

# **HIBAH MANAGEMENT SYSTEM**

**MUHAMMAD SYAHMI BIN ABDUL JALIL**

**UNIVERSITI TEKNIKAL MALAYSIA MELAKA**

## **CHAPTER 3: ANALYSIS**

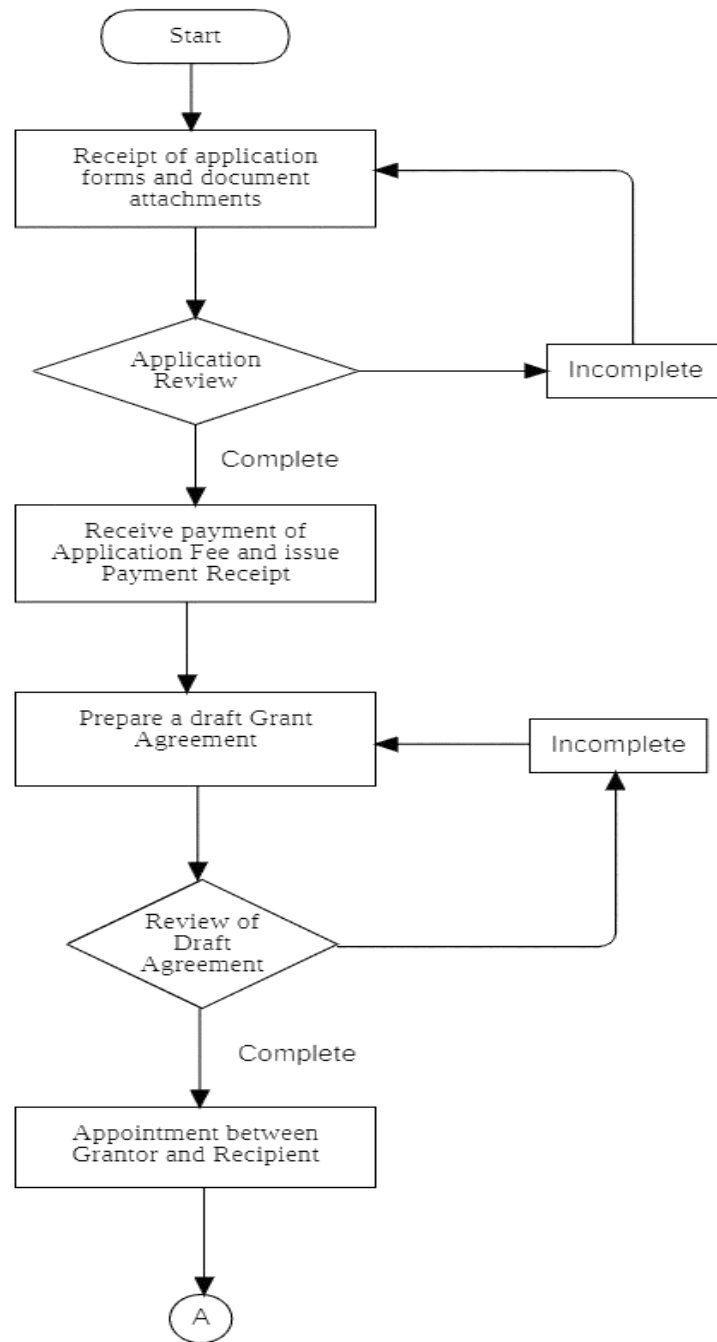
### **3.1 Introduction**

This section summarizes the requirement gathered for the current and proposed system Hibah Management System in terms of business process, functional requirement, non-functional requirement, and business flow diagram.

