and the person in charge of every office in each district being displayed. This is to give the citizen information on JKM organizational charts.

4.2.1.4 Services

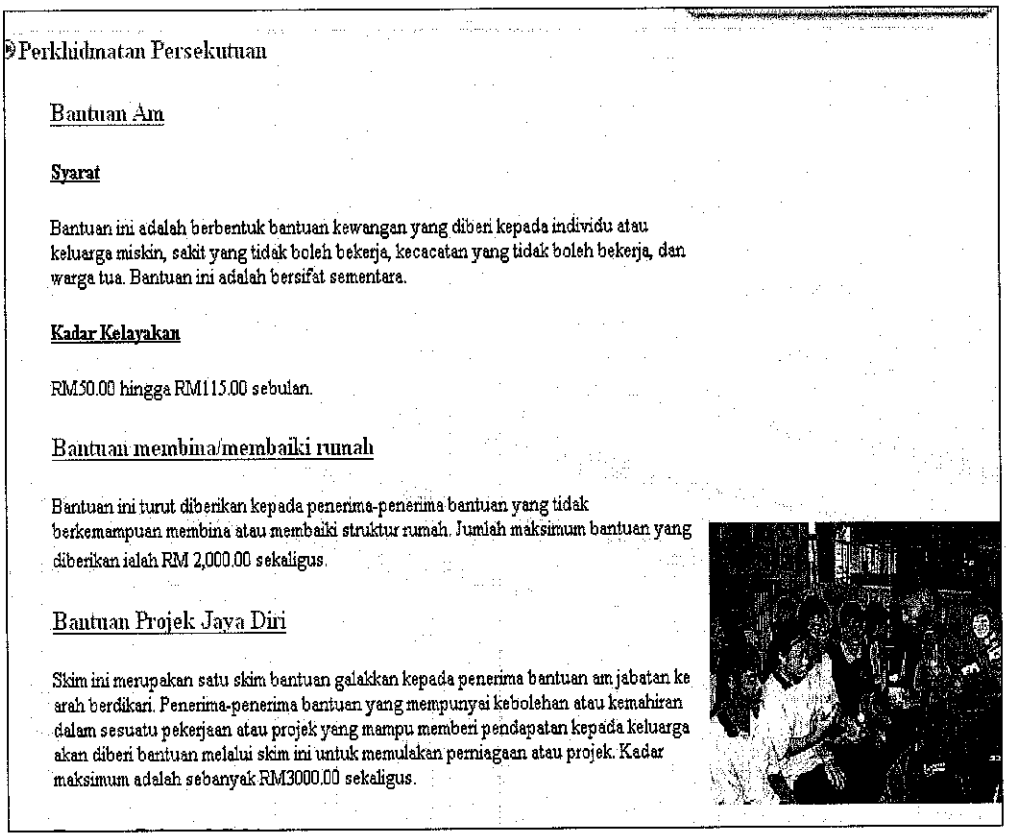


Figure 7: Snapshot of Services webpage

There are several services being provided by JKM for the citizen. The information on the services, the rules and brief explanation on the services can be viewed from the services page.

4.2.1.5 Acts

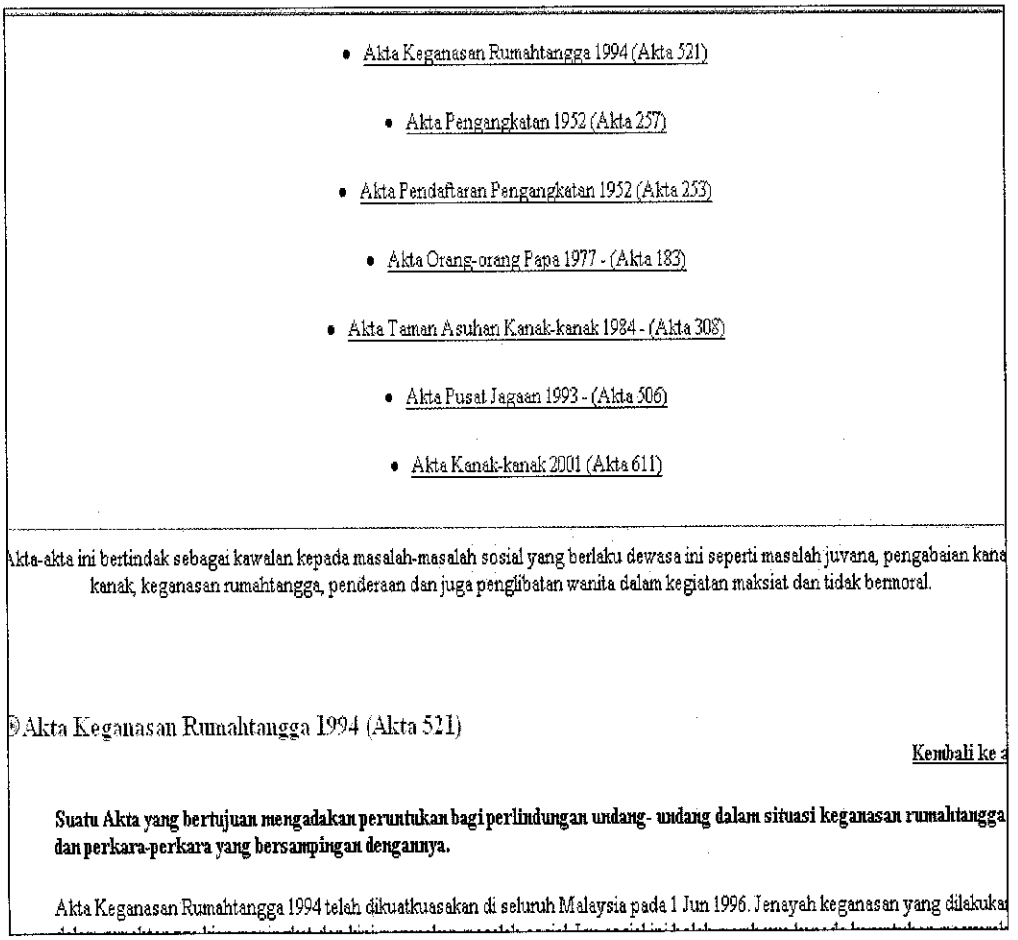


Figure 8: Snapshot of Acts webpage

In the acts page, there are several acts being aligned. This is to give the citizen general information and brief overview on the JKM acts that being practiced along with the services provided.

4.2.1.6 Form Downloads

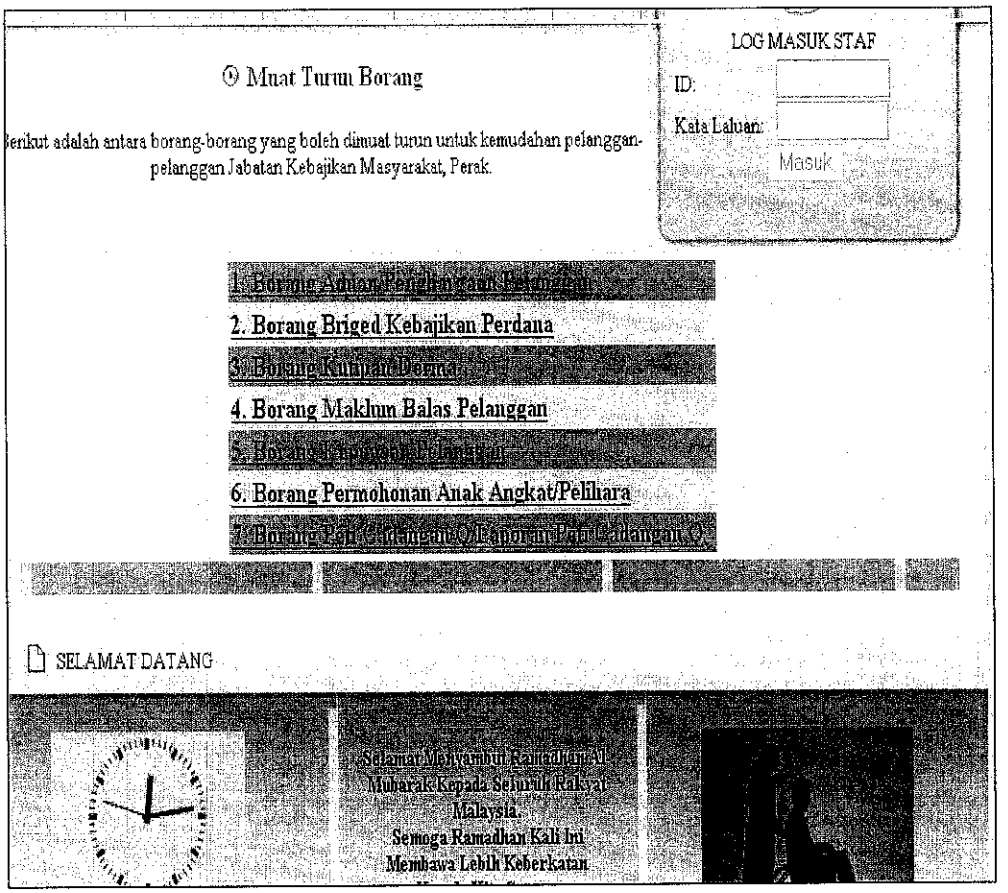


Figure 9: Snapshot of Form Downloads webpage

This page allows the citizen to download any forms for their ease of use. They can easily download, print and just submit the form to any nearest JKM office. This is to give the citizens alternative ways instead of going to the JKM office to get the form; they can easily download it from this website.

4.2.1.7 Online Application

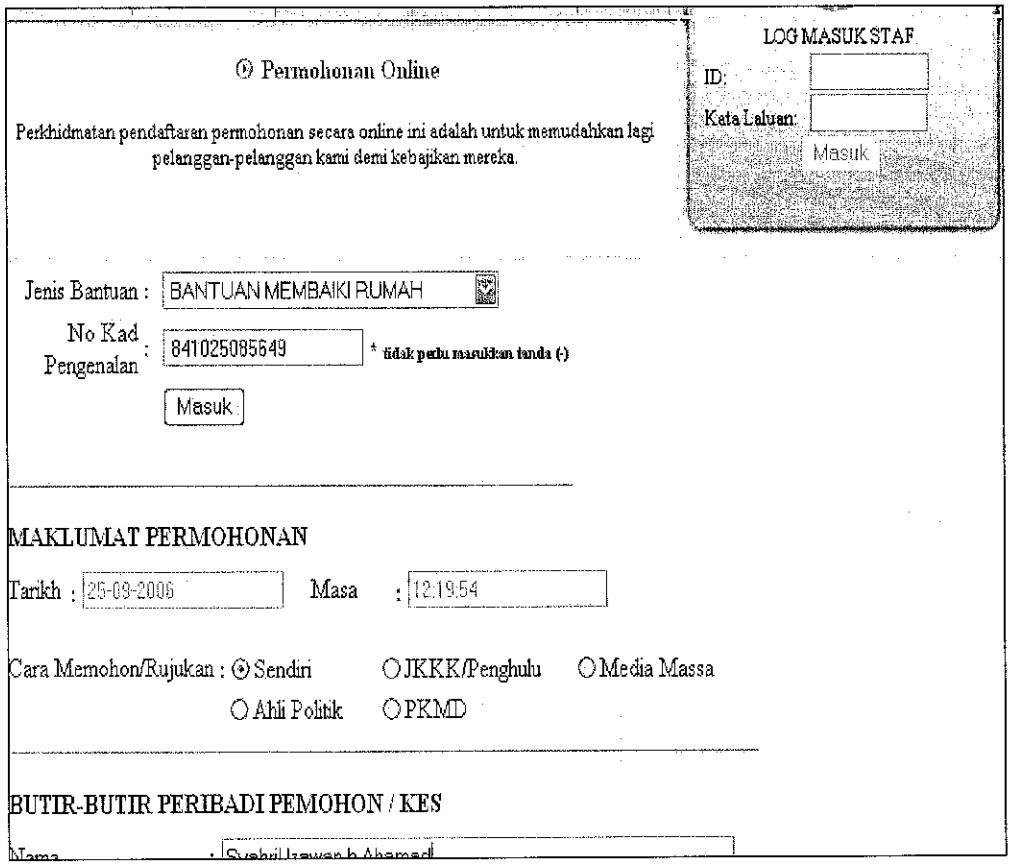


Figure 10: Snapshot of Online Application webpage

This page allows the citizen to apply for aids online where the information will be updated later after the investigator make an investigation. This also to give the user alternative way to apply for aids.

4.2.2 Sistem Bantuan Jabatan Kebajikan Masyarakat for Staffs

For the staff's part, the SBJKM is a system that will simplify their tasks where it is a computerized version of the current manual system. The snapshots of staffs part are as below:

4.2.2.1 Login

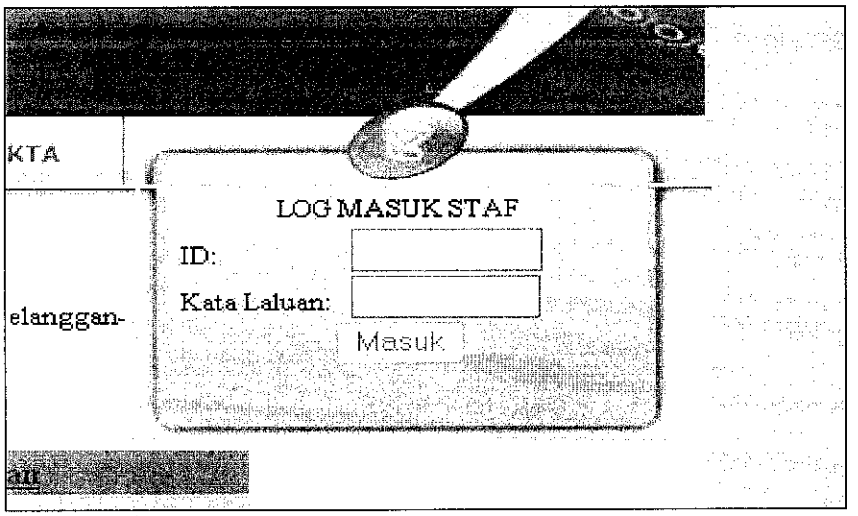


Figure 11: Snapshot of Login page

For this function, the user will have to login before they can get into the system. They can login from the JKM websites which will then redirect them to the system after they login. The user has been divided into 4 groups that are web administrator, officer, investigator and clerk. Each user will have different menu where different functions will be given according to their group user.

