EVALUATION SURVEY SYSTEM

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BORANG PENGESAHAN STATUS TESIS

JUDUL: EVALUATION SURVEY DATABASE

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Tarikh:

EVALUATION SURVEY SYSTEM

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This report is submitted in partial fulfilment of the requirements for the Bachelor of Computer Science(Database Management)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
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DECLARATION

I hereby declare that this project report entitled

EVALUATION SURVEY SYSTEM

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

STUDENT :_____ Date:_____

(PHANG CHEE WAI)

SUPERVISOR :_____ Date :_____

(PM Norhaziah Md.Salleh)

CHAPTER I

INTRODUCTION

1.1 Project Background

This project developed an evaluation survey database. This database will helps to overcome the problems occurred in manual way to do the evaluation. This database can store all the evaluation survey questions that user created and enable other users to answer the survey. Besides that, this database also helps user to have a more accurate calculation on the result.

1.2 Problem Statement

Evaluation survey always been done in paper format. Manual evaluation system might bring the consequence of data lose due to the questions are recorded on paper and easily lost it. After the evaluating survey form is done, survey creator has to distribute the survey form to the target and collect it back. This action always brings the consequences where the survey form collected was incomplete or respondent never answer all the questions. Besides that, process on doing analysis manually will consume a long time. People have to calculate the result manually using calculator. Human errors always found in calculating the statistic no matter

APPENDIX A (PSM Milestone)

Task Name	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15
Discuss the title with supervisor															
Delivery proposal to supervisor															
Analyst User and System Requirement															
Database Design and Development Process															
Interface Design and Development Process															
Database and Interface Integration Process															
System Testing and Error Detection															
Final presentation to supervisor and evaluator															

how careful the person was. This may lead to the inaccurate result on particular survey.

1.3 Objective

Objectives of this project are:

- To enable the process of analysis faster.
- To reduce the loss of survey data.
- To reduce the human error on calculating the statistic.

1.4 Scope

This project will cover the creation of the survey where user must enter the survey title and also deadline for particular. User can creates many surveys at the same time without losing any data of any survey. Besides that, user has to insert the schema based on respective scale. This is to allow the system compare the final result of respondent with the schema and gives advice or suggestion to respondent. This evaluation survey system is flexible on the amount of questions can be created and same goes to the choices. User can create as many questions as he/she wants. There is no limit for it. User does not have to worry the calculation of the final result because it is calculated by the system. However, this project does not include any communication platform for survey creator and respondents.

1.5 Project Significance

Everyone can get benefits from this system especially undergraduate student and also those who need to do survey very often. This system can helps them to create a survey easily by just typing the questions without worry about formatting.

Even if there are any mistakes occur, people can just update the questions easily. Furthermore, it helps people to save time on distributing the survey forms manually. They just have to inform the respondent to answer the survey through online. People do not have to worry about the incomplete data. Besides that, this system also enables people to calculate the result of survey in a short time. It will auto calculate the result after respondent answer the evaluating survey. Yet the result is faster and more accurate compare to manual system.

1.6 Expected Output

This project is expected to be user friendly. It can automatically calculate the results and provide the advice or suggestion to them based on result. It can provide admin the respondents' answer statistic so that admin will get to know the standard among most of the respondents.

1.7 Conclusion

As a summary, this chapter explains briefly on the project background, problems of why this system being develops and also the objective. This chapter includes the scope which is what is involved in this system. Chapter 1 explains how this project will bring benefit to particular users and also the expected output. Next chapter will explain about the literature review and project methodology.

CHAPTER II

ANALYSIS

2.1 Introduction

Analysis phase will always be the essential phase for a project. Through this phase can get to know what customer wants. It is an important part of process to gather the business requirements. Without an appropriate analysis, project's final deliverables might not meet the customers' expectation. Therefore, this chapter will discuss on the analysis phase of this project. Topics that will cover under this chapter are problem analysis and requirement analysis.

2.2 Problem Analysis

Some researches are conducted in order to identify the problems and difficulties of the current Evaluation Survey System. Therefore, the system can be improved and the objectives of the to-be system can be fulfilled based on the results of researches.

