

# SDD Document SEM I 20212022

# PSM Management System (PSMMS)

## Dingo Gang

1.	Muhammad Afif bin Ab Rahman	[CB19007]
2.	Muhammad Ilman Nashran bin Mohd Nasruddin	[CB19014]
3.	Siti Nurasma' binti Hashim	[CB19123]
4.	Nureen Nasuha binti Mohd Rosli	[CB19124]
5.	Nabilah Ayuni binti Mohd Nasir	[CB19125]
6.	Nur Alia Shahira binti Mohd Zaidi	[CB19141]

# **TABLE OF CONTENTS**

1	IN.	FRODUCTION	4
	1.1	Purpose	
	1.2	System Identification	
	1.3	Module Overview	
	1.3	3.1 Manage Lecturer Expertise	
	1.3	3.2 Manage Profile	!
	1.3	3.3 Manage Supervisor Hunting	!
	1.3	8.4 Manage Title from Student and Lecturer	
	1.3		
	1.3	8.6 Manage Logbook	!
2	RE	FERENCE DOCUMENT	7
3		ta design	
	3.1	General Architecture	8
	3.1.1	3-Tier Architecture Layer	9
	3.1	.1.1 Manage Lecturer Expertise [SDD-REQ-100]	
		.1.2 Manage Profile [SDD-REQ-200]	
		.1.3 Manage Supervisor Hunting [SDD-REQ-300]	
	3.1	.1.4 Manage Title [SDD-REQ-400]	1:
		.1.5 Manage Approval and Proposal Submission [SDD-REQ-500] _	
	3.1	.1.6 Manage Logbook [SDD-REQ-600]	1-
	3.1.2	Framework	1
		Package Module	
		Pata Dictionary	
4		TAIL DESIGN	
•	4.1	Manage Lecturer Expertise [SDD-REQ-100]	
	4.2	Manage Profile [SDD-REQ-200]	
	4.3	Manage Supervisor Hunting [SDD-REQ-300]	
	4.4	Manage Title [SDD-REQ-400]	
	4.5	Manage Approval and Proposal Submission [SDD-REQ-500]	
	4.6	Manage Logbook [SDD-REQ-600]	
5.	RF	QUIREMENT TRACEABILITY	
٠.			

5.1 Manage Lecturer Expertise [SRS-REQ-100]	69
5.2 Manage Profile [SRS-REQ-200]	69
5.3 Manage Supervisor Hunting [SRS-REQ-300]	70
5.4 Manage Title from Student and Lecturer [SRS-REQ-400]	70
5.5 Manage Approval and Proposal Submission [SRS-REQ-500]	71
5.6 Manage Logbook [SRS-REQ-600]	71

INTRODUCTION

1.1 **Purpose** 

The goal of this System Design Document (SDD) is to provide the essential guidelines for designing and

implementing software that meets all the criteria.

The purpose of this document in the instance of the PSM Management System (PSMMS) is to provide

an online system to manage both supervisor and student for PSM subjects where students need to find a

supervisor to guide them through their project. It will describe the system's goal and features, as well as

the system's interfaces, what the system will perform, the constraints that it must function under, and

how the system will react to external stimuli.

This paper will be design-agnostic, focusing solely on the end criteria that must be met by the final

software. This document can also be utilized by clients and stakeholders as a representation of their

software requirements. Fulfilling all the SDD's requirements is the same as fulfilling the client's contract.

1.2 **System Identification** 

System Title: PSM Management System

**System Abbreviation: PSMMS** 

**Year:** 2021

**System Identification:** SRS-PSMMS-2021-V1

#### 1.3 Module Overview

#### 1.3.1 Manage Lecturer Expertise

Manage Lecturer Expertise module allows the lecturers to manage their expertise by adding or editing their expertise in the system. The students can browse a list of lecturers and their expertise by picking one from the list.

#### 1.3.2 Manage Profile

Manage Profile module allows the users (Student and Lecturer) to view their profile. The student can view the lecturer profile to gain any information about the lecturer while the lecturer also can view the student profile. The users can manage their profiles by editing, updating, or adding new information to the profile.

#### 1.3.3 Manage Supervisor Hunting

Manage Supervisor Hunting module allows the student to search for a potential supervisor or PSM title available to request. Students can book the supervisor chosen and fill in a project proposal form if he/she wants to propose their own title. The student also can choose the supervisor title available and even filter the search based on the lecturer's name or the lecturer's field of expertise.

#### 1.3.4 Manage Title from Student and Lecturer

Manage Title module allows the lecturer to add and modify their title, as well as view it in the system. After the lecturer enters their title into the system, the student can view the title and can book the title that they want. The student also can search for their preferred title in the system if they have the title that they want to search.

#### 1.3.5 Manage Approval and Proposal Submission

Manage Approval and Proposal Submission module allows the student to submit their proposals to the lecturers by filling out a proposal form and viewing the results of their proposal application. The lecturers can manage the approval process for each proposal submitted in this PSMMS system.

#### 1.3.6 Manage Logbook

Manage Logbook module allows the students to update their PSM progress in the logbook. If there is any discussion or meeting with their supervisor, they need to report the progress in the logbook with some information such as Week, Date, Time, Current Progress and Upcoming Progress. The student can

also view and edit their logbook. The student's logbook can be generated and printed before the evaluation presentation. The supervisor can monitor their student's logbook progress and add some comments on the progress. The supervisor needs to approve their student's logbook.

# 2 REFERENCE DOCUMENT

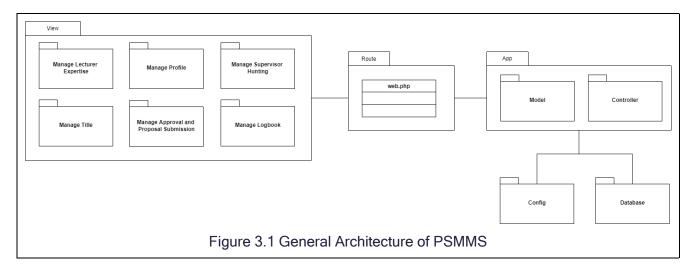
This document is prepared in reference to the following documents:

- Armel, J. (2014). *Web application development with Laravel PHP Framework version 4*. [Bachelor of Engineering, Helsinki Metropolia University of Applied Sciences]. <a href="https://www.theseus.fi/bitstream/handle/10024/74052/Author.pdf">https://www.theseus.fi/bitstream/handle/10024/74052/Author.pdf</a>
- Rajput, S. (2020). What are the reasons to choose Laravel MVC for web development. *MSC IT Research Methods and Professional Issues*. Published. <a href="https://doi.org/10.31219/osf.io/fgq3z">https://doi.org/10.31219/osf.io/fgq3z</a>
- Tutorials Point (2016). *Laravel Tutorial*. Tutorials Point (I) Pvt. Ltd. <a href="https://www.tutorialspoint.com/laravel/laravel\_tutorial.pdf">https://www.tutorialspoint.com/laravel/laravel\_tutorial.pdf</a>
- Laravel. (n.d.). Request Lifecycle Laravel The PHP Framework For Web Artisans. Laravel The PHP Framework For Web Artisans. Retrieved December 1, 2021, from <a href="https://laravel.com/docs/8.x/lifecycle">https://laravel.com/docs/8.x/lifecycle</a>
- Patel, J. (2021, November 18). Why Laravel PHP Framework is Best Considered to Use in 2021?