4.2.2.2 New Registration

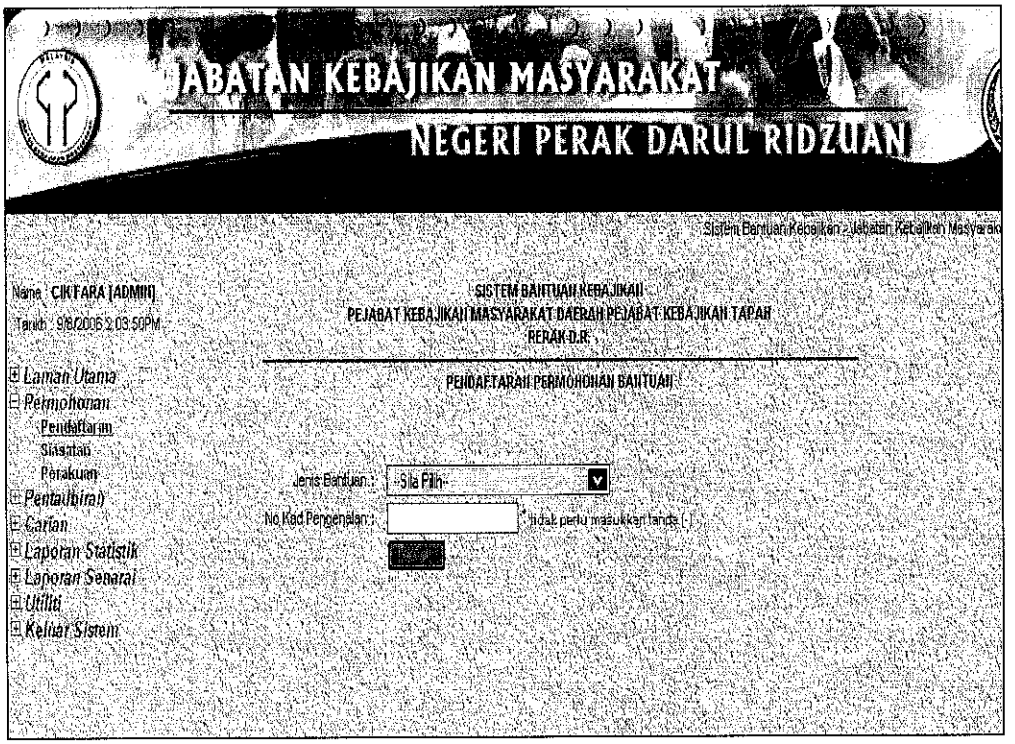


Figure 12: Snapshot of New Registration

The user registration function where specifically for clerk, is to register a new application whether the applicant apply online or manual. If the application is online, then the clerk will need to check again in the system and if the application is manual, then the clerk will need to register or to key in back the data from the paper into the system.

As shown in the Figure 12, the user will first have to select type of aid that they want to register for the applicant. Then, they have to enter the applicant identity card (I/C) number and click on the button 'Masuk'.

4.2.2.3 New Registration Details

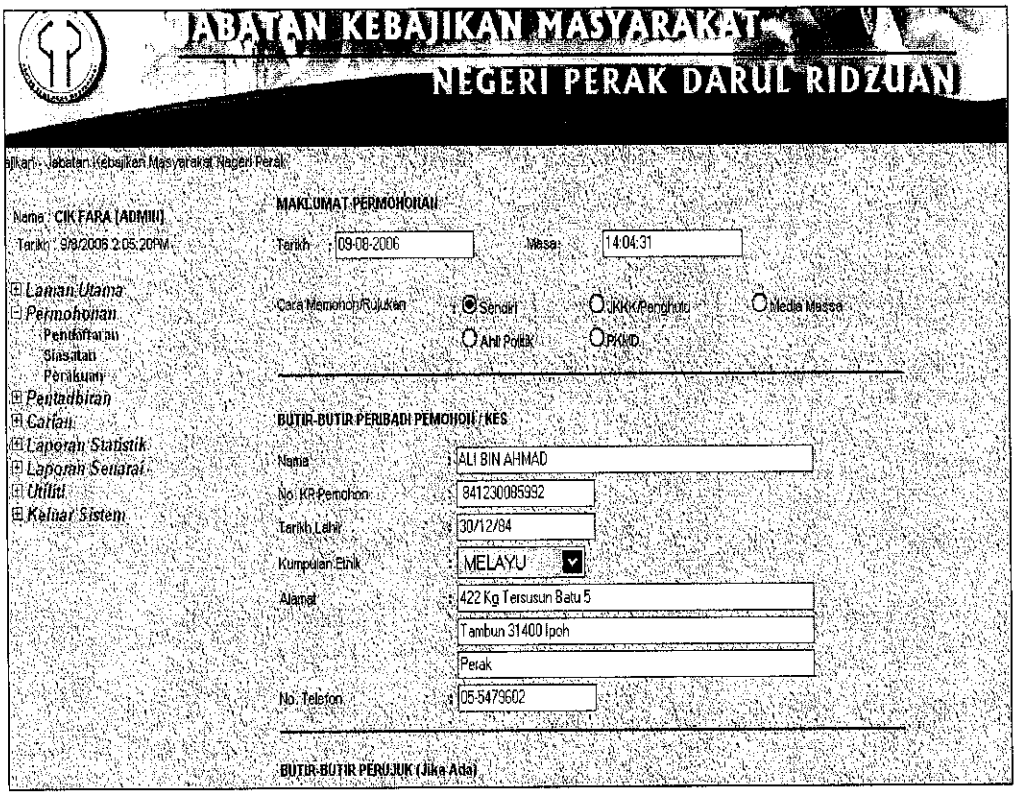


Figure 13: Snapshot of New Registration Details

After the user register the new application, the system will then generate the registration number for the applicant. Then, the user will have to fill in the details of the applicants as shown in the Figure 13 above.

4.2.2.4 List of New Applications

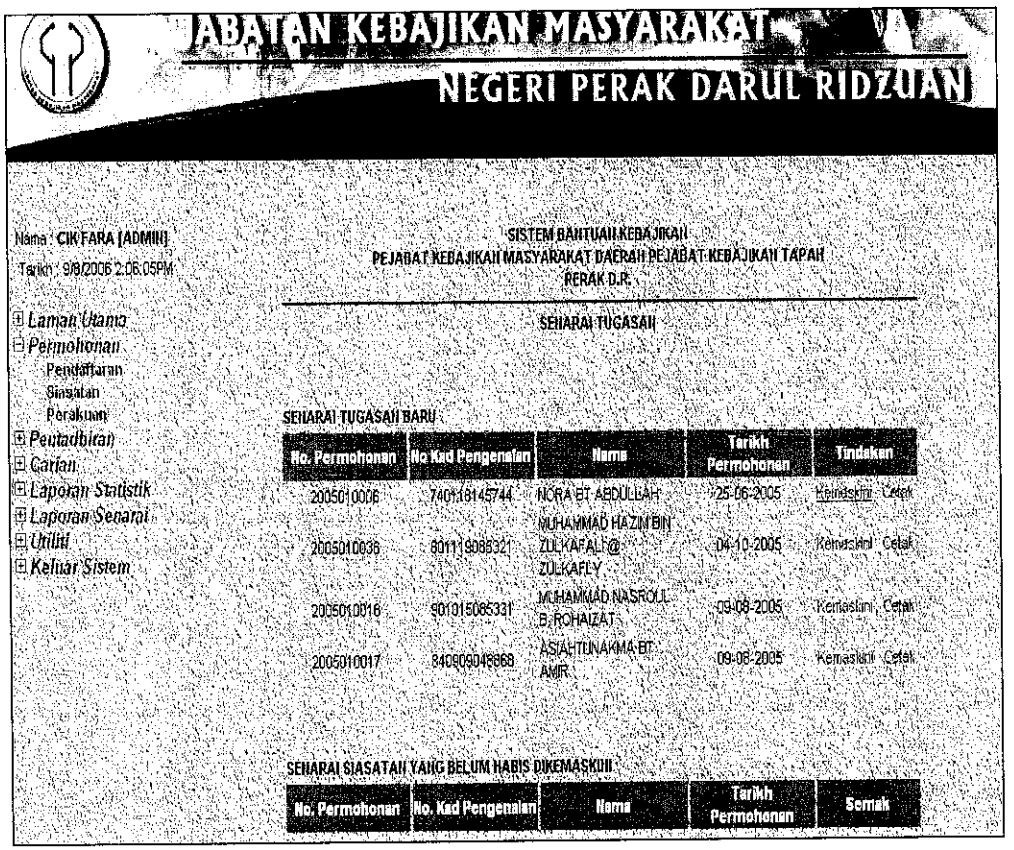


Figure 14: Snapshot of List of New Applications

Then, after the new registration has been completed, it will be included in the list of new registration where the user can update or delete the registration. The list is divided into 2 groups that are list of new applications and list of unfinished update applications as shown in the Figure 14 above.

4.2.2.5 Statistic

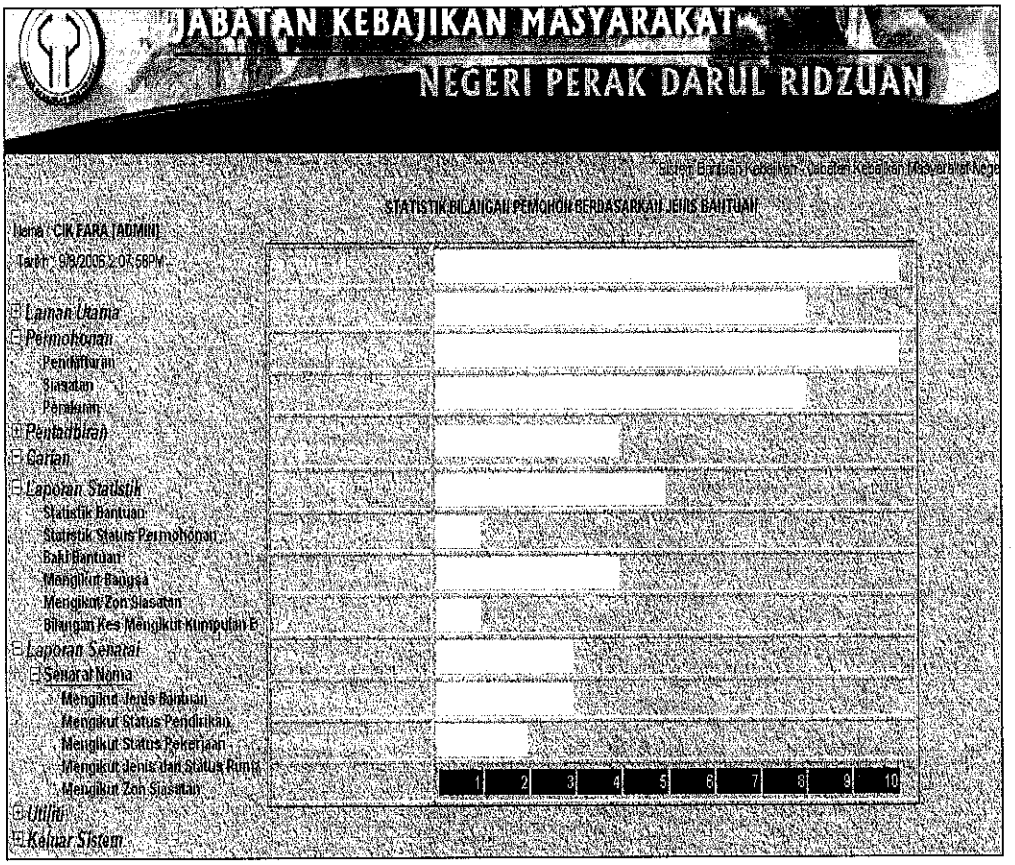


Figure 15: Snapshot of Statistic

Besides of new registration, the user also can view the statistic of the application in the JKM. This statistic can only be viewed by the officer, who needs to produce monthly report with it. Other than that, this statistic also has been categorized into several categories such as type of aid and race. Figure 16 below shows statistic table according to race.