Current Evaluation Survey System does not have the computerized system to manage the evaluating survey. Administrator has to set the target market for particular evaluating survey before they starts doing the questions. The questions and choices have to jot down in a computer or notes or personal computer. Before the confirmation on the questions and choices, administrator cannot proceed to next

step. Besides that, the questions and choices might be easily lost due to unexpected damage on computers or the loss of notes.

After the conformation of questions and choices, administrator can starts to type the evaluating survey using Microsoft Words or any other software. Once it is done, administrator has to print out the survey and let others to check on it to make sure there are no mistakes. If there are any mistakes, administrator has to re-correct it again until it is correct. This takes time to make sure the survey is right because the evaluating survey has to pass around and check. Peoples are not always available when administrator needs them to check the evaluating survey. Thus, administrator has to waste time and wait for the checking result.

Next, administrator needs to print out or photocopy whole set of evaluating survey for distributing purposes. Administrator has to go to somewhere which is fulfilling the target of the survey and distribute the survey forms. Administrator needs to waste time on distributing and waiting the respondents complete the evaluating.

After all respondents have returned back the survey forms, administrator has to make sure there is no survey form is missing. However, there is always a chance to loss one or two surveys. This burden administrator because he/she has to re-print the missing surveys and re-distribute to the target. This brings the consequence waste of time.

Administrator then has to calculate the survey form one by one to know the result. This process might spend a long time to complete even the evaluating survey is only 10 to 20 forms. Another problem on calculating the result is human error. No matter how careful people on doing works, there is always a careless mistake.

The current manual way on doing evaluating:

- Administrator has to draft the schema of the evaluating survey. The schema together with its description. If there are any changes, administrator has to do it again.
- Administrator has to draft the questions together with choices.
- Administrator has to calculate the survey forms after respondents have answered. However, some of the survey forms might be loss in the process on distributing and also collecting.

- Administrator has to make sure the survey forms distribute to target and collect it back before the deadline. Some of the surveys have time limit, therefor, administrator has to beware on the deadline.
- Survey users/respondents have to fill up the form manually. This process consumes time while administrator can actually do other things instead of waiting the respondents/survey user to complete.
- Administrator has to verify the survey forms are answered completely by survey user/respondents.
- Administrator has to total up survey users' marks one by one. Then, administrator has to calculate the average/mean to get survey users' result.
- Administrator has to classify the survey forms based on survey users' answer to know the statistics of particular survey. For example, question one there are how many people choose answer A.

The flow chart below is the procedure to make a booking in existing system.