  Monocubed. Retrieved December 2, 2021, from <a href="https://www.monocubed.com/why-laravel-php-framework/">https://www.monocubed.com/why-laravel-php-framework/</a>
- Ighodaro, N. (2018, August 22). *How Laravel implements MVC and how to use it effectively*. Blog Pusher. Retrieved December 2, 2021, from <a href="https://blog.pusher.com/laravel-mvc-use/">https://blog.pusher.com/laravel-mvc-use/</a>
- Vincy. (2021, July 27). *PHP Laravel Project Example for Beginners*. Phppot. Retrieved December 2, 2021, from <a href="https://phppot.com/php/php-laravel-project-example/">https://phppot.com/php/php-laravel-project-example/</a>

# 3 DATA DESIGN

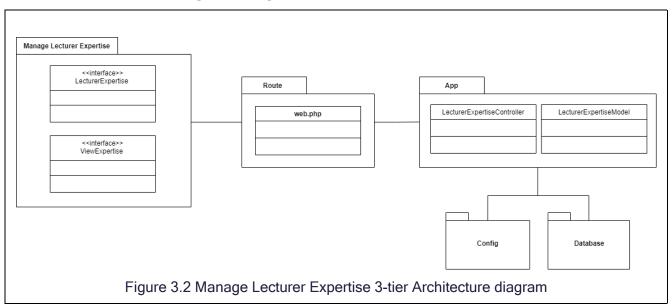
## 3.1 General Architecture



## 3.1.1 3-Tier Architecture Layer

## 3.1.1.1 Manage Lecturer Expertise [SDD-REQ-100]

Siti Nurasma' binti Hashim [CB19123]



#### 3.1.1.1.1 Manage Lecturer Expertise

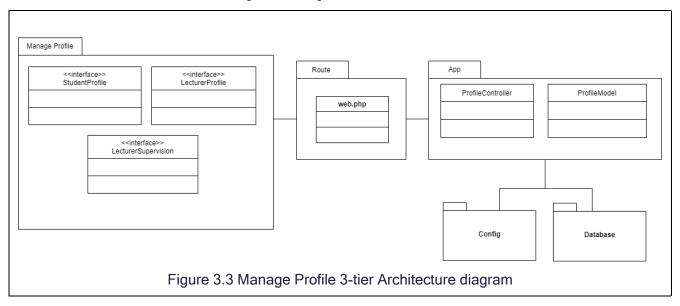
Class Name	Description
	This class allows the lecturer to view the expertise details,
LecturerExpertise	and perform an action which are, add new expertise and
	edit existing expertise details.
ViowExportico	This class allows the student to view the lecturer's
ViewExpertise	expertise.

## 3.1.1.1.2 App

Class Name	Description
LecturerExpertiseController	This controller is used to communicate Manage Lecturer
Legitare Expertise Controller	Expertise Interface with the entity class Model.
LecturerExpertiseModel	This model is used to fetch data from the database to
Lecturer Expertiseivioder	display in the LecturerExpertise and viewExpertise.

## 3.1.1.2 Manage Profile [SDD-REQ-200]

Nur Alia Shahira binti Mohd Zaidi [CB19141]



## 3.1.1.2.1 Manage Profile

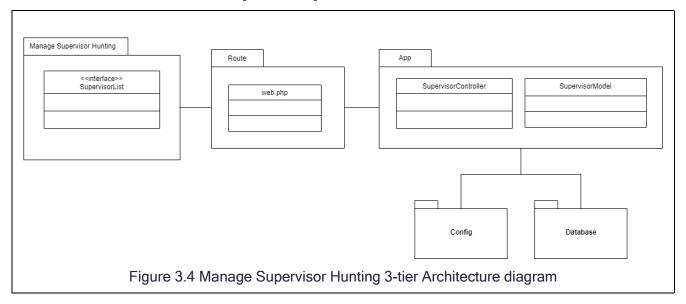
Class Name	Description
LecturerProfile	This class allows the student and lecturer to view lecturer's profile.
StudentProfile	This class allows the student and lecturer to view student's profile.
LecturerSupervision	This class allows the lecturer to view the student under his/her supervision

## 3.1.1.2.2 App

Class Name	Description
ProfileController	The controller that communicates with Manage Profile
1 TomeController	Interface with entity class Model (ProfileModel)
	This model is used to query and retrieve data from
ProfileModel	database that is being displayed in StudentProfile
	interface and LecturerProfile interface

## 3.1.1.3 Manage Supervisor Hunting [SDD-REQ-300]

Muhammad Afif bin Ab Rahman [CB19007]



## 3.1.1.3.1 Manage Supervisor Hunting

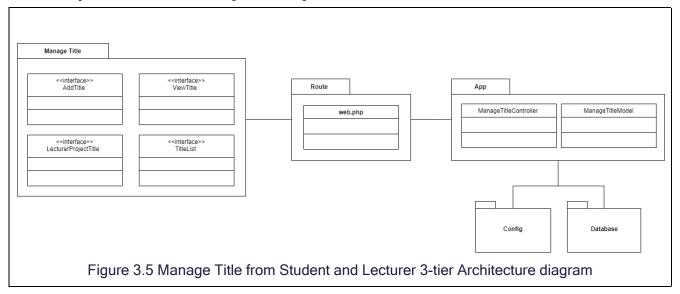
Class Name	Description
SupervisorList	This class allows the students to browse lecturer list with their basic information and book any supervisor that they want

## 3.1.1.3.2 App

Class Name	Description
	This controller is used to communicate with the Manage
SupervisorController	Supervisor Hunting Interface with the entity class Model
	(Supervisor)
SupervisorModel	This model is used to fetch data from the database to
Supervisoriviouei	display in the SupervisorList interface

## 3.1.1.4 Manage Title [SDD-REQ-400]

Nabilah Ayuni binti Mohd Nasir [CB19125]



## 3.1.1.4.1 Manage Title

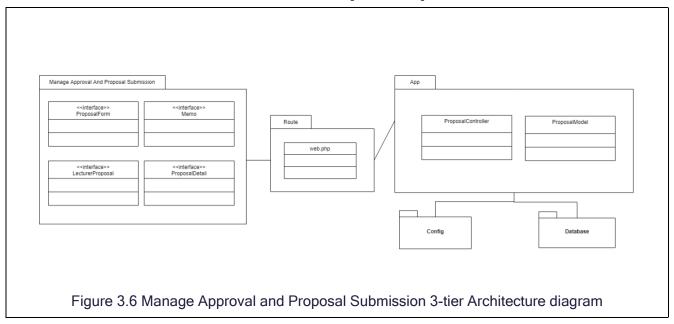
Class Name	Description
AddTitle	This class allows the lecturer to add their title into the system.
ViewTitle	This class allows the lecturer to view and edit lecturer's title details.
LecturerProjectTitle	This class allows the lecturer to view title list, edit and delete their title information.
TitleList	This class allows the student to view the project title list, project title status and book their preferred title.

## 3.1.1.4.2 App

Class Name	Description
ManageTitleController	This controller is being used to communicate with
	ManageTitleView and the entity class Model.
	This model is used to store and fetch data from the
ManageTitleModel	database for the Manage Title from Student and Lecturer
	module.