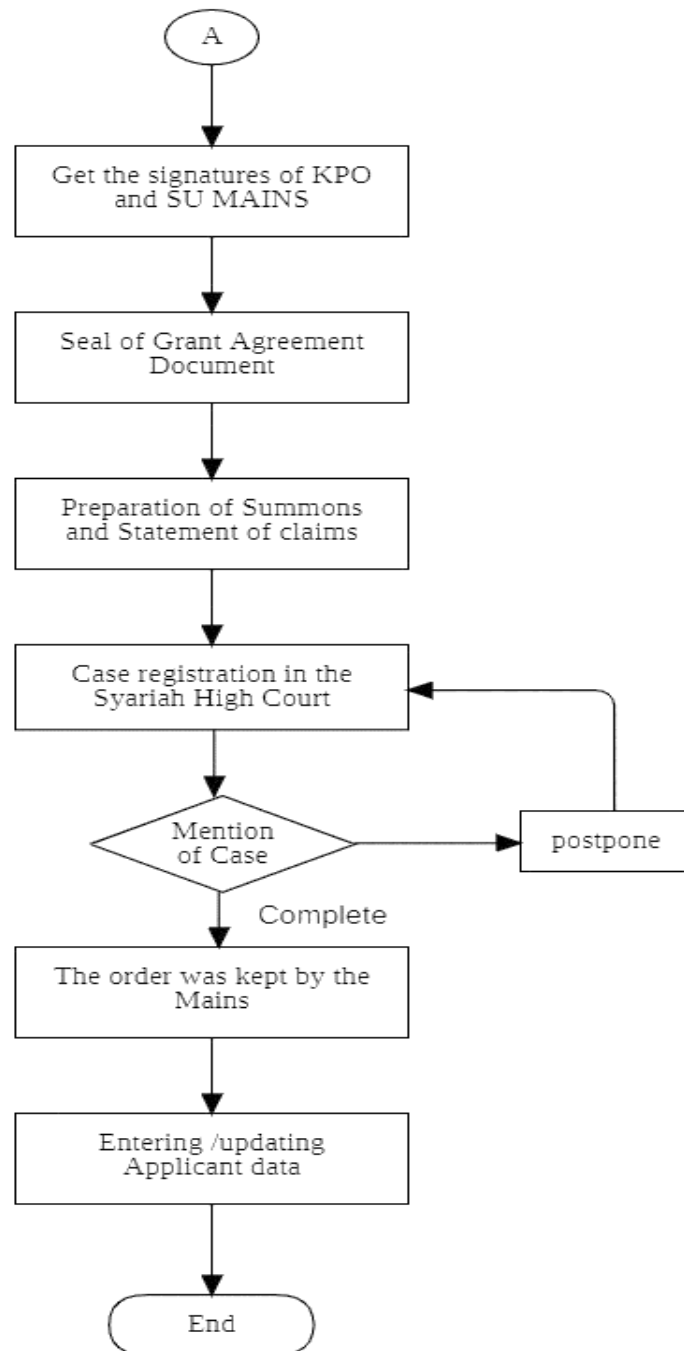
### **3.2 Problem Analysis**

#### **3.2.1 The current business flow for staff**

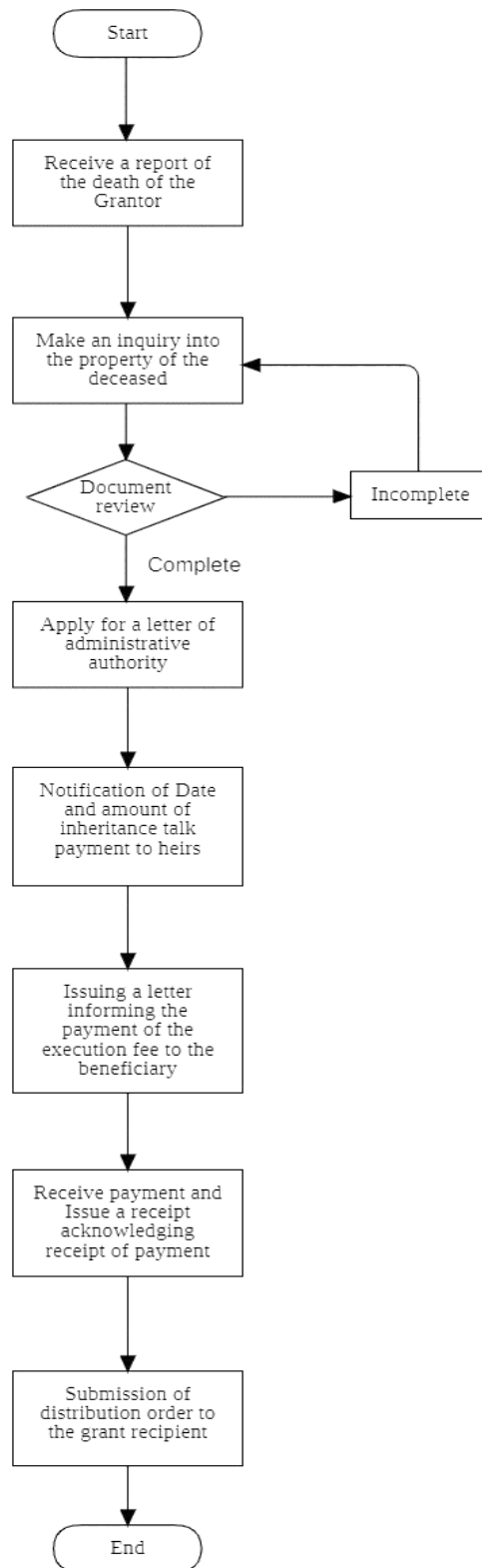
Figure 3.1 and figure 3.2 shows the business flow of the current system (as-is system) for staff.