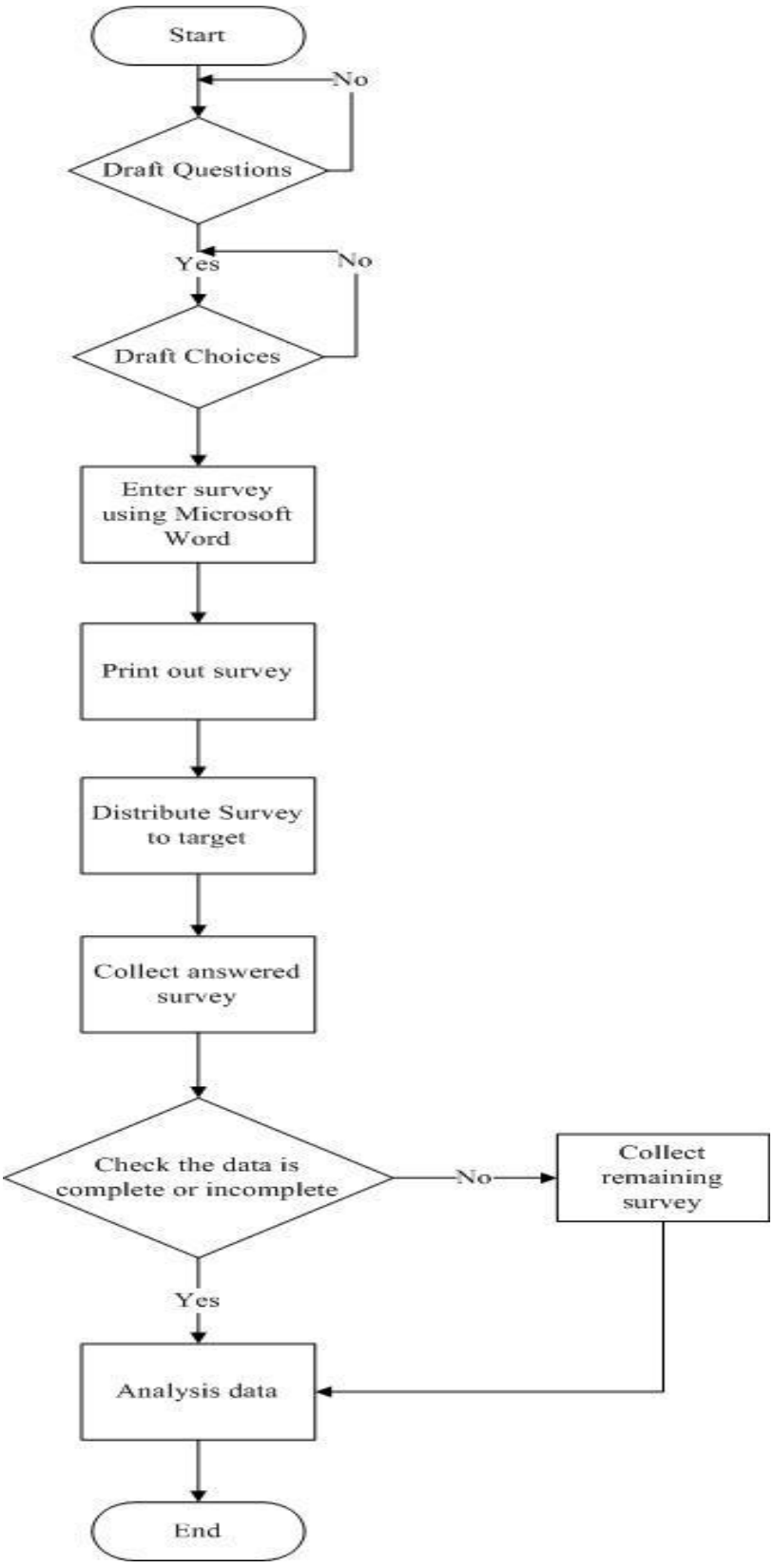

Figure 2.1 As-Is System Flow Chart

2.3 Requirement analysis

Requirement analysis is a must in a project. There are many ways to obtain the requirement such as questionnaire or interview. Requirement analysis helps to find out the requirements of customer and enable the process of developing the process have a clearer path. This can lead the project to a success path. Under this section, there are data requirement, functional requirement, non-functional requirement and others requirement of To-Be System will be explain.

2.3.1 Data Requirement

Data requirement defines what data should be the input and output and what data should the system store internally. Tables below show the input and output of the system and also the Data Dictionary of each entity.

Table 2.1 Input, Output and Data Stored in To-Be System

Data	Description (System Input)	Description (System Output)
Users	This component stores the users' personal information such as username, identity card number, contact number, email address of users.	New data is inserted into database. Data is updated in database. Data can be retrieved when browse.
Survey	This component saves the survey's information such as survey title, status of survey and deadline for particular survey.	New data is inserted into database. Data is updated in database. Data can be retrieved when browse.
Schema	This component stores the standard schema of survey such as the scale of survey, description of each scale.	New data is inserted into database. Data can be retrieved when browse.

Question	This component saves all the questions that created by admin.	New data is inserted into database. Data is updated in database. Data can be retrieved when browse.
Answer	This component records all the answers which are answered by users.	New data is inserted into database. Data is updated in database. Data can be retrieved when browse.
Choice	This component stores variety of choices for particular question and allow users choose on one of it.	New data is inserted into database. Data is updated in database. Data can be retrieved when browse.
Survey Detail	This component stores the survey's id and user's id.	New data is inserted into database. Data is updated in database. Data can be retrieved when browse.
Result	This component records the result based on users' answer such as the mean of the answer, description of the result.	New data is inserted into database. Data is updated in database. Data can be retrieved when browse.