#### 3.1.1.5 Manage Approval and Proposal Submission [SDD-REQ-500]

Muhammad Ilman Nashran bin Mohd Nasruddin [CB19014]



## 3.1.1.5.1 Manage Approval and Proposal Submission

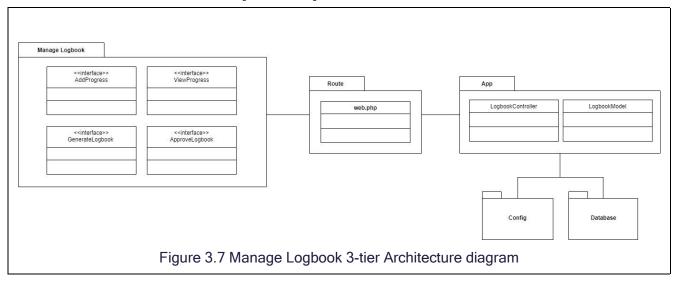
Class Name	Description
ProposalForm	This class allows the students to submit their proposal by inserting the proposal from.
Memo	This class allows the students to view their proposal status.
LecturerProposal	This class allows the lecturer to view, accept and reject the proposal that is being submitted by students.
ProposalDetail	This class allows the lecture to view details of the proposal.

#### 3.1.1.5.2 App

Class Name	Description	
ProposalController	This controller is used to communicate within the	
Proposarcontroller	Proposal Model and Proposal View.	
	This model is used to store and fetch data from the	
ProposalModel	database for the Manage Approval and proposal	
	submission.	

## 3.1.1.6 Manage Logbook [SDD-REQ-600]

Nureen Nasuha binti Mohd Rosli [CB19124]



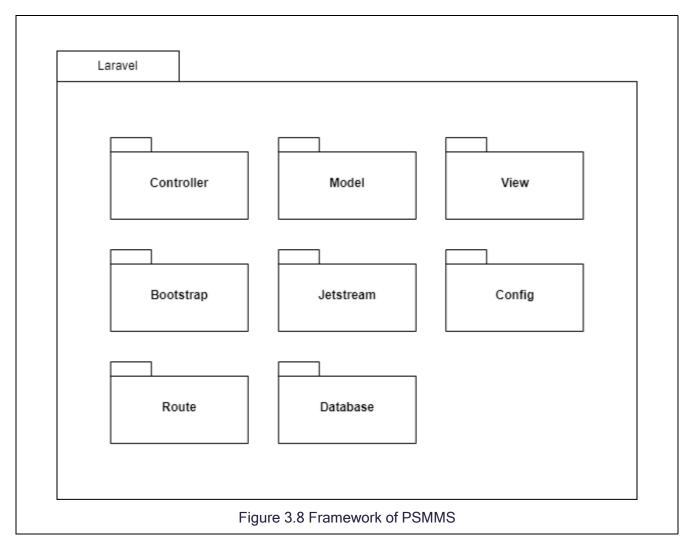
## 3.1.1.6.1 Manage Logbook

Class Name	Description	
AddProgress	This class allows the student to add, view and edit their logbook progress into the system	
GenerateLogbook  This class allows the system to generate the logbook the system		
ViewProgress	This class allows the lecturer to view and add comment into their student under supervision logbook progress in the system	
ApproveLogbook	This class allows the lecturer to approve their student under supervision logbook progress in the system	

## 3.1.1.6.2 App

Class Name	Description	
LogbookController	This controller is used to communicate with Manage	
Logbookoomionei	Logbook Interface with the entity class Model.	
LogbookModel	This model is used to store, query, and retrieve data from	
Logbookiviodei	the database and display in ViewProgress	

## 3.1.2 Framework



Package Name	Description	
	Bootstrap is a popular CSS framework which has simple,	
Dootstron	yet functional design. Bootstrap has a lot of templates	
Bootstrap	available online due to its popularity, which will potentially	
	ease development	
	Controllers act as an interface between Model and View components	
Controllers	to process all the business logic and incoming requests, manipulate	
Controllers	data using the Model component and interact with the Views to render	
	the final output.	
Models	The Model component corresponds to all the data-related logic that	
iviodeis	the user works with.	

Database	A database is a data structure that stores organized information.	
Views	View component is used for all the UI logic of the application.	
Routes	Route is a way of creating a request URL of your application.	
Config	Database links the information, mail server information, and other core configuration values such as application time zone, and encryption key can all be configured using these configuration files.	
Jetstream	Jetstream provides the implementation for your application's login, registration, email verification, two-factor authentication, session management, API via Laravel Sanctum, and optional team management features.	

# 3.2 Package Module

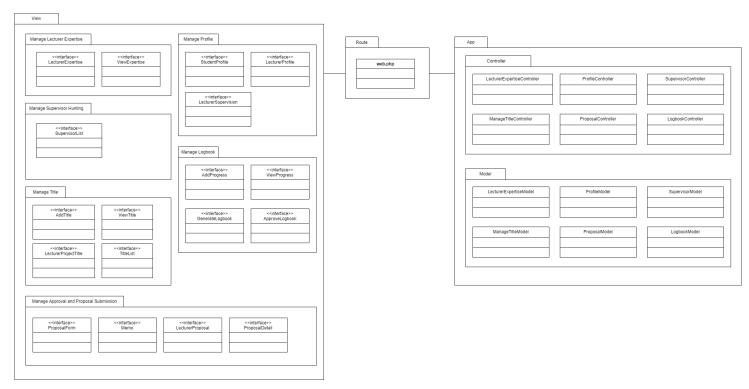


Figure 3.9 Package Module of PSMMS

# 3.3 Data Dictionary

## 3.3.1 Manage Lecturer Expertise table

Field Name	Description	Data Type	Constraint
Expertise_ID	Lecturer expertise	Varchar(10)	PK
Lecturer_ID	Lecturer ID number	Varchar(10)	FK
Expertise_Name	Expertise name	Varchar(255)	-
Expertise_Level	Expertise level	Varchar(255)	-

## 3.3.2 Manage Profile

## Lecturer table

Field Name	Description	Data Type	Constraint
Lecturer_ID	Lecturer ID number	Varchar(10)	PK
Lecturer_Name	Lecturer's Name	Varchar(255)	-
Lecturer_Email	Lecturer's Email Address	Varchar(255)	-
Lecturer_OfficeNo	Lecturer's Office Number	Varchar(10)	-
Lecturer_Biography	Lecturer's Biography details	Varchar(255)	-
Lecturer_Image	Lecturer profile image	Varchar(10)	-

## Lecturer\_Education table

Field Name	Description	Data Type	Constraint
Education_ID	Education ID number	Varchar(10)	PK
Lecturer_ID	Lecturer ID number	Varchar(10)	FK
Institution_Name	Institution Name	Varchar(255)	
Level_Education	Level of Education	Varchar(255)	
Major_Education	Major of Education	Varchar(255)	
Year_Education	Year of Education	Int	

#### Student table

Field Name	Description	Data Type	Constraint
Student_ID	Student ID number	Varchar(10)	PK
Lecturer_ID	Lecturer ID number	Varchar(10)	FK
Student_Name	Student's Name	Varchar(255)	
Student_Email	Student's Email Address	Varchar(255)	
Student_PhoneNo	Student's Phone Number	Varchar(15)	
Student_Major	Student's Major Course	Varchar(255)	
Student_Year	Student's Year	Int	
PSM_Level	PSM Level	Int	
Student_Image	Student Profile Image	Varchar(10)	