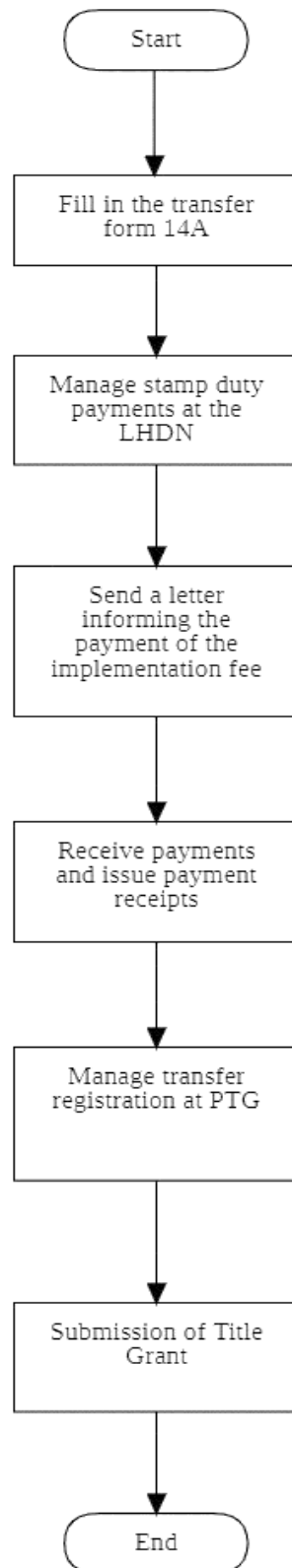
**Figure 3.1: Flowchart of current system for staff part 1**



**Figure 3.2: Flowchart of current system for staff part 2**



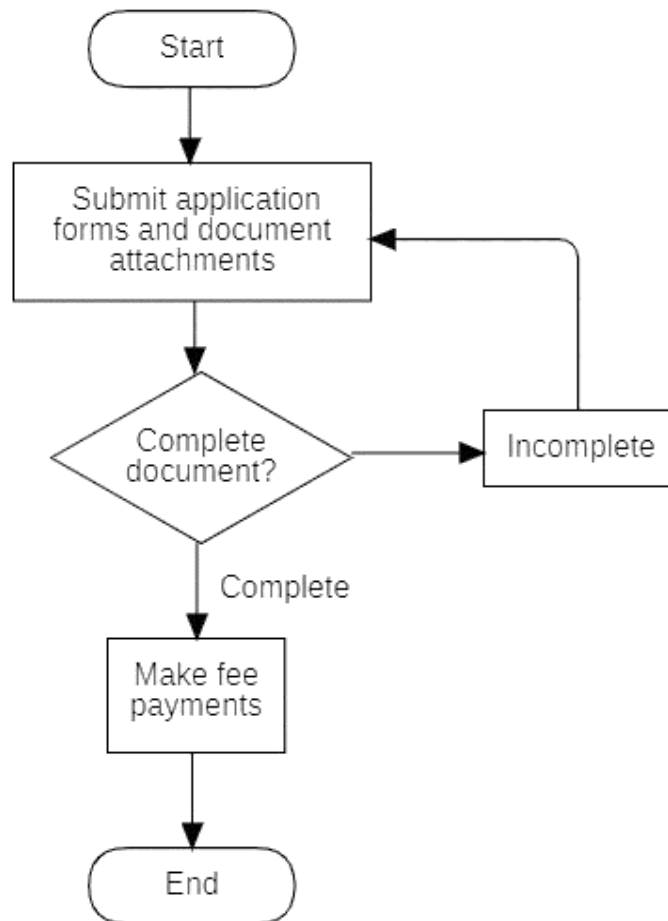
**Figure 3.3: Flowchart of current system for staff**



**Figure 3.4: Flowchart of current system for staff**

### 3.2.2 The current business flow for client

Figure 3.3 shows the business flow of the current system (as-is system) for client.