Table 2.2 : Data Dictionary of Table Admin

Primary / Foreign Key	Column Name	Column Description	Data Type	Length / Size	Notes
Primary key	admin_id	Auto generate unique identification id for admin	varchar2	10	
	username	Username of admin	varchar2	50	
	password	Password of admin to login the system	varchar2	20	

Table 2.3 : Data Dictionary of Table SurveyUser

Primary / Foreign Key	Column Name	Column Description	Data Type	Length / Size	Notes
Primary key	u_id	Auto generate unique identification id for user	varchar2	10	
	Name	Name of user	varchar2	50	
	Ic	Identification number of user	varchar2	14	
	Password	Password of user	Varchar2	15	
	Email	Email of user	Varchar2	50	
	Gender	Gender of user	Varchar2	6	
	Username	Username of user	Varchar2	50	

Table 2.4 : Data Dictionary of Table Survey

Primary / Foreign Key	Column Name	Column Description	Data Type	Length / Size	Notes
Primary key	surveyID	Auto generate unique identification id for particular survey	varchar2	10	
	Title	Title of survey	varchar2	100	
	Status	"Complete or Incomplete" to determine whether the survey can be answered by user or not.	varchar2	15	
	duedate	Due date of the particular survey	date		

Table 2.5 : Data Dictionary of Table Survey_detail

Primary / Foreign Key	Column Name	Column Description	Data Type	Length / Size	Notes
Primary key	sd_id	Auto generate unique identification id for survey detail table	varchar2	10	
Foreign key	u_id	Foreign key of surveyuser id	varchar2	10	
Foreign key	Surveyid	Foreign key of survey id	varchar2	10	

Table 2.6 : Data Dictionary of Table Schema1

Primary / Foreign Key	Column Name	Column Description	Data Type	Length / Size	Notes
Primary key	sc_id	Auto generate unique identification id for schema table	varchar2	10	
	Scale	Scale of the result for particular survey	Number`	10	
	Description	Description of the result based on the scale	varchar2	1000	
Foreign Key	Surveyid	Foreign key of survey id	Varchar2	10	

Table 2.7 : Data Dictionary of Table Question

Primary / Foreign Key	Column Name	Column Description	Data Type	Length / Size	Notes
Primary key	q_id	Auto generate unique identification id for question table	varchar2	10	
	Question	Question of particular survey	Varchar2	1000	
	Questlistno	Numbering of the questions	varchar2	10	
Foreign Key	Surveyid	Foreign key of survey id	Varchar2	10	

Table 2.8 : Data Dictionary of Table Answer

Primary / Foreign Key	Column Name	Column Description	Data Type	Length / Size	Notes
Primary key	a_id	Auto generate unique identification id for answer table	varchar2	10	
	Answer	Scale of answers of each of the question answered by user	Number	10	
Foreign Key	Surveyid	Foreign key of survey id	Varchar2	10	
Foreign Key	Q_id	Foreign key of question id	Varchar2	10	

Table 2.9 : Data Dictionary of Table Choice

Primary / Foreign Key	Column Name	Column Description	Data Type	Length / Size	Notes
Primary key	c_id	Auto Generated unique identification id for choice table	varchar2	10	
	Choice	Choices of each question	Varchar2	1000	
	Scala	Scale of the choices	number	10	
Foreign Key	Q_id	Foreign key of question id	Varchar2	10	

Table 2.10 : Data Dictionary of Table Result

Primary / Foreign Key	Column Name	Column Description	Data Type	Length / Size	Notes
Primary key	r_id	Auto generate unique identification id for result table	varchar2	10	
	Min1	Mean or average marks based on users' answer	Number	10	
	Result	Result of the survey based on min1	Varchar2	1000	
Foreign Key	sd_id	Foreign key of table survey_detail primary key	Varchar2	10	

2.3.2 Functional Requirement

Functional requirement specify the functions of the system, how it records, compute, transforms and transmits data. It can be categorized into two parts which is mandatory and value-added.