## 3.3.3 Manage Supervisor Hunting table

Data obtained from lecturer table in 2.2.2

Field Name	Description	Data Type	Constraint
Lecturer_ID	Lecturer ID number	Varchar(10)	PK
Lecturer_Name	Lecturer's Name	Varchar(255)	-
Lecturer_Email	Lecturer's Email Address	Varchar(255)	-
Lecturer_Image	Lecturer profile image	Varchar(10)	-

## 3.3.4 Manage Title from Student and Lecturer table

Field Name	Description	Data Type	Constraint
Title_ID	Title ID number	Varchar(10)	PK
Lecturer_ID	Lecturer ID number	Varchar(10)	FK
Student_ID	Student ID number	Varchar(10)	FK
Title_Name	Title Name	Varchar(225)	-
Title_Type	Title Type	Varchar(225)	-
Title_Description	Title Description	Varchar(225)	-
Required_Skill	Knowledge/Skill Required	Varchar(225)	-
Title_Status	Title Status	Varchar(225)	-
Lecturer_Email	Lecturer's Email Address	Varchar(255)	-

## 3.3.5 Manage Approval and Proposal Submission table

Field Name	Description	Data Type	Constraint
Proposal_ID	Proposal ID number	Varchar(10)	PK
Student_ID	Student ID number	Varchar(10)	FK
Lecturer_ID	Lecturer ID number	Varchar(10)	FK
Proposal_Title	Student's proposal title	Varchar(225)	-
Proposal_Type	Student's proposal type	Varchar(225)	-
SV_Name	Student's supervisor name	Varchar(225)	-
Proposal_Status	Studen' proposal status	Varchar(10)	-
Proposal_Doc	Student's proposal	Varchar(225)	-
	document		

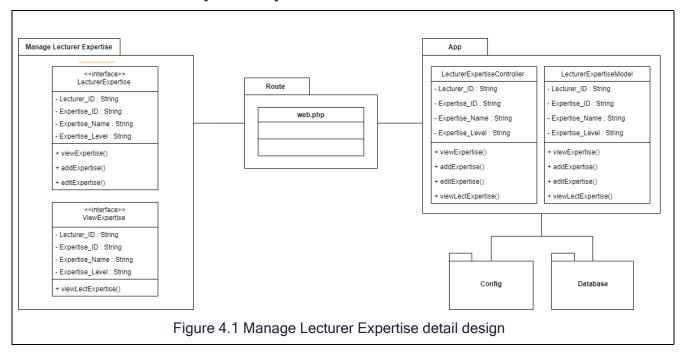
# 3.3.6 Manage Logbook table

Field Name	Description	Data Type	Constraint
Logbook ID	Logbook ID	Varchar(10)	PK
Student_ID	Student matric ID	Varchar(10)	FK
Student_Name	Student name	Varchar(255)	-
Student_Title	Student PSM title	Varchar(255)	-
Week	Logbook week	Varchar(10)	-
Date	Logbook date	Date	-
Time	Logbook time	Time	-
Current_Progress	Add student current progress	Varchar(255)	-
Upcoming_Progress	Add student upcoming progress	Varchar(255)	-
Add_Comment	Add lecturer comment	Varchar(255)	-
Status_Approval	Status approval	Varchar(255)	-

# 4 DETAIL DESIGN

## 4.1 Manage Lecturer Expertise [SDD-REQ-100]

Siti Nurasma' binti Hashim [CB19123]



# 4.1.1 LecturerExpertise [SDD-REQ-101]

Class Type	Boundary Class		
D 11.10	An interface to display lecturer expertise and perform an action to add new expertise and edit existing expertise.		
Responsibility			
	Attributes Name	Attributes Type	
	Lecturer_ID	String	
Attributes	Expertise_ID	String	
	Expertise_Name	String	
	Expertise_Level	String	
	Method Name	Description	
	viewExpertise()	Method to display lecturer expertise for the lecturer.	
Methods	addExpertise()	Method for the lecturer to add new expertise into	
Metrious		database.	
	editExpertise()	Method for the lecturer to edit their expertise	
		details.	
Algorithm	viewExpertise() BEGIN  GET Expertise_ID FROM expertise table; System query from database; DISPLAY Expertise_Name, Expertise_Name ACCORDING Expertise_ID. END  addExpertise() BEGIN INSERT Expertise_Name, Expertise_Name INTO expertise table; System query from database; DISPLAY LecturerExpertise page. END  editExpertise() BEGIN		

GET Expertise\_ID FROM expertise table;

SEND variable Expertise\_ID TO LecturerExpertiseController

FOR editExpertise() class;

System query from database;

DISPLAY LecturerExpertise page.

END

# 4.1.2 ViewExpertise [SDD-REQ-102]

Class Type	Boundary Class	
Responsibility	An interface to display lecturer's expertise.	
	Attributes Name	Attributes Type
	Lecturer_ID	String
Attributes	Expertise_ID	String
	Expertise_Name	String
	Expertise_Level	String
	Method Name	Description
Methods	viewLectExpertise()	Method to display lecturer expertise for the
		student.
Algorithm	viewLectExpertise() BEGIN GET Expertise_ID FROM expertise table; System query from database; DISPLAY Expertise_Name, Expertise_Name ACCORDING Expertise_ID. END	

## 4.1.3 LecturerExpertiseController [SDD-REQ-103]

Class Type	Controller Class		
Responsibility	Control the flow of input between ManageLecturerExpertiseInterface and ManageLecturerExpertiseModel.		
	Attributes Name Attributes Type		
	Lecturer_ID	String	
Attributes	Expertise_ID	String	
	Expertise_Name	String	
	Expertise_Level	String	
	Method Name	Description	
	viewExpertise()	Method to view lecturer expertise for the lecturer.	
Methods	addExpertise()	Method to add new expertise into database.	
	editExpertise()	Method to edit lecturer expertise details.	
	viewLectExpertise()	Method to view lecturer expertise for the student.	
	viewExpertise()  BEGIN  IF viewExpertise() is called;  THEN create view lecturer expertise details to connect to LecturerExpertiseModel;  RETURN to LecturerExpertise page.  END IF  END		
Algorithm	addExpertise() BEGIN  IF addExpertise() is called;  THEN create object add expertise form to connect to LecturerExpertiseModel; RETURN to addExpertise form LecturerExpertise page. END IF END  editExpertise()		

```
BEGIN

IF editExpertise() is called;

THEN create object edit expertise form to connect to
LecturerExpertiseModel;

RETURN to editExpertise form LecturerExpertise page.

END IF
END

viewLectExpertise()

BEGIN

IF viewLectExpertise() is called;

THEN create view lecturer expertise details to connect to
LecturerExpertiseModel;

RETURN to ViewExpertise page.

END IF
END
```

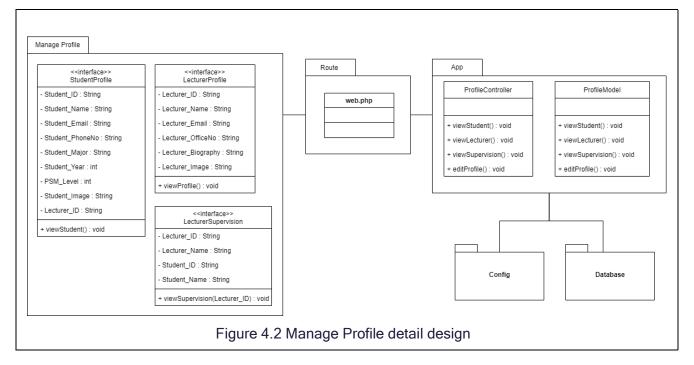
# 4.1.4 LecturerExpertiseModel [SDD-REQ-104]