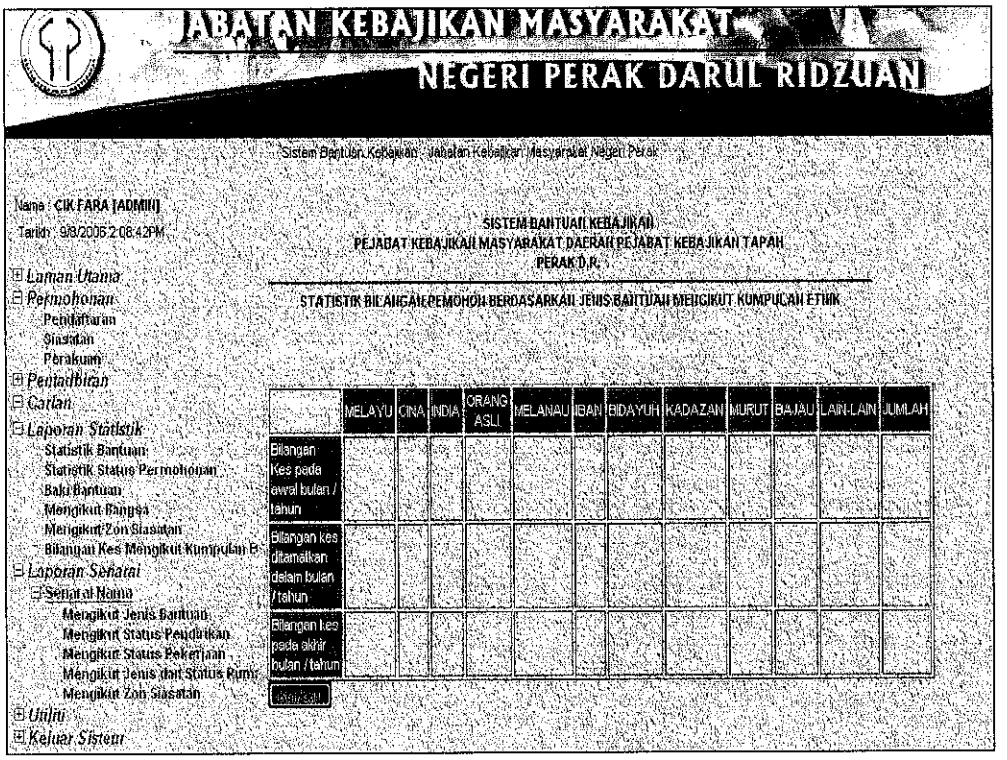


Figure 16: Snapshot of Statistic

4.2.2.6 Name Lists According to Job Status

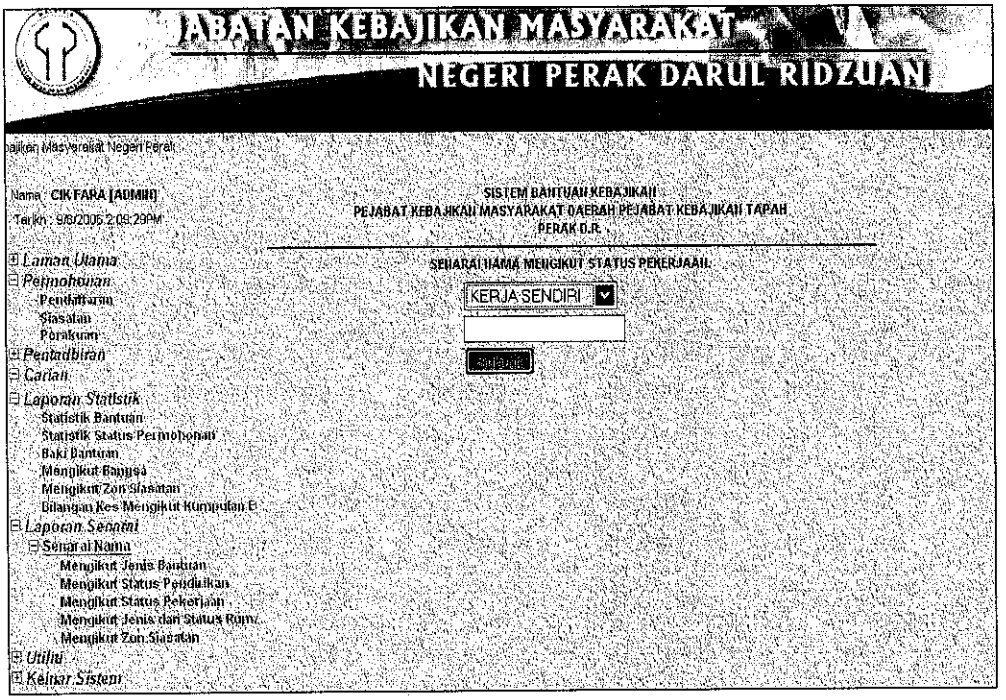


Figure 17: Snapshot of Name Lists According to Job Status

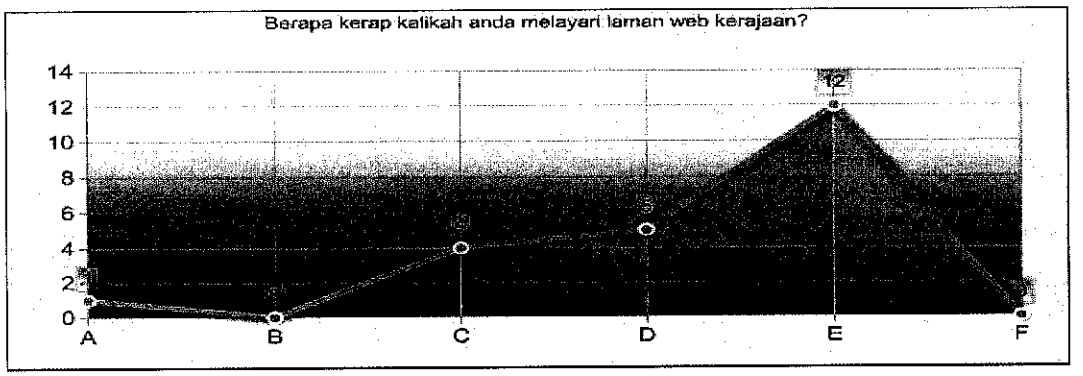
Figure 17 shows the name list according to job status. This function can only be access by officer. The officer will first select the appropriate job status and then enter the relevant years. After that, the officer will click the 'Submit' button to get the name lists.

4.3 Results and Discussions on User Acceptance

The study on the user acceptance has been conducted online where a set of questionnaire has been created with the objective to get the citizen's responses towards e-Government as well as Jabatan Kebajikan Masyarakat (JKM).

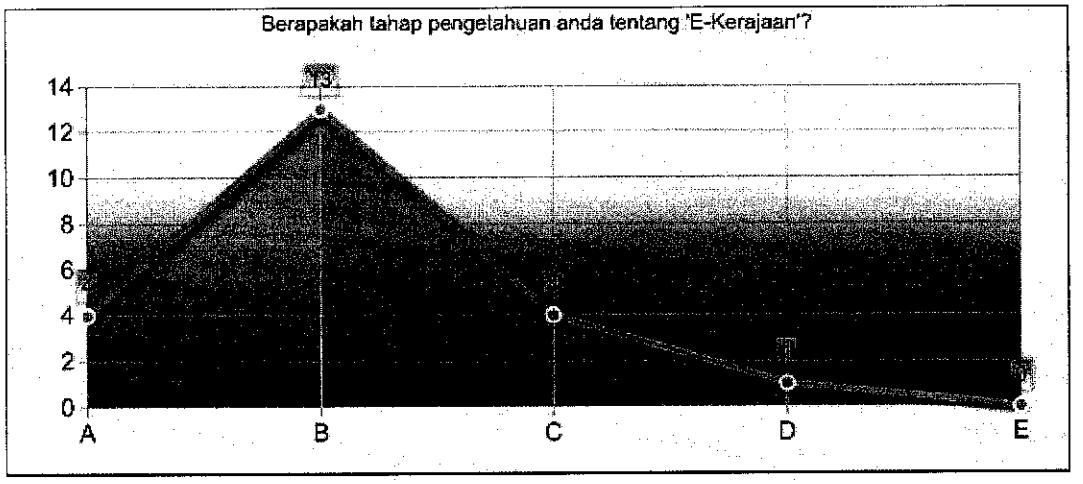
In response to the online survey which can be access online, majority of the participants has heard and know about e-Government. However, 90.9% of the participants has never access any of JKM websites and 2.7% not really sure what is JKM.

The following graphs show the results of the user acceptance towards e-Government.



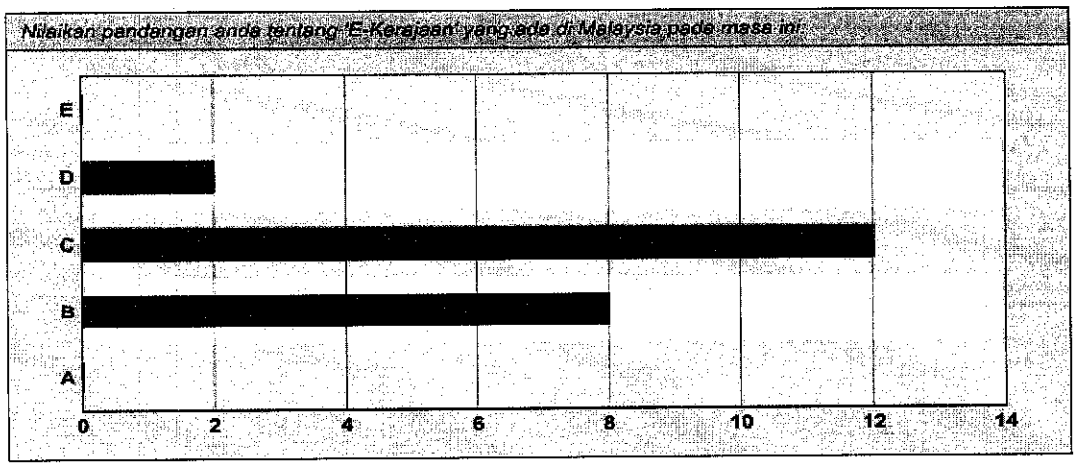
A – Beberapa kali sehari
B – Sekali sehari
C – 3-5 kali seminggu
D – 1-2 kali seminggu
E – Sekali sebulan
F – Saya tidak mempunyai akses kepada internet

Figure 18: Results of User Acceptance – How often does the citizen access government website?



A – Tidak tahu langsung
B – Sedikit tahu
C – Tahu
D – Sangat tahu
E – Pakar dan sangat berpengetahuan tentang E-Kerajaan

Figure 19: Results of User Acceptance –The participants' knowledge's level on e-Government



A – Sangat puas hati
B – Puas hati
C – Sedikit tidak puas hati
D – Tidak puas hati
E – Sangat tidak puas hati

Figure 20: Results of User Acceptance – Participants' point of view on e-Government

4.4 Limitation

However, the working prototype must is facing some barriers. As being plan, the first part of the project that is the first semester of FYP was dedicated in planning, analyzing and designing system. By the second semester, the programming started along with the database development. This is followed by the implementation of the systems as the study of the citizens' acceptance take place.

Then, the workable product should be test out on life testing where it will be put on real server so that every one can have accessed to it. Unfortunately, the author faced some difficulties or limitation towards the plan. It is because the difficulties getting the citizens into this experiment has become the main obstacle in order to implements the study. Besides, to get the target amount of citizens with various backgrounds may be difficult as the system should be made accessible from anywhere instead of get the citizens to come to UTP to do the assessment.

Besides that, the security of the system is not properly being conducted as it only applies the basic functions of security such as authorization and authentication through login function. The functions of the system for the staffs are not complete as the system cannot generate voucher as it is planned due to time and skills constraint.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATION

5.1 Conclusion

The project had three objectives to achieve in terms of research study and product development. The main focus of project is to study on the user acceptance towards e-Government. The objectives are as follows:

1. To develop an online system based on the current manual system process flow
2. Give more commodity to the user
3. Study the citizen acceptance towards the e-Government

For the first objective, the author has developed an online system that is based on the current manual system process flow. This system is expected to simplify the current work process of the JKM staffs and also reduce the risks of data loses by having the traditional paper-based data entry, update and delete. Therefore, the first objective has been fulfilled as the system has been developed.

To achieve the second objective, the system along with the websites should be made available online. This is to give commodity to user in terms of the user has accessibility to the information anytime and anywhere. Hence, the second objective has also been fulfilled as the system and website are now available online.

The third or last objective is to study on the citizen acceptance towards the e-Government. To achieve this objective, a study should be made on the citizen

acceptance. The author has successfully made a study however the number of respondents of the study is not significant to make a conclusion on the user acceptance towards e-Government in Malaysia.

5.2 Recommendation

This project has the potential to be continued in terms of enhancing the functions of the system and improving the usability of the website from human computer interaction (HCI) other than improving the system technically from the security and reliability point of view.

Besides that, the study of the user acceptance also can be improve as Malaysia is now moving towards e-Government and e-Governance where the technology changes keep emerging and being applied in the government sector. Other than that, the study can also introduce and give the citizens clearer ideas and views on the e-Government.

The external examiner, Mr. Ishak Hassan also has advised the author to study in more details on the process flow of e-Government. This include JKM as well as other government sector to avoid misunderstood as well as to keep updated on the e-Government development in Malaysia.

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World Markets Research Centre, 2001, *Global e-Government Survey*