The mandatory requirements are illustrate as below:

- Survey User Management

  Provides management of survey user where survey user can update their own personal details and allow new users to register themselves.

- Survey Management

  Provides the adding and updating abilities regarding the latest survey information.

- Question Management

Provides the adding and updating abilities regarding to any changes on the questions.

- Choice Management

  Provides the updating abilities regarding to any changes on the choices.

- Calculation on Average/Mean

  Provides the accurate calculation of mean based on the answer chosen by survey user.

- Expiry Date of Survey

  Provides the deadline of the survey so that survey users can know the time left for particular survey.

- User Authentication

  Authenticates the username or unique ID and his/ her password before enter into the system

- Display Result

  Display result based on survey user's chosen answer and provides advice to survey user.

The value-added requirements are listed as below:

- Status of survey can be updated by admin.
- Expiry date of survey selection is displayed in calendar.
- Days left of survey will be shown for survey users.

The functional requirements and its descriptions are stated as the table below:

Table 2.11 Functional Requirements

No	Functional Requirement	Description
1	Survey User Management	• The system stores the personal information of the survey users in database. • The system able to retrieve the data saves in the database and presents the data in the interfaces of system. • The system allows the survey users to update theirs personal information. • The system allows new information is added into the database through registration.
2	Survey Management	• The system allows new survey information added into the database. • The system allows the admin to update survey's information if needed. • The system able to retrieve the information of survey which is saved in database and display the information in the interfaces of system.
3	Question Management	• The system allows many questions added into the database. • The system able to retrieve the questions which are saved in database and display the questions in the interfaces of system and update the questions if needed.
4	Choice Management	• The system allows many choices are added into the database. • The system able to retrieve the choices based on particular question that saved in database and display it in the interfaces of system and update

		the choices if needed.
5	Calculation on Average based on Users Answer	• The system will calculate the average/mean based on the answer by users.
6	Expiry Date of Survey	• The system will calculate the days left for particular survey. • The system able to display the days left for survey users to take particular survey.
7	User Authentication	• The system enables the users of the system to login and logout. • The system able to authenticate the username and password in the database.
8	Display Result	• The system able to display the result based on the average calculated and giving advice to users according to their result.

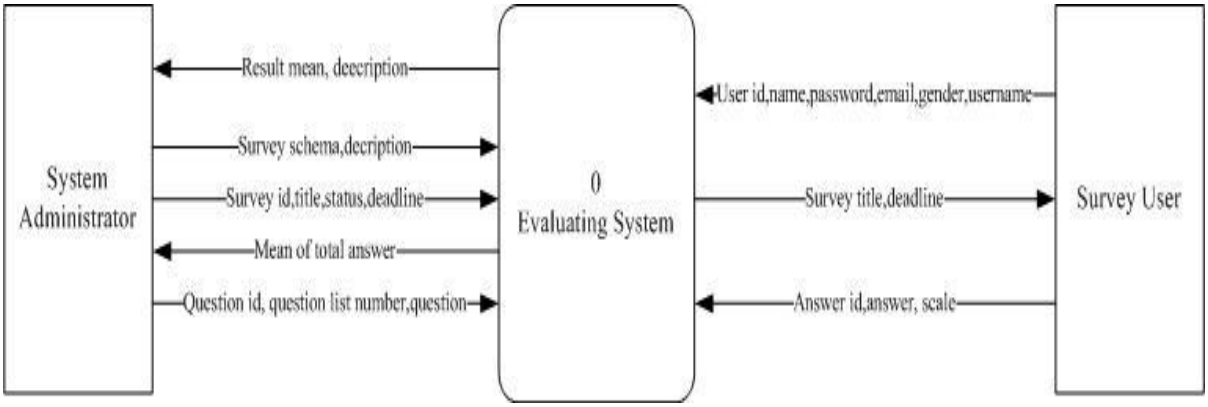

Figure 2.2 : Context Diagram for To-Be System

Figure 2.2 shows the context diagram for the computerized system. Context diagram do shows the overall and general process for the system.