Class Type	Entity Class		
Decreased	To save data to the database and retrieve request data from the database.		
Responsibility			
	Attributes Name	Attributes Type	
	Lecturer_ID	String	
Attributes	Expertise_ID	String	
	Expertise_Name	String	
	Expertise_Level	String	
	Method Name	Description	
	viewExpertise()	Method to retrieve and display lecturer	
		expertise for the lecturer.	
	addExpertise()	Method to save and display new expertise into	
Methods		database.	
	editExpertise()	Method to save the update and display edited	
		lecturer expertise details.	
	viewLectExpertise()	Method to retrieve and display lecturer	
		expertise for the student.	
	viewExpertise() BEGIN		
	RETRIEVE Expertise_Name, Expertise_Level FROM Expertise table		
	WHERE Expertise_ID = Expertise_ID AND Lecturer_ID =		
	Lecturer_ID;		
	SEND Expertise_Name, Expertise_Level TO		
Algorithm	LecturerExpertiseController FOR viewExpertise() class.		
	END		
	addExpertise()		
	BEGIN		
	GET Expertise_Name, Expertise_Level FROM addExpertise() class;		
	SEND Expertise_Name, Expertise_Level TO expertise table.		
	END		

```
editExpertise()
BEGIN
 UPDATE Expertise_Name, Expertise_Level FROM Expertise table
    WHERE Expertise_ID = Expertise_ID AND Lecturer_ID =
    Lecturer_ID;
 SEND Expertise_Name, Expertise_Level TO
    LecturerExpertiseController FOR editExpertise() class.
END
viewLectExpertise()
BEGIN
 RETRIEVE Expertise_Name, Expertise_Level FROM Expertise table
    WHERE Expertise_ID = Expertise_ID AND Lecturer_ID =
    Lecturer_ID;
 SEND Expertise_Name, Expertise_Level TO
    LecturerExpertiseController FOR viewLectExpertise() class.
END
```

## 4.2 Manage Profile [SDD-REQ-200]

Nur Alia Shahira binti Mohd Zaidi [CB19141]



# 4.2.1 StudentProfile [SDD-REQ-201]

Class Type	Boundary Class	
Responsibility	An interface to display the student's profile.	
	Attributes Name	Attributes Type
	Student_ID	String
	Student_Name	String
Attributes	Student_Email	String
Allibules	Student_PhoneNo	String
	Student_Major	String
	Student_Year	Int
	PSM_Level	Int
Methods	Method Name	Description
Methods	viewStudent()	To display the student profile
	viewStudent()	
	BEGIN	
	GET Student_ID	
Algorithm	DISPLAY Student_Name, Student_Email, Student_PhoneNo,	
	Student_Major, Student_Year, PSM_Level	
	ACCORDING Student_ID	
	END	

## 4.2.2 LecturerProfile [SDD-REQ-202]

Class Type	Boundary Class		
Responsibility	An interface to display the lecturer's profile.		
	Attributes Name	Attributes Type	
	Lecturer_ID	String	
	Lecturer_Name	String	
	Lecturer_Email	String	
Attributes	Lecturer_OfficeNo	String	
Allibutes	Lecturer_Biography	String	
	Institution_Name	String	
	Level_Education	String	
	Major_Education	String	
	Year_Education	Int	
Methods	Method Name	Description	
Metrious	viewLecturer()	To display the lecturer profile	
	viewLecturer()		
	BEGIN		
	GET Lecturer_ID		
Algorithm	DISPLAY Lecturer_Name, Lecturer_Email, Lecturer_OfficeNo,		
	Lecturer_Biography, Institution_Name, Level_Education,		
	Major_Education, Year_Education		
	ACCORDING Lecturer_ID		
	END		

# 4.2.3 LecturerSupervision [SDD-REQ-203]

Class Type	Boundary Class	
Responsibility	An interface to display the student list under lecturer's supervision.	
	Attributes Name	Attributes Type
Attributes	Student_ID	String
	Student_Name	String
Methods	Method Name	Description
Metrious	viewSupervision(LecturerID)	To display the lecturer supervision list
	viewSupervision(LecturerID)	
	BEGIN	
Algorithm GET Student_ID,		t_Name
	ACCORDING Lecturer_ID	
	END	

# 4.2.4 ProfileController [SDD-REQ-204]

Class Type	Controller Class	
Responsibility	Control the flow of input and output between ManageProfileInterface and ManageProfileModel	
Attributes	Attributes Name	Attributes Type
Attributes	-	-
	Method Name	Description
	viewStudent()	To display the student profile details
Methods	viewLecturer()	To display the lecturer profile details
	viewSupervision()	To display the lecturer's supervision list
	editProfile()	To edit and update profile details
	viewStudent()	
	BEGIN	
	IF viewStudent() is called	
	THEN select Student_ID, Student_Name, Student_Email,	
	Student_PhoneNo, Student_Major, Student_Year,	
	PSM_Level, Student_Image, Lecturer_ID from table	
	Student	
	RETURN (	data to StudentProfile page
	ENDIF	
	END	
Algorithm	viewLecturer()	
	BEGIN	
	IF viewLecturer() is called	
THEN select Lect		ect Lecturer_ID, Lecturer_Name, Lecturer_Email,
	Lecturer_OfficeNo, Lecturer_Biography, Lecturer_Image from table lecturer in psmms database RETURN data to LecturerProfile page ENDIF END  viewSupervision(LecturerID) BEGIN	

```
IF viewSupervision(LecturerID) is called
THEN select all Student_ID, Student_Name WHERE
Lecturer_ID equal to LecturerID from table Student in
psmms database.
RETURN array data to LecturerSupervision page
ENDIF
END

editProfile()
BEGIN
IF editProfile() is called
THEN Update and store Lecturer_Name, Lecturer_Email,
Lecturer_OfficeNo, Lecturer_Biography, Lecturer_Image
for Lecturer_ID in table Lecturer in psmms database
ENDIF
END
```

## 4.2.5 ProfileModel [SDD-REQ-205]

Class Type	Entity Class		
Responsibility	Represent data of lecturer and student		
Attributes	Attributes Name	Attributes Type	
Attributes	-	-	
	Method Name	Description	
	viewStudent()	To retrieve the student profile details	
Methods	viewLecturer(LecturerID)	To retrieve the lecturer profile details	
	viewSupervision()	To retrieve the lecturer's supervision list	
	editProfile()	To update profile details	
	viewStudent()		
	BEGIN		
	RETRIEVE Student_Name, Student_Email, Student_PhoneNo,		
	Student_Major, Student_Year, PSM_Level		
	FROM table Student WHERE Student_ID = Student_ID		
	RETURN array Student_Name, Student_Email,		
	Student_PhoneNo, Student_major, Student_Year, PSM_Level		
	END		
	viewLecturer()		
	BEGIN		
A.1	RETRIEVE Lecturer_Name, Lecturer_Email,		
Algorithm	Lecturer_OfficeNo,Lecturer_Biography FROM table Lecturer		
	WHERE Lecturer_ID = Lecturer_ID		
	RETURN array Lecturer_Name, Lecturer_Email,		
	Lecturer_OfficeNo, Lecturer_Biography		
	END		
	viewSupervision(Lecturer_ID)		
	BEGIN		
	RETRIEVE all Student_ID, Student_Name FROM table Student WHERE Lecturer_ID = Lecturer_ID		
	RETURN array Student_ID, Student_Name END		

```
editProfile()

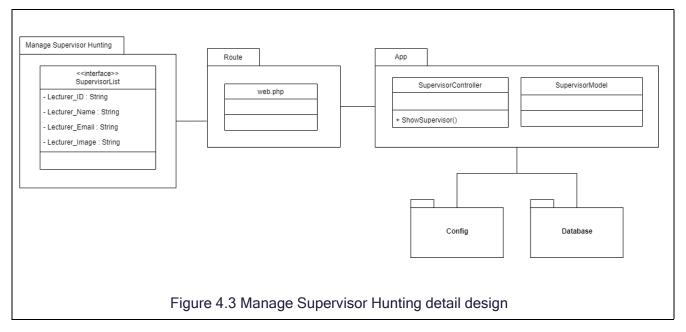
BEGIN

UPDATE Lecturer_Name, Lecturer_Email, Lecturer_OfficeNo,
Lecturer_Biography FROM table Lecturer
WHERE Lecturer_ID = Lecturer_ID

UPDATE Institution_Name, Level_Education,
Major_Education,
Year_Education FROM table Lecturer_Education
WHERE Lecturer_ID = Lecturer_ID AND
Education_ID = Education_ID
END
```