APPENDICES

Appendix I

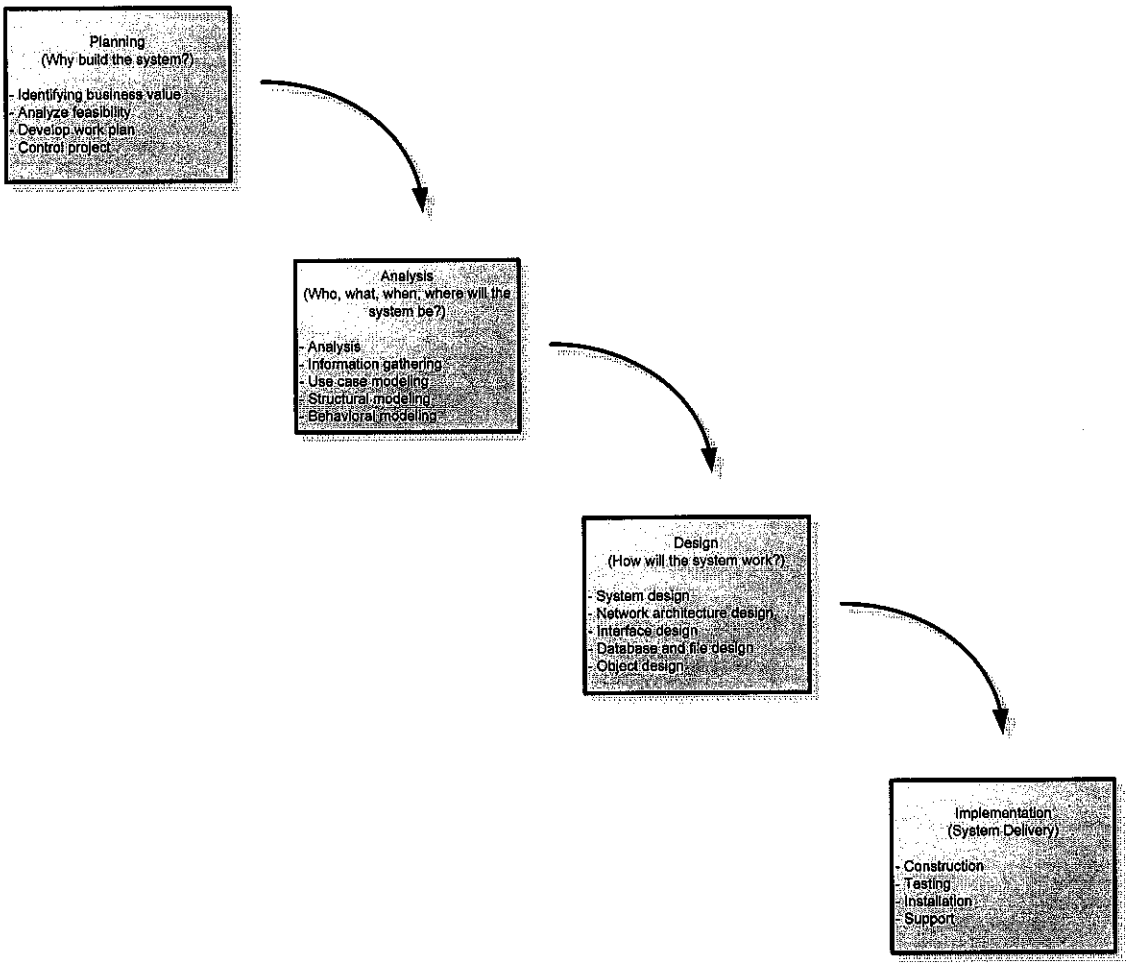
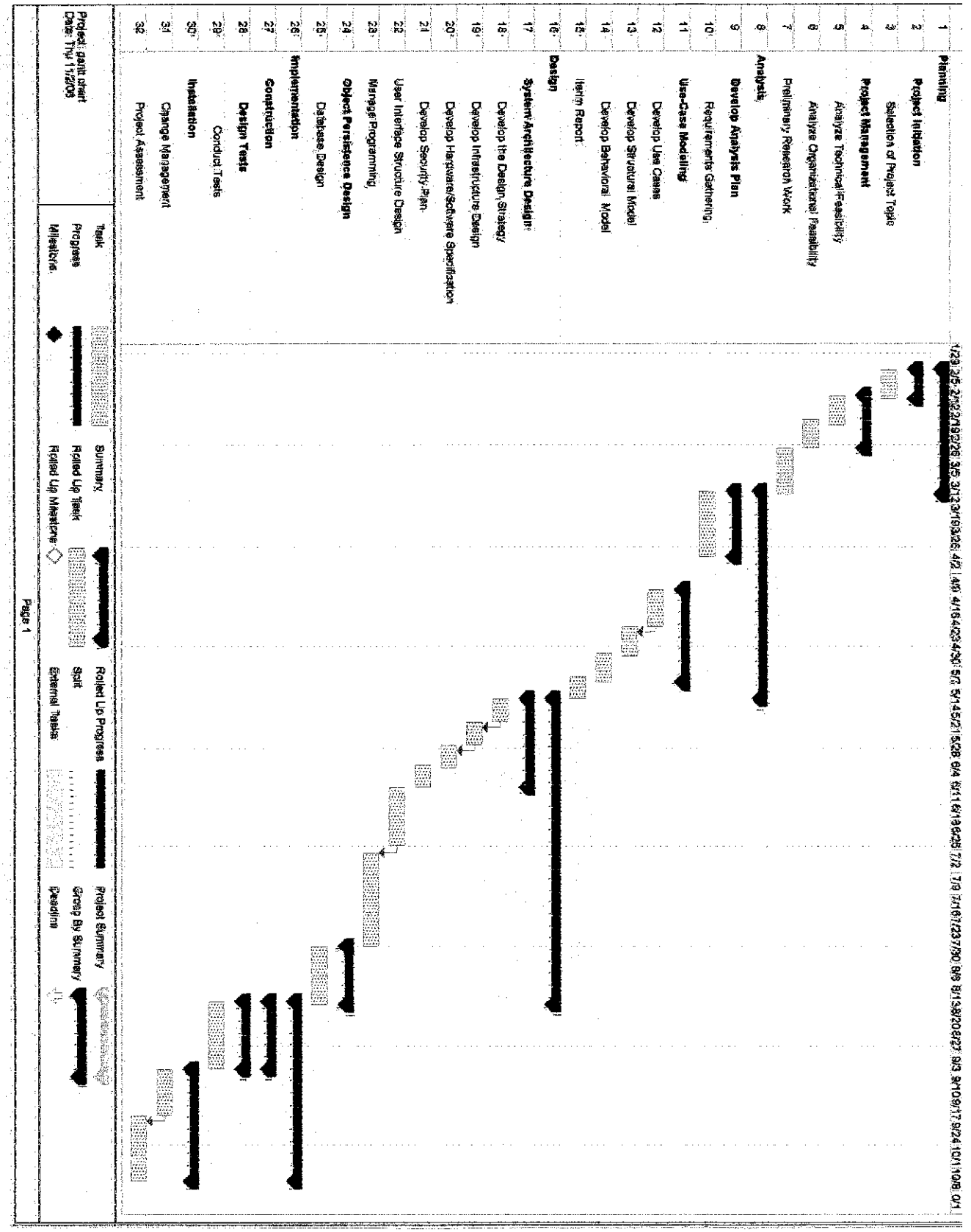
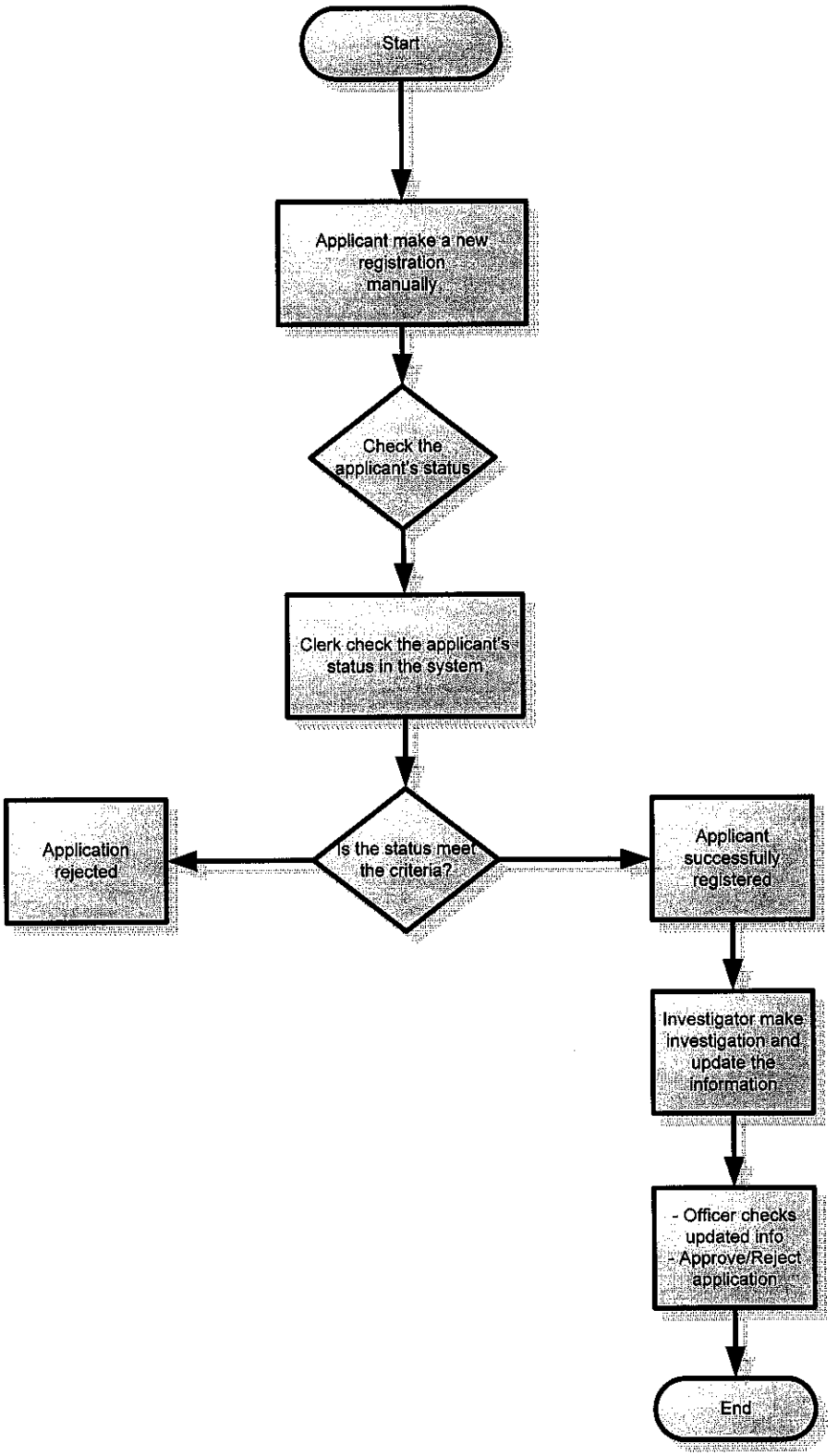


Figure 21: SDLC (Software Development Life Cycle)

Appendix II


Planning
Project Initiation
Selection of Project Topic
Project Management
Analyze Technical Feasibility
Analyze Organizational Feasibility
Preliminary Research Work
Analysis
Develop Analysis Plan
Requirements Gathering
Use-Case Modeling
Develop Use Cases
Develop Structural Model
Develop Behavioral Model
Interim Report
Design
System Architecture Design
Develop the Design Strategy
Develop Infrastructure Design
Develop Hardware/Software Specification
Develop Security Plan
User Interface Structure Design
Manage Programming
Object Persistence Design
Database Design
Implementation
Construction
Design Tests
Conduct Tests
Installation
Change Management
Project Assessment
Project: gantt chart
Date: Thu 1/12/06
Task
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Rolled Up Progress
Split
External Tasks
Project Summary
Group By Summary
Deadline
Page 1

Appendix III



Source: Jabatan Kebajikan Masyarakat, Perak

Figure 22: JKM System Flowchart

Appendix IV

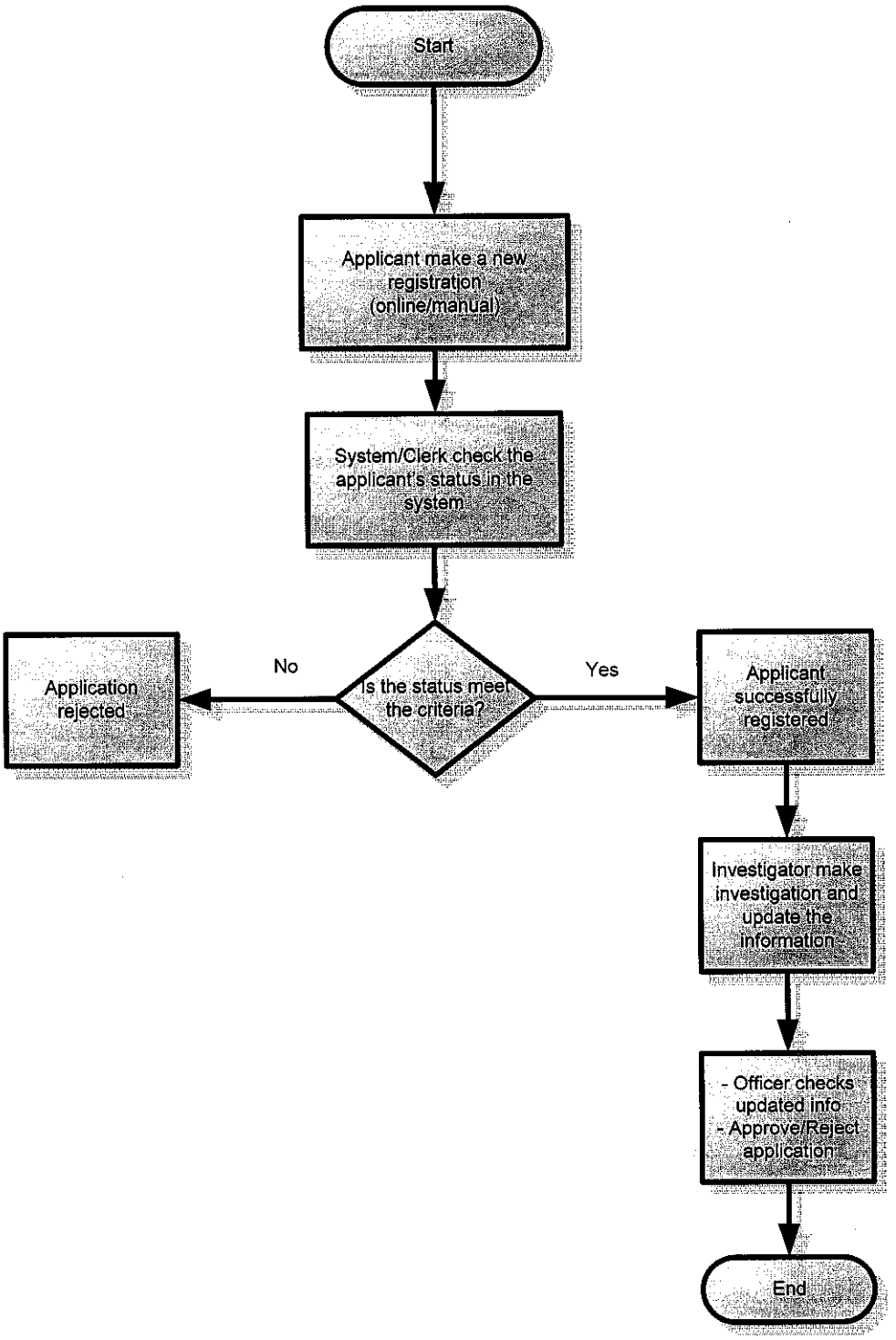


Figure 23: System Flowchart (SBJKM, Perak)