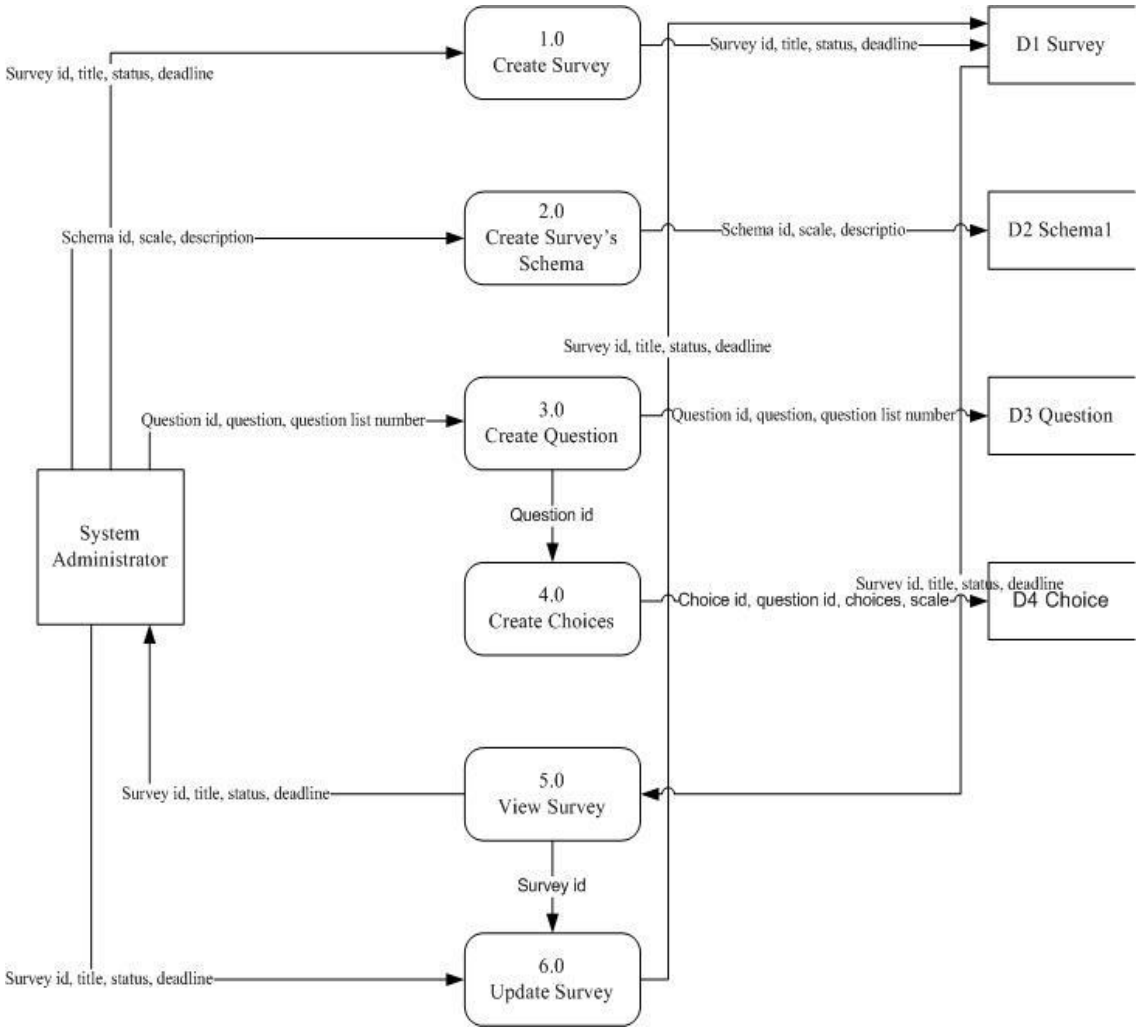

Figure 2.3 DFD Level 0 for administrator

Figure 2.3 shows the DFD level 0 for administrator. As the diagram shows, it can clearly see the overall functional system for administrator. There are total six processes included and four entities will be implementing in the system. The input and output has clearly stated in the DFD.