### 4.3 Manage Supervisor Hunting [SDD-REQ-300]

Muhammad Afif bin Ab Rahman [CB19007]



### 4.3.1 SupervisorList [SDD-REQ-301]

Class Type	Boundary Class	
Responsibility	An interface to display the list of supervisors for the student	
	Attributes Name	Attributes Type
	Lecturer_ID	String
Attributes	Lecturer_Name	String
	Lecturer_Email	String
	Lecturer_Image	String
Methods	Method Name	Description
	Not applicable	Not applicable
Algorithm	Not applicable	

## 4.3.2 SupervisorController [SDD-REQ-302]

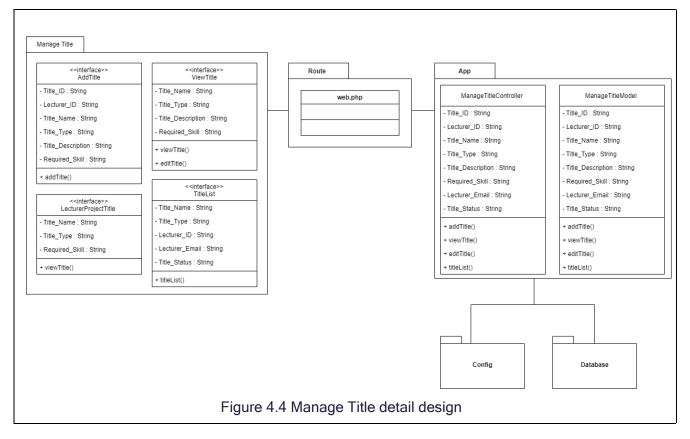
Class Type	Controller Class	
	Control the flow of input and output between	
Responsibility	ManageSupervisorHuntingInterface and	
	ManageSupervisorHun	tingModel
Attributes	Attributes Name	Attributes Type
Attributes	-	-
	Method Name	Description
Methods	ShowSupervisor()	Method to display all supevisor in the
		SupervisorList.blade.php
	ShowSupervisor()	
	BEGIN	
Algorithm	GET Lecturer_ID FROM table Lecturer	
, ugonum	DISPLAY Lecturer_Name, Lecturer_Email, Lecturer_Image ACCORDING Lecturer_ID	
	END	

## 4.3.3 SupervisorModel [SDD-REQ-303]

Class Type	Entity Class	
Responsibility	Represent data of supervisor	
Attributes	Attributes Name	Attributes Type
	-	-
Methods	Method Name	Description
	Not applicable	Not applicable
Algorithm	Not applicable	

### 4.4 Manage Title [SDD-REQ-400]

Nabilah Ayuni binti Mohd Nasir [CB19125]



### 4.4.1 AddTitle [SDD-REQ-401]

Class Type	Boundary Class	
Responsibility	An interface for the lecturer to add their new title.	
	Attributes Name	Attributes Type
	Title_ID	String
	Lecturer_ID	String
Attributes	Title_Name	String
	Title_Type	String
	Title_Description	String
	Required_Skill	String
	Method Name	Description
Methods	addTitle()	To save the title information entered by
		the lecturer in the title database.
	addTitle()	
	BEGIN	
	INSERT Title_Name, Title_Type, Title_Description, Required_Skill	
Algorithm	INTO title table;	
	System query from database.	
	DISPLAY ViewTitle page.	
	END	

### 4.4.2 ViewTitle [SDD-REQ-402]

Class Type	Boundary Class	
Responsibility	An interface for the lecturer to view title information and edit their title information.	
	Attributes Name	Attributes Type
	Title_Name	String
Attributes	Title_Type	String
	Title_Description	String
	Required_Skill	String
	Method Name	Description
NA -11 -1	viewTitle()	To retrieve the lecturers' title information and
Methods	view ritie()	display it to them.
	editTitle()	To edit and update the lecturer's title information.
	viewTitle() BEGIN GET Title_ID field FROM title table DISPLAY Title_Name, Title_Type, Title_Description, Required_Skill ACCORDING Title_ID	
Algorithm	editTitle()	
	BEGIN  READ Title ID FROM title table	
SEND title information deta		ation details TO ManageTitleModel FOR editTitle()

## 4.4.3 LecturerProjectTitle [SDD-REQ-403]

Class Type	Boundary Class		
	An interface for the	lecturer to view title list and perform an action to edit	
Responsibility	their existing title and delete their title.		
	Attributes Name	Attributes Type	
Attributes	Title_Name	String	
Attributes	Title_Type	String	
	Required_Skill	String	
	Method Name	Description	
Mathanda	viewTitle()	To retrieve the lecturers' title information and	
Methods	view ride()	display it to them.	
	editTitle()	To edit and update the lecturer's title information.	
	viewTitle()		
	BEGIN		
	GET Title_ID fi	eld FROM title table	
	DISPLAY Title_	Name, Title_Type, Required_Skill ACCORDING	
	Title_ID		
	END editTitle()		
Algorithm			
	BEGIN		
	READ Title_ID FROM title table		
	SEND title information details TO ManageTitleController		
	FOR editTitle()		
	END		

### 4.4.4 TitleList [SDD-REQ-404]

Class Type	Boundary Class	
Responsibility	An interface for the student to view the project title list, project title status and book their preferred title.	
	Attributes Name	Attributes Type
	Title_Name	String
Attributes	Title_Type	String
Allibutes	Lecturer_ID	String
	Lecturer_Email	String
	Title_Status	String
	Method Name	Description
Methods	titleList()	To retrieve the lecturers' title information list and
		display it to them.
	titleList()	
	BEGIN	
Algorithm	GET Title_ID field FROM title table	
Augoriumi	DISPLAY Title_Name, Title_Type, Lecturer_ID, Lecturer_Email,	
	Title_Status ACCORDING Title_ID	
	END	