Appendix V

Figure 24: UML Diagram for Sistem Bantuan JKM, Perak

Appendix VI

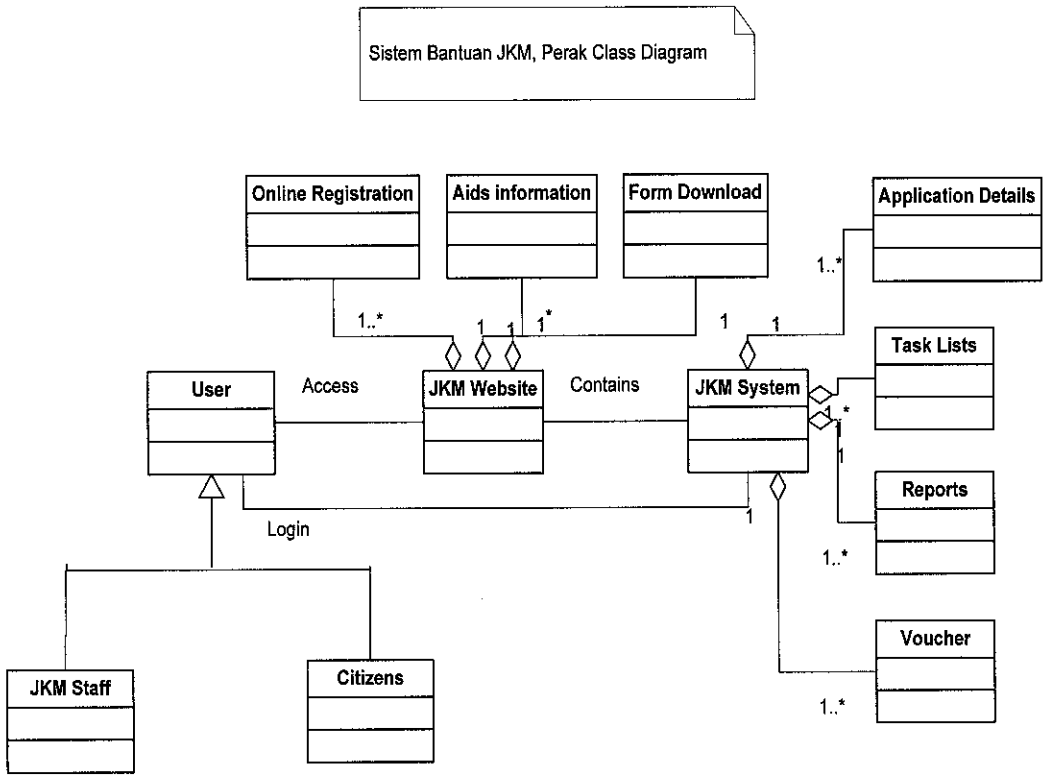


Figure 25: SBJKM, Perak Class Diagram

Appendix VII

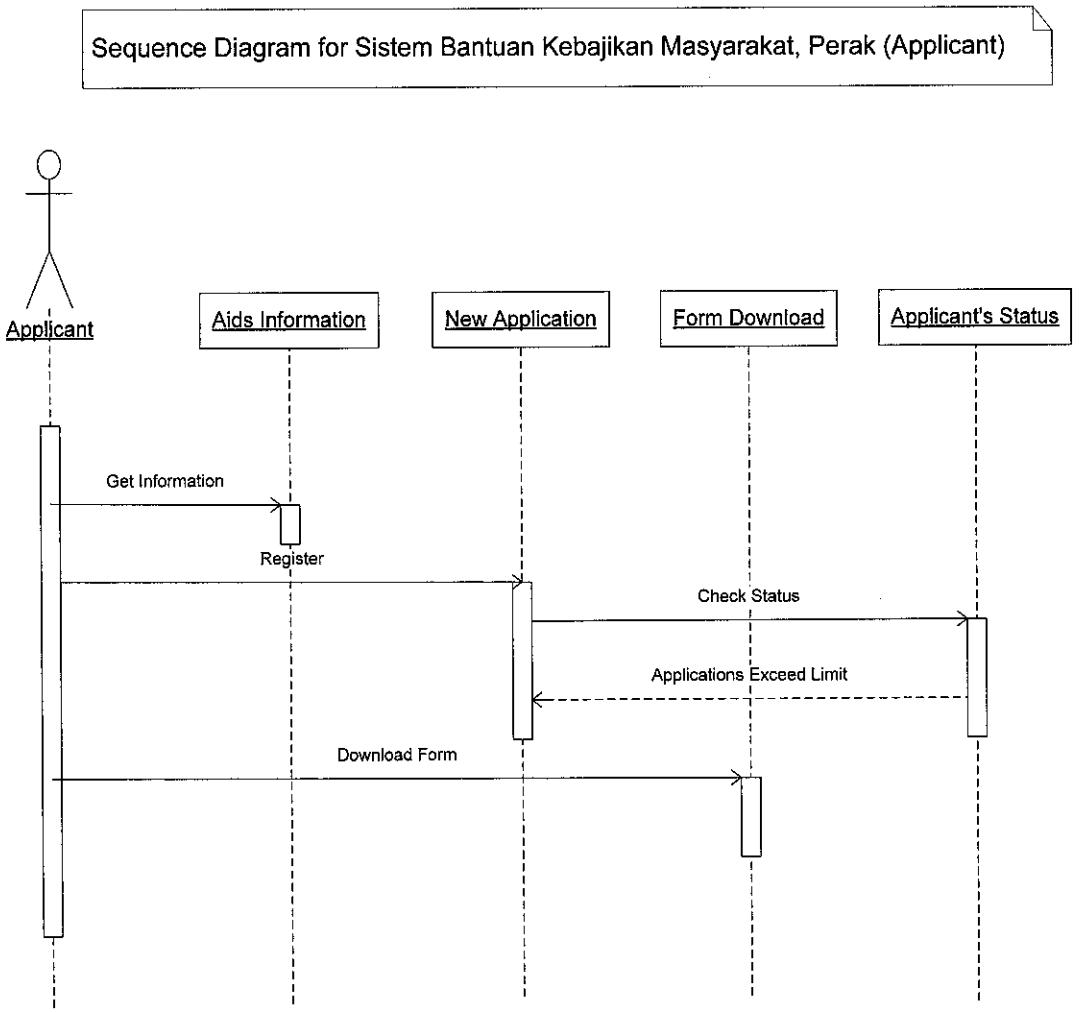


Figure 26: SBJKM, Perak Sequence Diagram (Applicant)

Appendix VIII

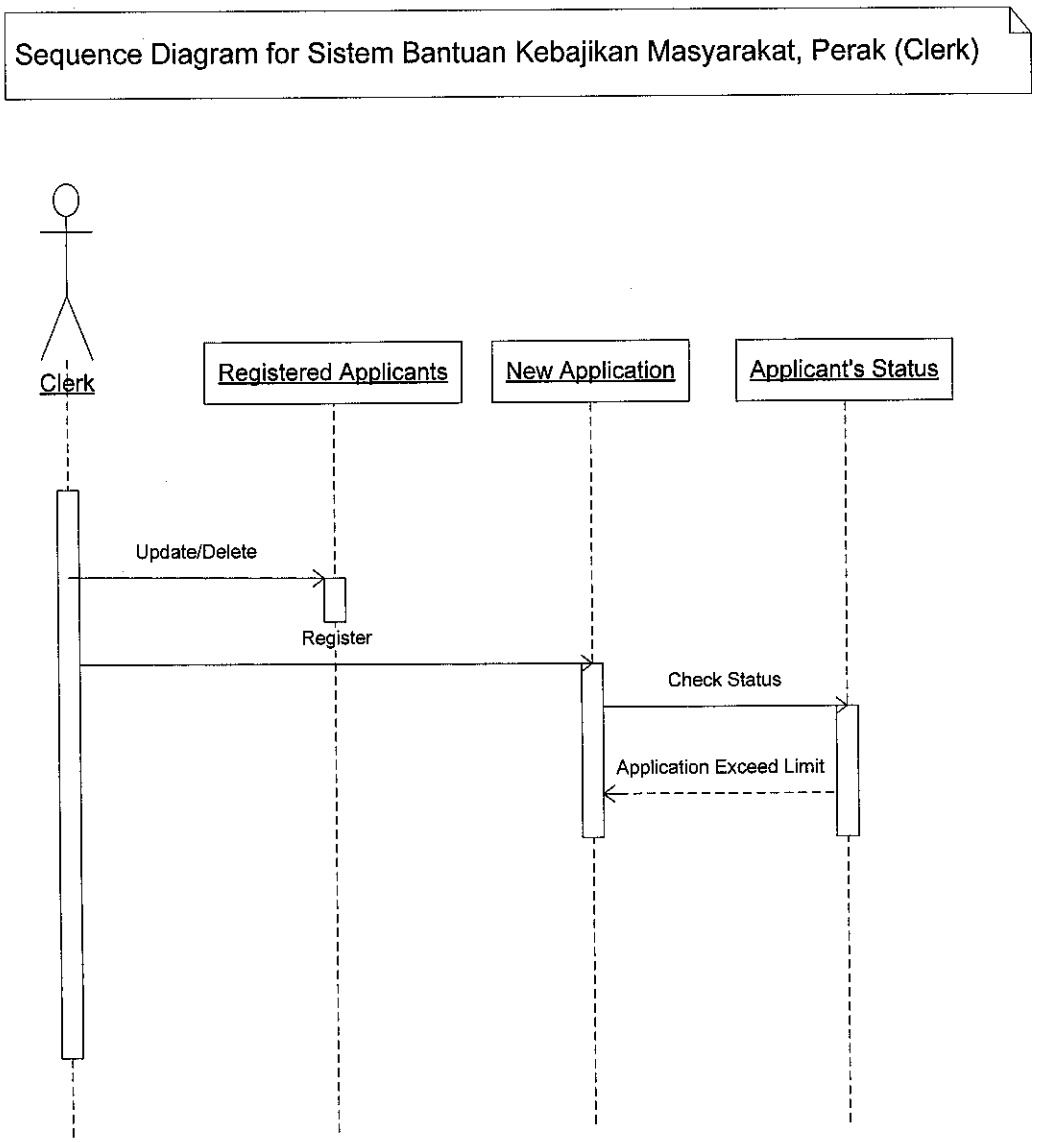


Figure 27: SBJKM, Perak Sequence Diagram (Clerk)

Appendix IX

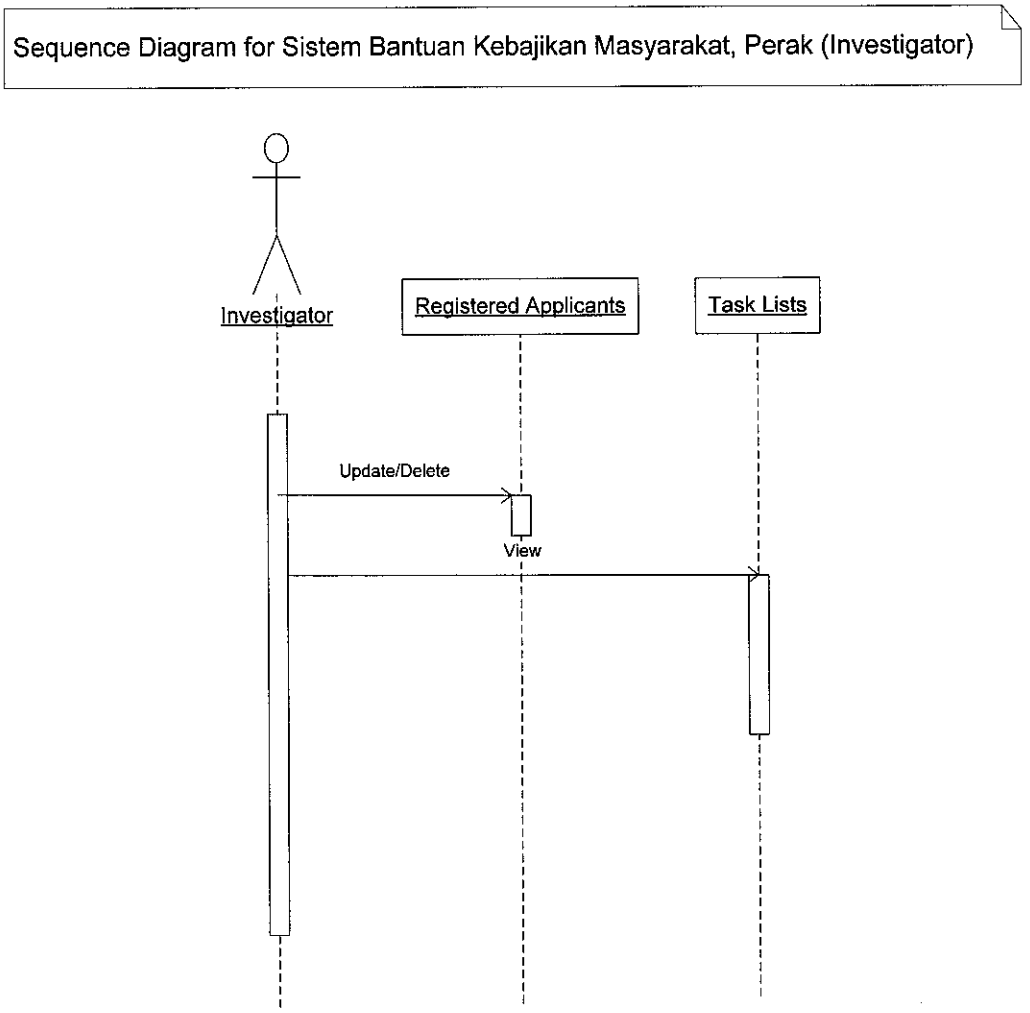


Figure 28: SBJKM, Perak Sequence Diagram (Investigator)