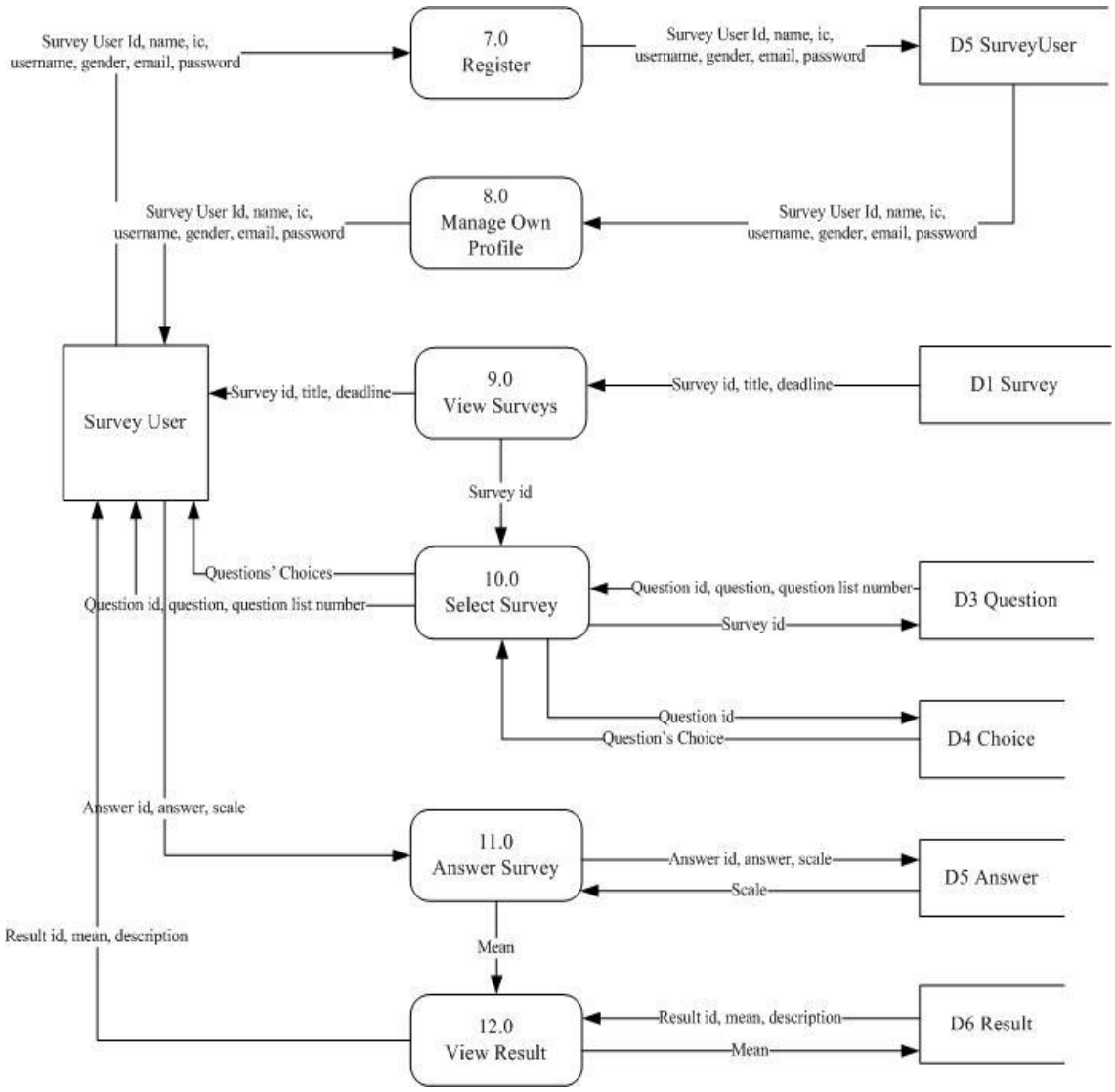

Figure 2.4 : DFD Level 0 for Survey User

Figure 2.4 shows the DFD level 0 for survey user. There are total six processes included in this DFD and six entities involved.