## 4.4.5 ManageTitleController [SDD-REQ-405]

Class Type	Controller Class	
Responsibility	Control the flow of input and output between ManageTitleView and ManageTitleModel	
	Attributes Name	Attributes Type
	Title_ID	String
	Lecturer_ID	String
	Title_Name	String
Attributes	Title_Type	String
	Title_Description	String
	Required_Skill	String
	Lecturer_Email	String
	Title_Status	String
	Method Name	Description
	addTitle()	To save the title information entered by
		the lecturer in the title database.
	viewTitle()	To retrieve the lecturers' title information and
Methods		display it to them.
	editTitle()	To edit and update the lecturer's title
	· · ·	information.
	titleList()	To retrieve the lecturers' title information list
		and display it to them.
	addTitle()	
	BEGIN	
	IF addTitle() is called	
	THEN create object lecturer add title form to connect to	
Algorithm	ManageTitleModel	
	RETURN to addTitle form AddTitle page END IF	
	END IF	

```
viewTitle()
BEGIN
 IF viewTitle() is called
     THEN create view lecturer title details information to connect
      to ManageTitleModel
      RETURN to view title details ViewTitle page.
 END IF
END
editTitle()
BEGIN
 IF editTitle() is called
      THEN create object edit title information form to connect to
      ManageTitleModel
      RETURN to editTitle form ViewTitle page.
 END IF
END
titleList()
BEGIN
 IF titleList() is called
      THEN create view lecturer title list to connect to
      ManageTitleModel.
      RETURN to TitleList page
 END IF
END
```

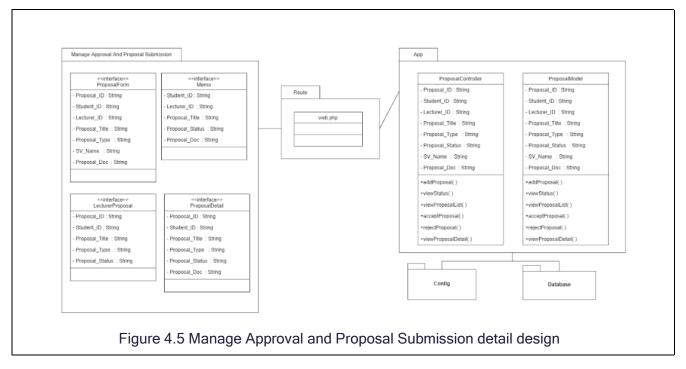
## 4.4.6 ManageTitleModel [SDD-REQ-406]

Class Type	Entity Class	
D 11.111	To save data to the database and retrieve request data from the	
Responsibility	database.	
	Attributes Name	Attributes Type
	Title_ID	String
	Lecturer_ID	String
	Title_Name	String
Attributes	Title_Type	String
	Title_Description	String
	Required_Skill	String
	Lecturer_Email	String
	Title_Status	String
	Method Name	Description
	addTitle()	To save the title information entered by
	add Tille()	the lecturer in the title database.
	viewTitle()	To retrieve the lecturers' title information and
Methods	view ride()	display it to them.
	editTitle()	To edit and update the lecturer's title
	odit Hilo()	information.
	titleList()	To retrieve the lecturers' title information list
		and display it to them.
	addTitle()	
	BEGIN	
	GET Title_Name, Title_Type, Title_Description, Required_Skill	
	FROM addTitle() Class	
Algorithm	SEND Title_Name, Title_Type, Title_Description, Required_Skill	
	TO title table	
	END	

```
viewTitle()
BEGIN
 RETRIEVE Title_Name, Title_Type, Title_Description, Required_Skill
 FROM title table
    WHERE Title ID = Title ID AND Lecturer ID = Lecturer ID;
 SEND Title_Name, Title_Type, Title_Description, Required_Skill
     TO ManageTitleController FOR viewTitle() class.
END
editTitle()
BEGIN
 UPDATE Title_Name, Title_Type, Title_Description, Required_Skill
 FROM title table
    WHERE Title ID = Title ID AND Lecturer ID = Lecturer ID;
 SEND Title_Name, Title_Type, Title_Description, Required_Skill
     TO ManageTitleController FOR editTitle() class.
END
titleList()
BEGIN
RETRIEVE Title Name, Title Type, Lecturer ID, Lecturer Email
  FROM title table
    WHERE Title ID = Title ID AND Lecturer ID = Lecturer ID;
 SEND Title_Name, Title_Type, Lecturer_ID, Lecturer_Email
     TO ManageTitleController FOR titleList() class.
END
```

### 4.5 Manage Approval and Proposal Submission [SDD-REQ-500]

Muhammad Ilman Nashran bin Mohd Nasruddin [CB19014]



### 4.5.1 ProposalForm [SDD-REQ-501]

Class Type	Boundary Class	
Responsibility	An interface for the students to add their new proposal.	
	Attributes Name	Attributes Type
	Proposal_ID	String
	Student_ID	String
Attributes	Lecturer_ID	String
	Proposal_Title	String
	Proposal_Type	String
	Proposal_Doc	String
	SV_Name	String
Methods	Method Name	Description
	Not applicable	-
Algorithm	Not applicable	

## 4.5.2 Memo [SDD-REQ-502]

Class Type	Boundary Class	
Responsibility	An interface for the students to view their proposal status.	
	Attributes Name	Attributes Type
	Proposal_ID	String
Attributes	Student_ID	String
Alinbules	Proposal_Title	String
	Proposal_Status	String
	Proposal_Doc	String
Methods	Method Name	Description
	Not applicable	-
Algorithm	Not applicable	

### 4.5.3 LecturerProposal [SDD-REQ-503]

Class Type	Boundary Class	
Deeneneihilitu	An interface for the lecturer to view the list of submitted proposals from	
Responsibility	their student.	
	Attributes Name	Attributes Type
	Proposal_ID	String
Attributes	Student_ID	String
Attributes	Proposal_Title	String
	Proposal_Type	String
	Proposal_Status	String
Methods	Method Name	Description
	Not applicable	-
Algorithm	Not applicable	

## 4.5.4 ProposalDetail [SDD-REQ-504]

Class Type	Boundary Class	
Responsibility	An interface for the lecturer to view the details of submitted proposals.	
	Attributes Name	Attributes Type
	Proposal_ID	String
	Student_ID	String
Attributes	Proposal_Title	String
	Proposal_Type	String
	Proposal_Status	String
	Proposal_Doc	String
Methods	Method Name	Description
	Not applicable	-
Algorithm	Not applicable	

## 4.5.5 ProposalController [SDD-REQ-505]

Class Type	Controller Class		
Responsibility	This class controls the flow of data between Manage Approval and Proposal Submission Interface and Proposal Model		
	Attributes Name	Attributes Type	
Attributes	Proposal_ID String Student_ID String Lecturer_ID String Proposal_Title String Proposal_Type String Proposal_Status Proposal_Doc String SV_Name String		
	Method Name	Description	
	addProposal( )	Method for student to add and save the proposal submission details into database	
	viewStatus( )	Method for student to view the proposal submission status.	
Methods	viewProposalList( )	Method for lecturer to view the list proposal submission from students.	
	acceptProposal()	Method to allow lecturer to accept the proposal.	
	rejectProposal()	Method to allow lecturer to reject the proposal.	
	viewProposalDetail( )	Method for lecturer to view the details of the proposal submission from students.	
	addProposal()		
Algorithm	BEGIN  IF addProposal() is called  THEN create object Student add proposal form to connect to ProposalModel  RETURN to ProposalForm page END IF  END		

```
viewStatus( )
BEGIN
  IF viewStatus() is called
    THEN create a view student proposal status to connect
      to ProposalModel
      RETURN to view proposal Memo page
  END IF
END
viewProposalList( )
BEGIN
  IF viewProposalList() is called
    THEN create a view Lecturer list proposal to connect
      to ProposalModel
      RETURN to view proposal list LecturerProposal page.
  END IF
END
acceptProposal()
BEGIN
  IF acceptProposal() is called
    THEN create an object to connect to ProposalModel
      RETURN to view proposal list LecturerProposal page.
  END IF
END
rejectProposal()
BEGIN
  IF rejectProposal() is called
    THEN create an object to connect to ProposalModel
      RETURN to view proposal list LecturerProposal page.
  END IF
END
```

```
viewProposalDetail()

BEGIN

IF viewProposalDetail() is called

THEN create a lecturer view proposal detail to connect

to ProposalModel

RETURN to view ProposalDetail page

END IF

END
```