Appendix X

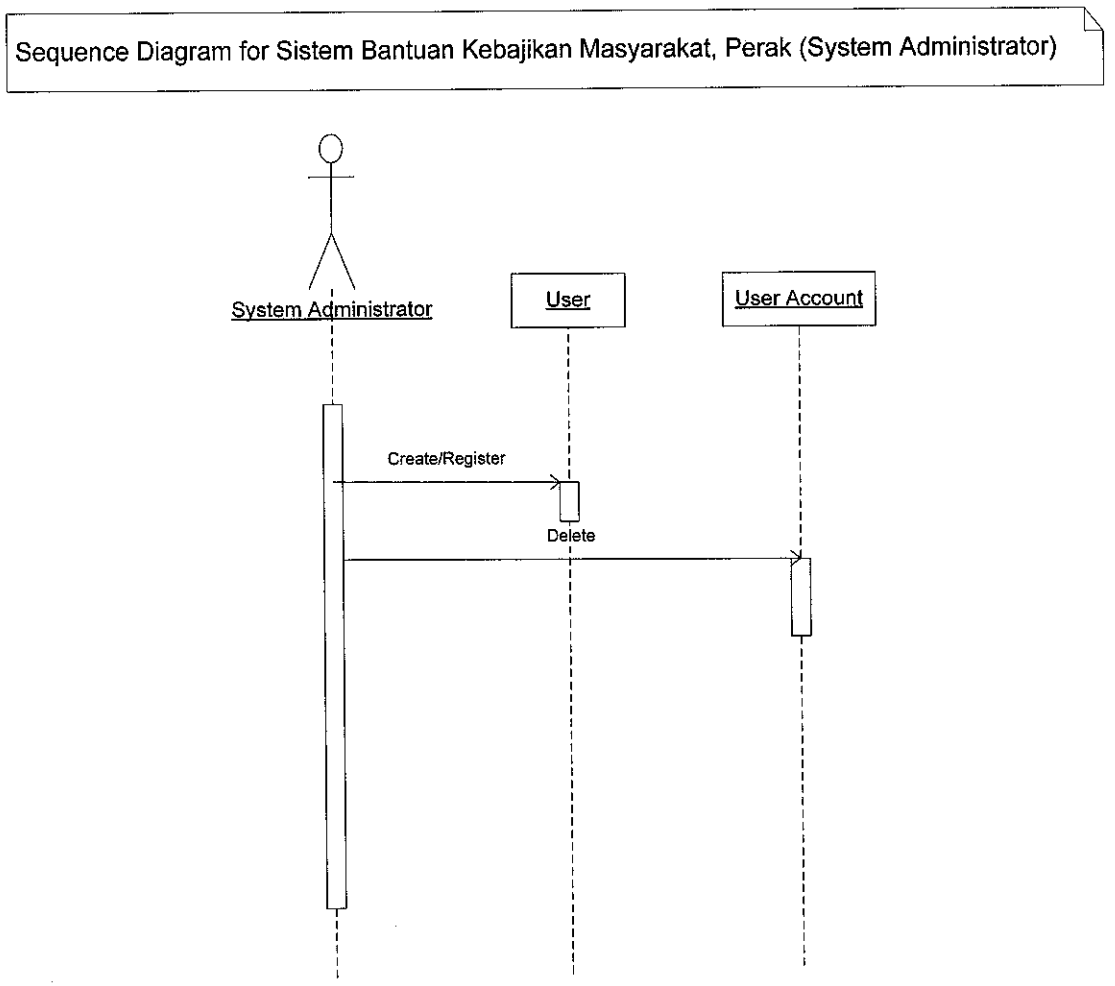


Figure 29: SBJKM, Sequence Diagram (System Administrator)

Appendix XI: JKM Websites in Malaysia

JKM, Penang

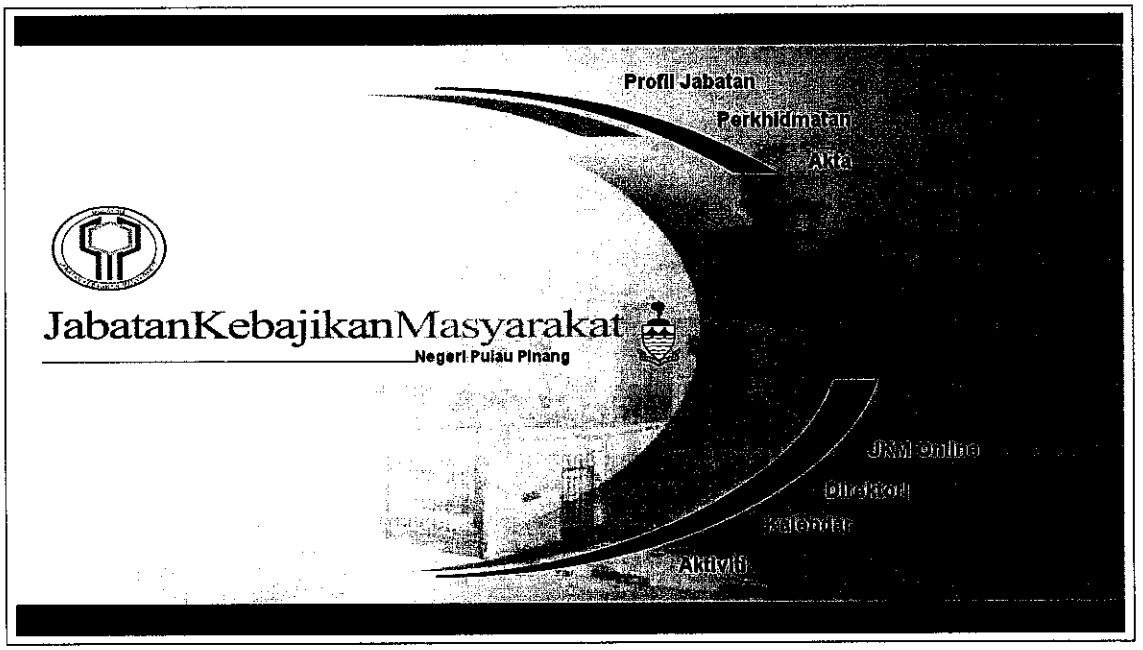


Figure 30: Snapshot of JKM, Penang (Main Page)