**Figure 3.5: Flowchart of current system for client**

## 3.3 Requirement analysis

### 3.3.1 Data Requirement

This section will cover the system input and output, and the data that will store internally using Data Dictionary.

#### 3.3.1.1 User Table

Field Name	Data Type	Field Length	Constraint	Description
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user_id	int	10	Primary key	ID, auto generated
user_name	varchar	30	Not null	Name of user
user_email	varchar	20	Not null	Email of user
user_password	varchar	20	Not null	Password of user

### 3.3.1.2 Giver Table

Field Name	Data Type	Field Length	Constraint	Description
Giver_id	int	10	Primary key	ID, auto generated
giver_name	varchar	30	Not null	Name of giver
giver_ic	varchar	12	Not null	IC number of giver
giver_DoB	date		Not Null	Date of Birth
giver_passport	varchar	9	Not null	Passport number of giver
giver_citizenship	varchar	15	Not null	Citizenship of giver
giver_gender	char	5	Not null	Gender of giver
giver_status	varchar	15	Not null	Status of giver
giver_race	varchar	15	Not null	Race of giver
giver_religion	varchar	15	Not null	Religion of giver
giver_permanent_adress	varchar	30	Not null	Permanent Address of giver
giver_mailing_address	varchar	30	Not null	Mailing Address of giver
giver_phone_number_R	varchar	11	Not null	Regular phone number



giver_phone_number_H	varchar	11	Not null	House phone number
giver_employer_name	varchar	30	Not null	Name of giver's employer
giver_employer_address	varchar	30	Not null	Address of giver's employer
Giver_IC_patch	varchar	15	Not null	
hibah_id	int	10	Foreign key	has

### 3.3.1.3 Hibah Table

Field Name	Data Type	Field Length	Constraint	Description
hibah_id	int	10	Primary key	ID, auto generated
hibah_application_date	date		Not null	
hibah_status	varchar	10	Not null	Current status of the hibah
user_id	int	10	Foreign key	Make by

### 3.3.1.4 Recipient Table

Field Name	Data Type	Field Length	Constraint	Description
recipient_id	int	10	Primary key	ID, auto generated
recipient_name	varchar	30	Not null	Name of receipt
recipient_ic	varchar	12	Not null	IC number of receipt
recipient_phone_number	varchar	11	Not null	Phone number of receipt
recipient_address	varchar	30	Not null	Address of receipt

recipient_relationship	varchar	10	Not null	Relationship receipt with giver
recipient_ic_path	varchar	15	Not null	IC path of receipt
hibah_id	int	10	Foreign Key	has

### 3.3.1.5 Property Table

Field Name	Data Type	Field Length	Constraint	Description
property_id	int	10	Primary key	ID, auto generated
property_type	varchar	10	Not null	Type of property
property_number	varchar	15	Not null	Property's number
property_PT_number	varchar	15	Not null	PT number of property
property_mukim	varchar	10	Not null	Mukim of property
property_district	varchar	10	Not null	District of property
property_width	varchar	10	Not null	Width of property
property_status				
property_distribution_intructions	varchar	40	Not null	Distribution instruction of property
hibah_id	int	10	Foreign key	has

### 3.3.1.6 Witness Table

Field Name	Data Type	Field Length	Constraint	Description
------------	-----------	--------------	------------	-------------

witness_id	int	10	Primary key	ID, auto generated
witness_name	varchar	20	Not null	Name of witness
witness_ic				
witness_address	varchar	30	Not null	Address of witness
witness_phone_number	varchar	11	Not null	Phone number of witness
witness_ic_path	varchar	15	Not null	Path of witness IC
hibah_id	int	10	Foreign key	has

#### 3.3.1.7 Document Table

Field Name	Data Type	Field Length	Constraint	Description
document_id	int	10	Primary key	ID, auto generated
document_path	varchar	15	Not null	Path of the document
hibah_id	int	10	Foreign key	has