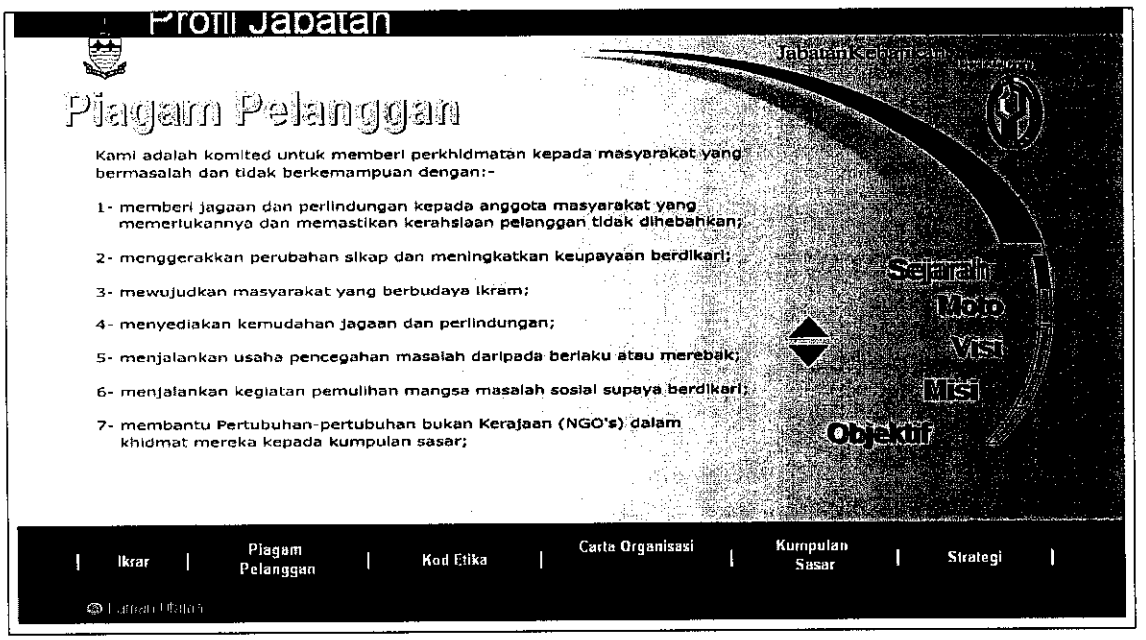


Figure 31: Snapshot of JKM, Penang

JKM, Perak

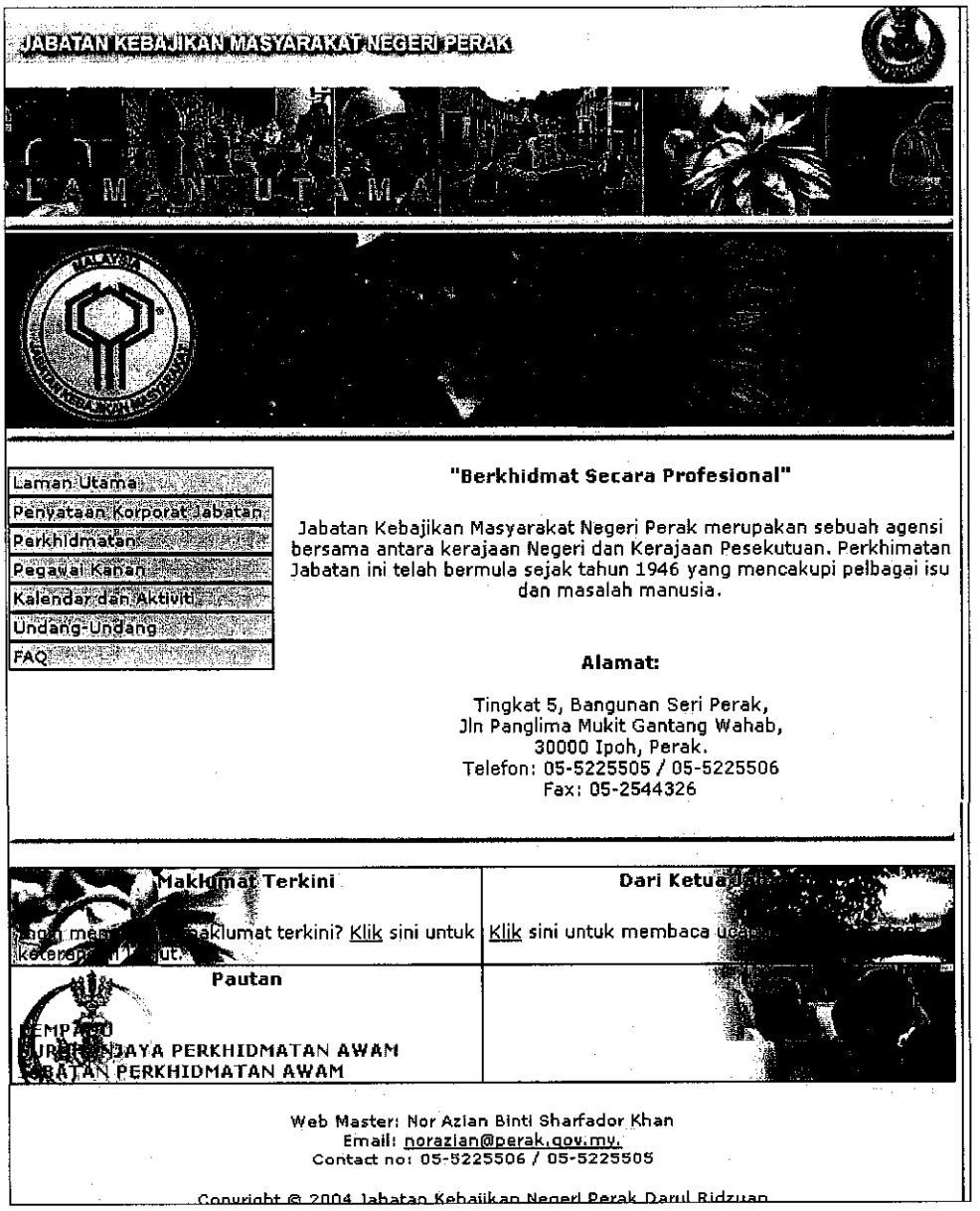


Figure 32: Snapshot of JKM, Perak

JKM, Selangor

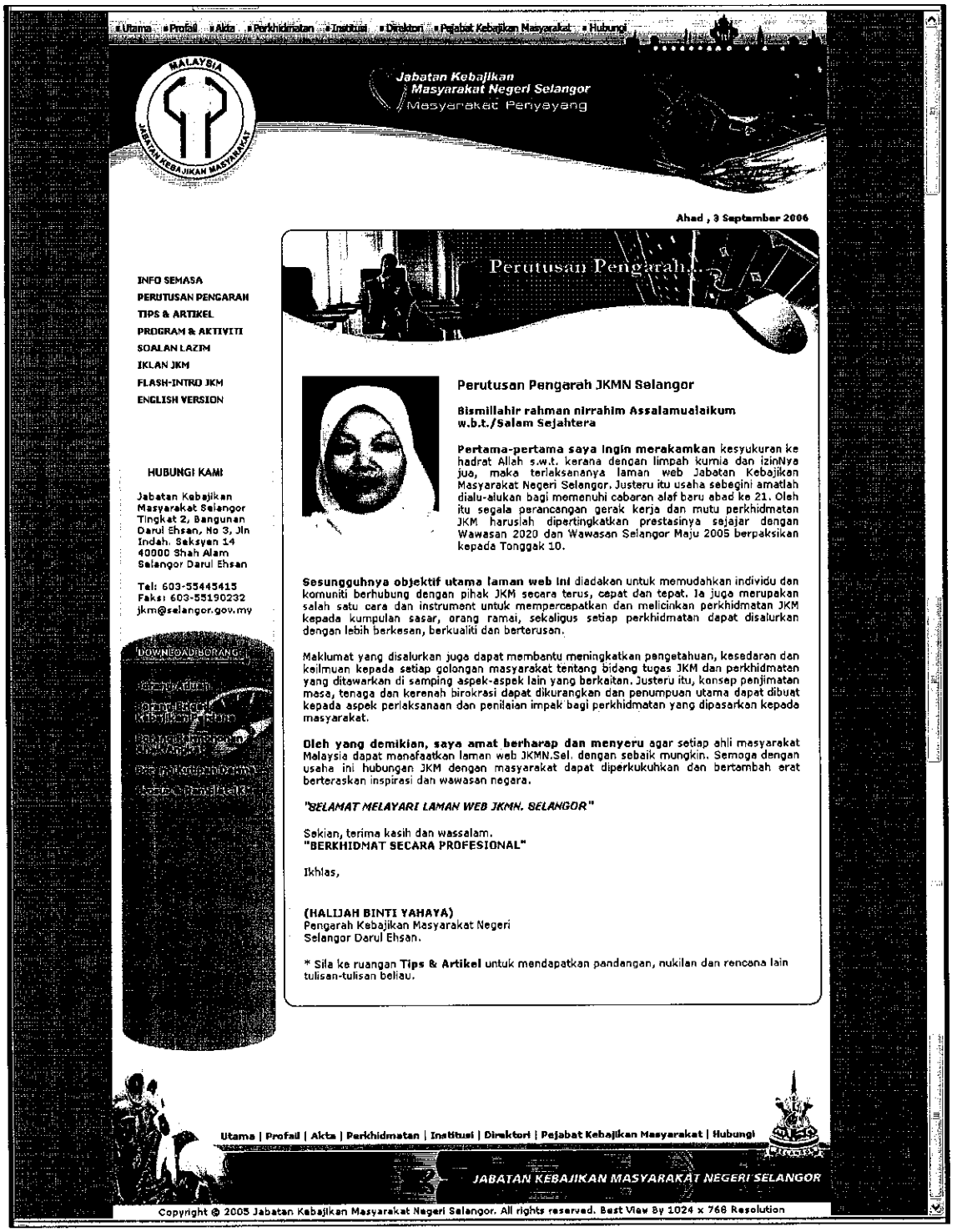


Figure 33: Snapshot of JKM, Selangor

JKM, Sabah

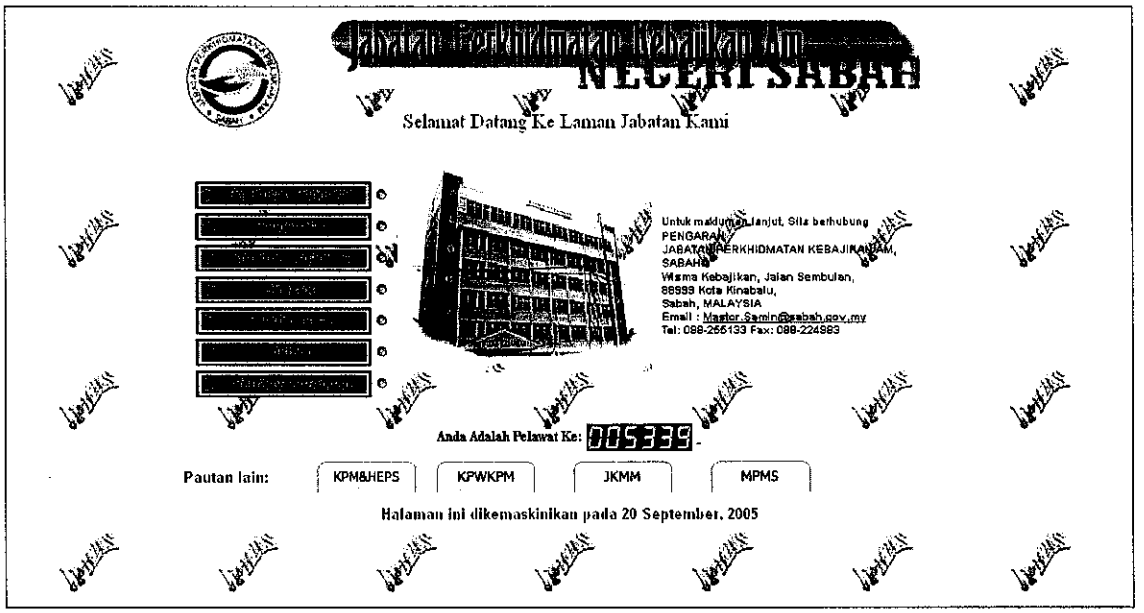


Figure 34: Snapshot of JPKA, Sabah

JKM, Negeri Sembilan

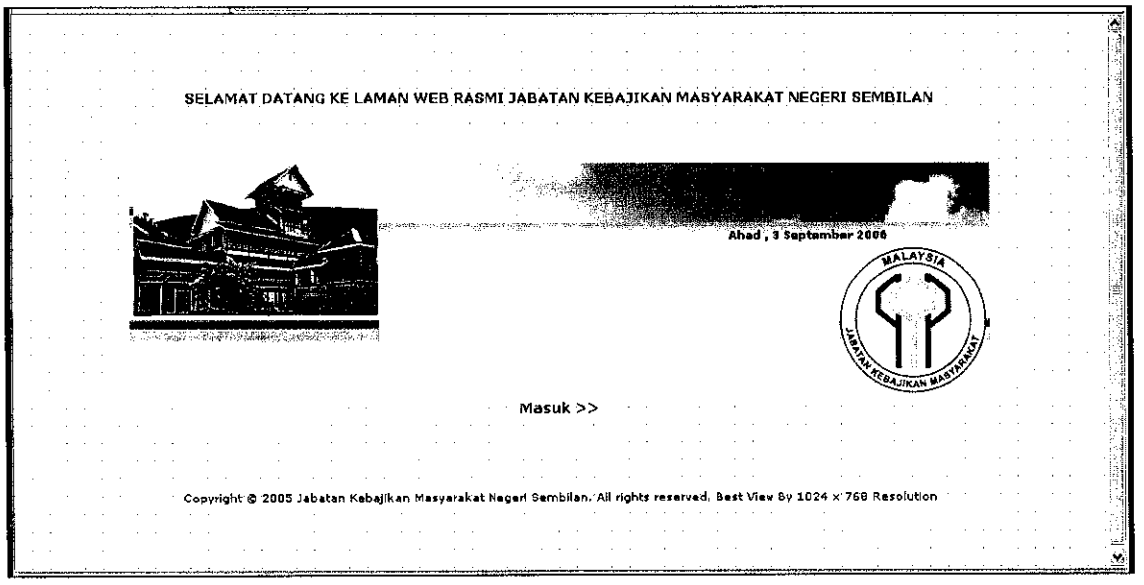


Figure 35: Snapshot of JKM, Negeri Sembilan (Main Page)