#### 3.3.1.8 Update By Staff Table

Field Name	Data Type	Field Length	Constraint	Description
update_id	int	10	Primary key	ID, auto generated
update_date	date		Not null	
hibah_id	int	10	Foreign key	Has
staff_id	int	10	Foreign key	Make by

#### 3.3.1.9 Update By User Table

Field Name	Data Type	Field Length	Constraint	Description
------------	-----------	--------------	------------	-------------

update_id	int	10	Primary key	ID, auto generated
update_date	date		Not null	
hibah_id	int	10	Foreign key	Has
user_id	int	10	Foreign key	Make by

#### 3.3.1.10 Staff Table

Field Name	Data Type	Field Length	Constraint	Description
staff_id	int	10	Primary key	ID, auto generated
staff_name	vchar	20	Not null	Name of staff
staff_phone_number	vchar	11	Not null	Phone number of staff
staff_email	vchar	20	Not null	Email of staff
staff_type	vchar	10	Not null	Type of staff
staff_password	vchar	20	Not null	Password of staff

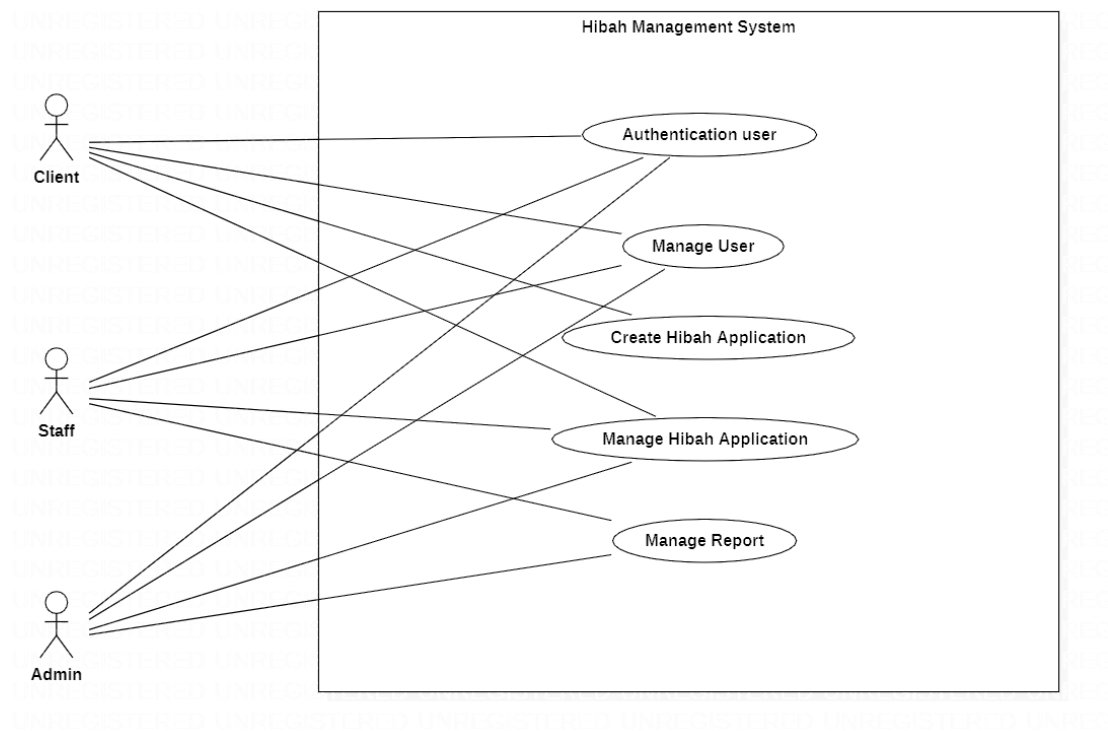
#### 3.3.1.11 Payment Table

Field Name	Data Type	Field Length	Constraint	Description
document_id	int	10	Primary key	ID, auto generated
document_path	vchar	15	Not null	Path of the document
hibah_id	int	10	Foreign key	has

### 3.3.2 Functional Requirement

This section describes the summary of functional requirements for Hibah Management System application. Functional requirements are important as it is the part of business process for the

system. The summary of the Hibah Management System functional requirements are as figure below:



**Figure 3.6: Global Use case**

This section will define high-level requirements and features of this system. It focuses on the capabilities of the system as required by the stakeholders and the target users. Table shows the breakdowns of each functional requirements for Hibah Management System.

**Table 3.1: The breakdowns of functional requirements**

FR No.	Requirement	Description
Authentication user		
FR_01	Login	The system shall allow user to access to their account.
FR_02		The system shall validate a valid email format
FR_03		The system shall check the correct password.
FR_04		The system shall not allow user to leave empty field before logging in to the app.

FR_05		The system shall not allow user to login if they do not have any account.
FR_06		The system shall force staff to change the password when first time log into the system.
FR_07		Change Password
FR_08	The system shall validate the length password must more than 7 characters.	
FR_09	The system shall validate the confirmation password entered must match with password entered.	
Manage User		
FR_10	Register	The system allow admin to create account for staff.
FR_11		The system shall not allow staff to register their account.
FR_12		The system shall validate email format is correct.
FR_13		The system shall validate the email whether has been used or not.
FR_14		The system shall validate the password must more than 6 characters.
FR_15		The system shall validate all the data in correct format.
FR_16		The system shall validate the confirmation password must same with entered password.
FR_17		The system shall send an email to staff after admin successfully registered their account.
FR_18		The system shall allow client to register new account.
FR_19		The system shall not allow user to leave empty field when create the account
FR_20	View User Account	The system should allow user to view the account information

		such as name, email, number phone and etc.
FR_21	Edit User Account	The system should allow user to update their account information.
FR_22		The system shall not allow user to leave empty field when updating their account.
FR_23		The system shall validate the email whether exist or not.
FR_24		The system shall all data format is correct such phone number and email.
Create Hibah Application		
FR_25	Create Hibah	The system shall allow client to create hibah application.
FR_26		The system shall allow client to upload pdf files.
FR_27		The system shall save the data in database for each section.
FR_28		The system shall not allow client to make more than one hibah application.
FR_29		The system shall not allow user to leave empty field.
FR_30		The system shall validate all data in correct format.
		The system shall notify the staff about the new application after client make the payment
Manage Hibah Application		
FR_31	View Hibah	The system shall allow staff to view all the application.
FR_32		The system shall allow client to view their application.
FR_33		The system allow client to view their current status of the hibah application.
		The system shall allow user to download the documents.
FR_34	Update Giver, Receiver, Property, and Witness Information	The system shall allow client to update the hibah application information.

FR_35		The system shall validate all the data format is correct.
FR_36		The system shall save date and time when the event occurs.
FR_37		The system shall not allow staff to update the information.
FR_38		The system shall not allow user to leave required filed empty.
FR_39	Update Hibah Application Status	The system shall not allow client to update the status.
FR_40		The system shall allow staff to update the status
FR_41		The system shall allow staff upload new document.
FR_42		The system will send email to client after update the status
FR_43	Generate Document	The system shall allow staff to generate document such as agreement document in doc file.
FR_44	Delete Hibah Application	The system shall not allow user to delete the hibah application
FR_45		The system shall not allow staff to delete the hibah application
Manage Report		
FR_46	Generate Report	The system shall allow staff to generate monthly and yearly report.
FR_47		The system shall allow staff to print the generated report.

### 3.3.3 Non-functional Requirement

This section describes the general non-functional requirements for the system. They are as follows:

**Table 3.2: The breakdowns of non-functional requirements**

NFR No.	Requirement	Description
Authentication user		
NFR _01	Availability	Available to use. User can be able to use the system. It going to be operational



		24 hours per day and 7 days a week.
NFR _02	Usability	Easy to use. User should can be able to use the application without problem or manuals
NFR _03	Response Time	Database update. The system should not take than 3 second to load the screen.

### **3.3.4 Others Requirement**

Describe each of software, hardware and requirements that will be used (justification of usage).

## **3.4 Conclusion**

On this chapter, requirement of the system has been listed down from functional requirement to the non-functional requirements and other requirements. These requirements are important in order to assist the developer and act as a guidance to develop the system according to the proper compliance that has been endorsed during the initial planning. Other important data also collected in a tabulated data such as data dictionary to ease developer on how to design the database and can identify data that input and output from the system.