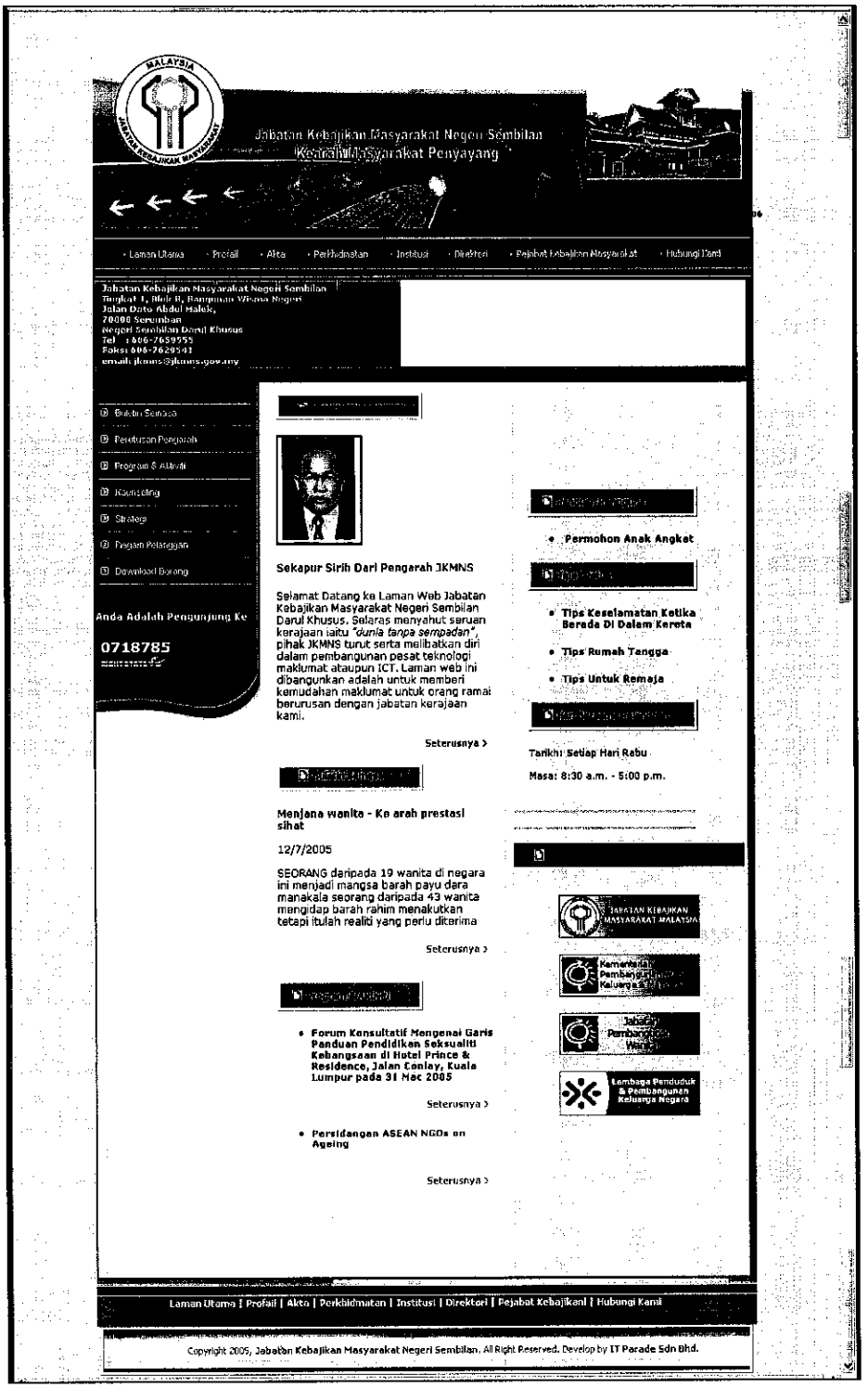


Figure 36: Snapshot of JKM, Negeri Sembilan

JKM, Melaka

Figure 37: Snapshot of JKM, Melaka

JKM, Johor

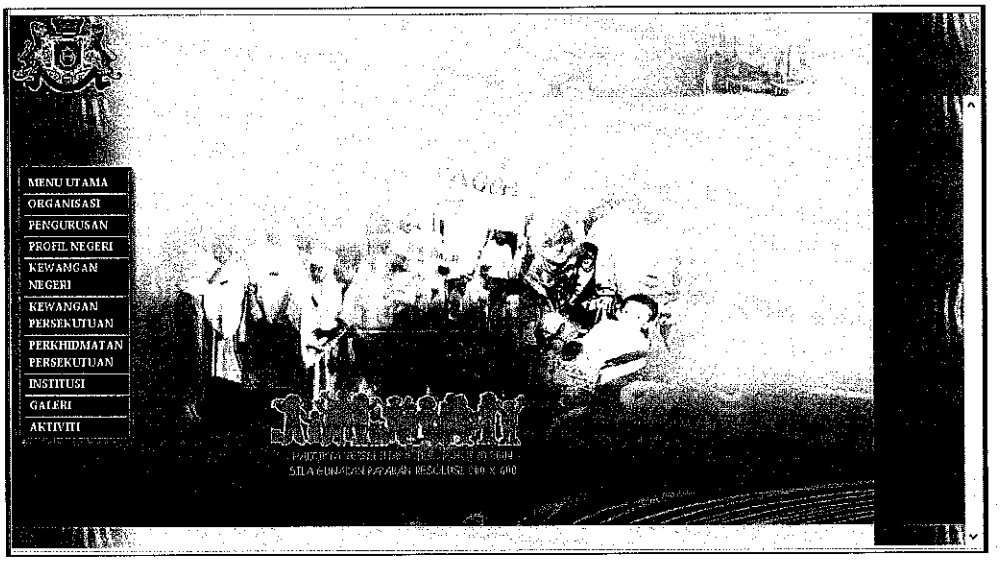


Figure 38: Snapshot of JKM, Johor

JKM, Pahang

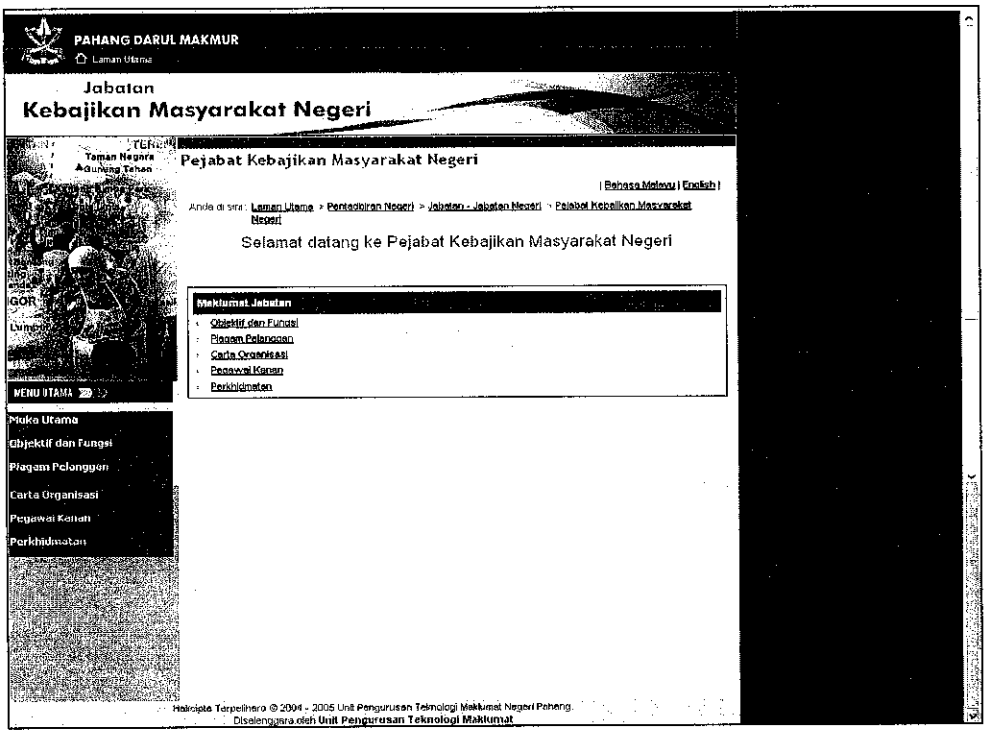


Figure 39: Snapshot of JKM, Pahang

JKM, Kedah

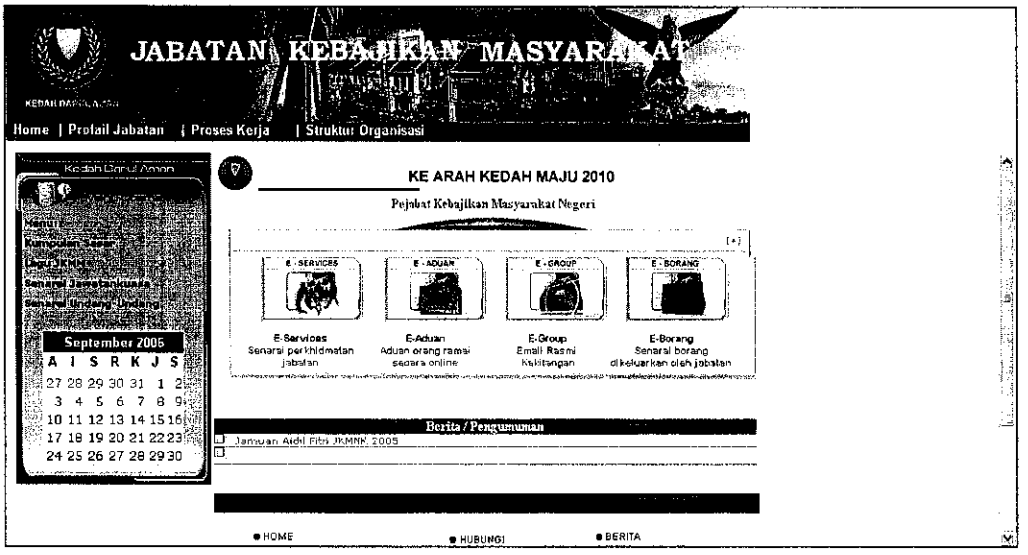


Figure 40: Snapshot of JKM, Kedah

JKM, Kelantan

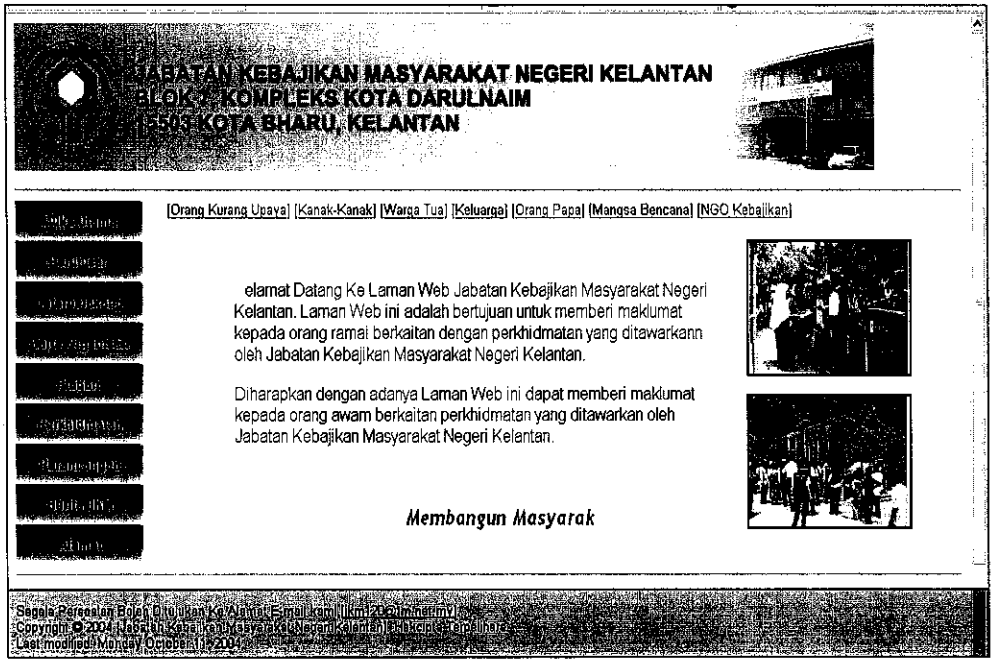


Figure 41: Snapshot of JKM, Kelantan

JKM, Terengganu

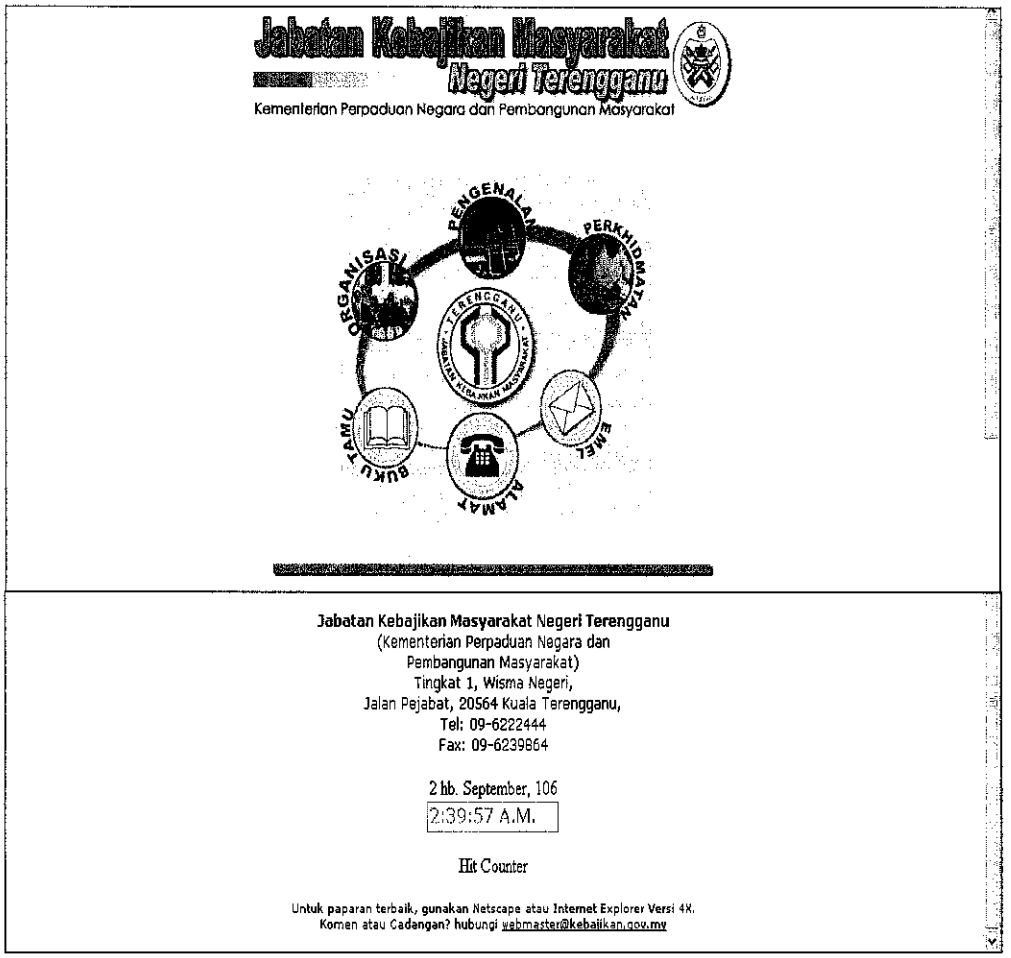


Figure 42: Snapshot of JKM, Terengganu

JKM, Sarawak

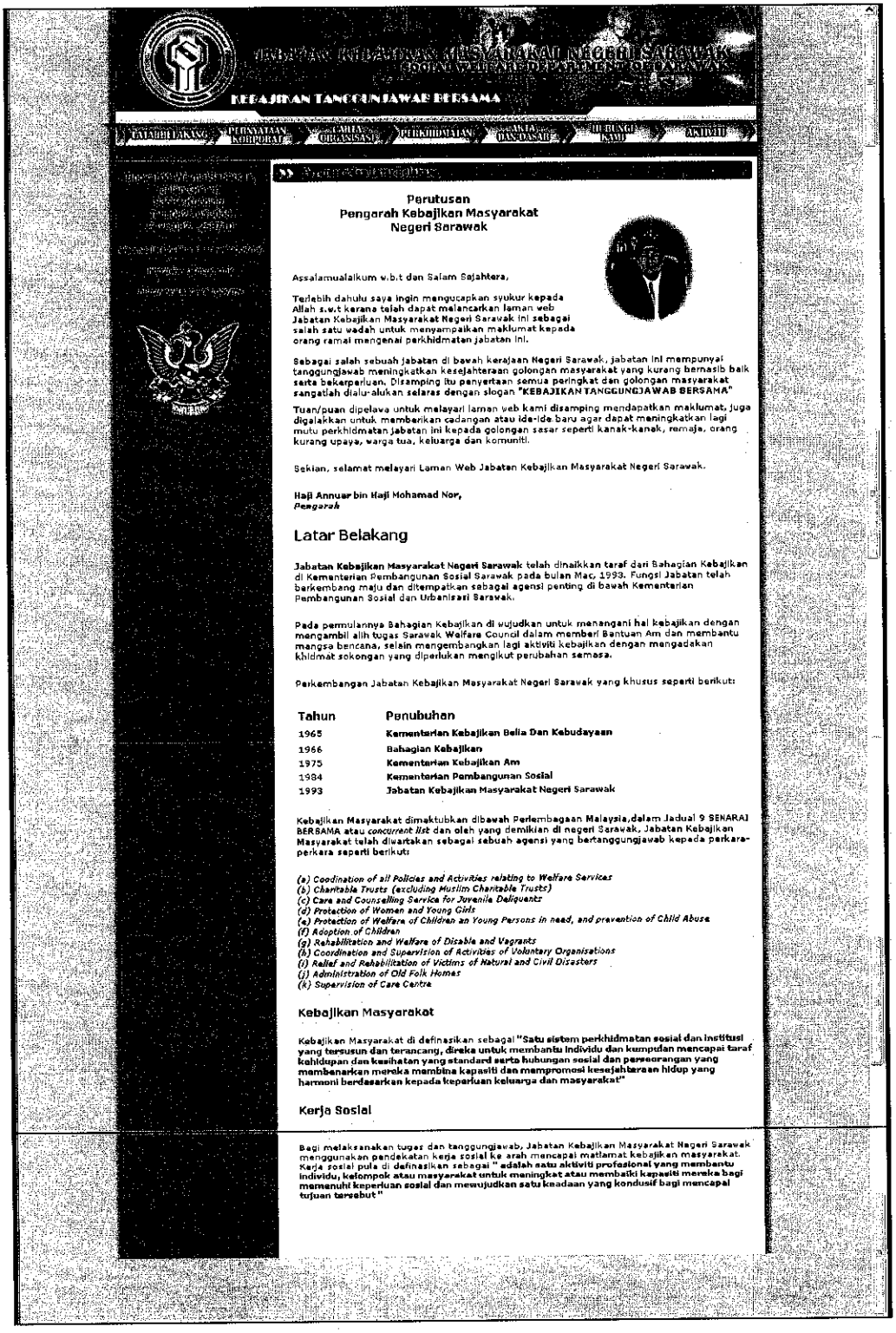


Figure 43: Snapshot of JKM, Sarawak

JKM, Malaysia

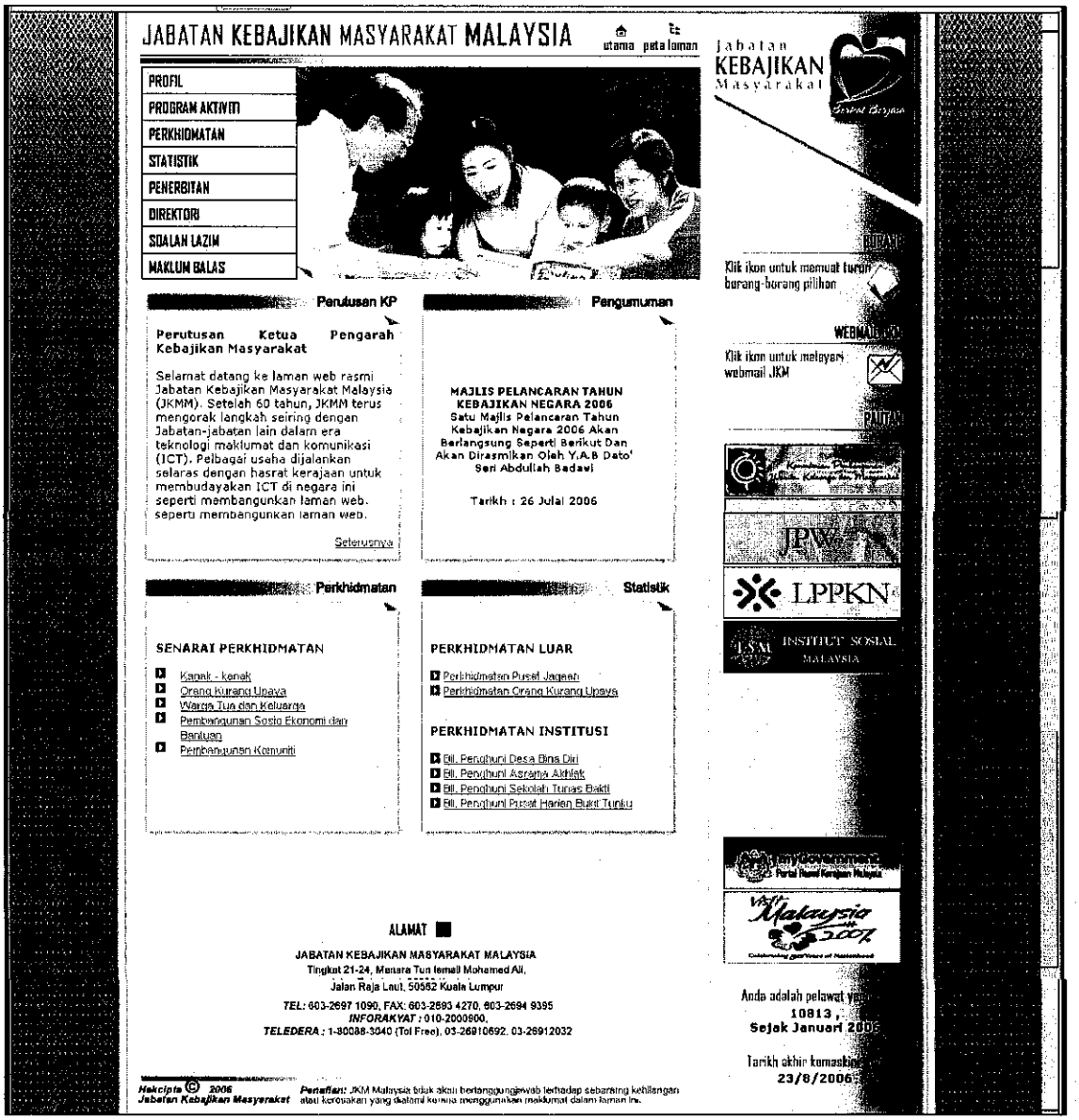


Figure 44: Snapshot of JKM, Malaysia