### 4.5.6 ProposalModel [SDD-REQ-506]

Class Type	Entity Class			
D 11.11.	To save data to the database and retrieve request data from the			
Responsibility	database.			
	Attributes Name	Attributes Type		
	Proposal_ID	String		
	Student_ID	String		
	Lecturer_ID	String		
Attributes	Proposal_Title	String		
	Proposal_Type	String		
	Proposal_Status	String		
	Proposal_Doc	String		
	SV_Name	String		
	Method Name	Description		
	addProposal( )	Method to add and save the proposal		
	aduPioposai( )	submission details into database.		
	viewStatus( )	Method to view the proposal submission status		
Methods	viewProposalList( )	Method to view the list proposal submission		
Methods		from students.		
	acceptProposal()	Method to allow lecturer to accept the proposal.		
	rejectProposal()	Method to allow lecturer to reject the proposal.		
	viewProposalDetail( )	Method to view the details of the proposal		
	viewi ropodalizotali( )	submission from students.		
	addProposal( )			
	BEGIN			
	GET Proposal_Title, Proposal_Type, Proposal_Doc, SV_Name,			
	Lecturer_ID			
Algorithm	FROM addProposal() Class			
	SEND Proposal_Title, Proposal_Type, Proposal_Doc, SV_Name,			
	Lecturer_ID			
	TO ProposalController Class FOR addProposal() class.			
	END			

```
viewStatus()
BEGIN
 RETRIEVE Proposal Title, Proposal Type, Lecturer Name,
 Proposal Status
 FROM proposal table
 SEND Proposal_Title, Proposal_Type, Lecturer_Name,
 Proposal_Status
    TO ProposalController FOR viewStatus ( ) class.
END
viewProposalList( )
BEGIN
 RETRIEVE Proposal_Title, Proposal_Type, Student_Name,
 Proposal_Status
 FROM proposal table
 SEND Proposal_Title, Proposal_Type, Student_Name,
 Proposal_Status
    TO ProposalController FOR viewProposalList() class.
END
acceptProposal()
BEGIN
  UPDATE Proposal SET Proposal Status = Proposal Status
  WHERE Student_ID=Student_ID
END
rejectProposal()
BEGIN
 UPDATE Proposal SET Proposal Status = Proposal Status
 WHERE Student_ID=Student_ID
END
```

### viewProposalDetail()

#### **BEGIN**

**RETRIEVE** Student\_ID, Student\_Name, PSM\_Level, Proposal\_Title,

Proposal\_Type,

FROM proposal table

WHERE Proposal\_ID = Proposal\_ID AND Student\_ID = Student\_ID;

**SEND** Student\_ID, Student\_Name, PSM\_Level, Proposal\_Title,

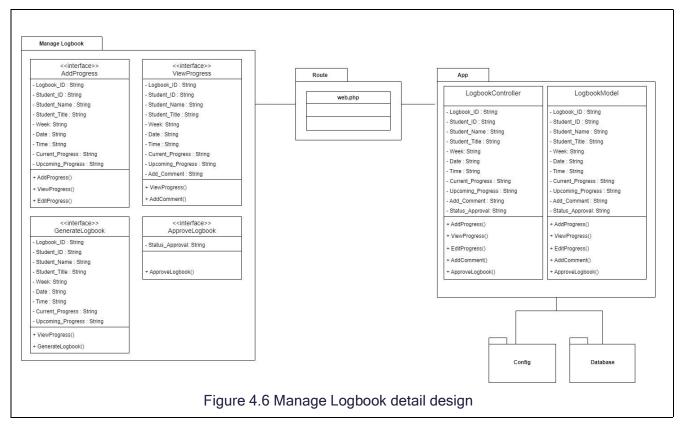
Proposal\_Type,

TO ProposalController FOR viewProposalDetail() class.

**END** 

### 4.6 Manage Logbook [SDD-REQ-600]

Nureen Nasuha binti Mohd Rosli [CB19124]



### 4.6.1 AddProgress [SDD-REQ-601]

Class Type	Boundary Class		
Responsibility	An interface for the student to add, view and edit their logbook progress		
	Attributes Name	Attributes Type	
	Logbook_ID	String	
	Student_ID	String	
	Student_Name	String	
Attributes	Student_Title	String	
Attributes	Week	String	
	Date	String	
	Time	String	
	Current_Progress	String	
	Upcoming_Progress	String	
	Method Name	Description	
	AddDrograps()	Method to add and save the logbook progress	
NA - 411 -	AddProgress()	details into database	
Methods	ViewProgress()	Method to view the logbook progress details	
		Method to edit and save the logbook progress	
	EditProgress()	details into database	
Algorithm	AddProgress() BEGIN  INSERT Student_Name, Student_Title, Week, Date, Time, Current_Progress, Upcoming_Progress INTO logbook table; System query from database; DISPLAY ViewProgress page END		

### ViewProgress()

#### **BEGIN**

**GET** Logbook\_ID **FROM** logbook table;

System query from database;

DISPLAY Student\_Name, Student\_Title, Week, Date, Time,

Current\_Progress, Upcoming\_Progress **ACCORDING** Logbook\_ID.

**END** 

#### EditProgress()

#### **BEGIN**

**GET** Logbook\_ID **FROM** logbook table;

SEND Student\_Name, Student\_Title, Week, Date, Time,

Current\_Progress, Upcoming\_Progress TO LogbookController

FOR EditProgress() class.

System query from database

**END** 

## 4.6.2 GenerateLogbook [SDD-REQ-602]

Class Type	Boundary Class		
Responsibility	An interface for the student to view and generate the logbook		
	Attributes Name	Attributes Type	
	Logbook_ID	String	
	Student_ID	String	
	Student_Name	String	
Attributes	Student_Title	String	
Attributes	Week	String	
	Date	String	
	Time	String	
	Current_Progress	String	
	Upcoming_Progress	String	
	Method Name	Description	
Methods	ViewProgress()	Method to view the logbook progress details	
	GenerateLogbook()	Method to generate the logbook	
	ViewProgress()		
	BEGIN		
	GET Logbook_I	D <b>FROM</b> logbook table;	
	System query from	om database;	
	DISPLAY Stude	nt_Name, Student_Title, Week, Date, Time,	
	Current_Progres	ss, Upcoming_Progress ACCORDING	
	Logbook_ID.		
	END		
Algorithm			
	GenerateLogbook()		
	BEGIN		
	System query all the logbook progress details from database		
	IF "Print"		
	System generate and print the logbook		
	ELSE "Cancel"		
	System display ViewProgress		
	END		

## 4.6.3 ViewProgress [SDD-REQ-603]

Class Type	Boundary Class		
D 11.11.	An interface for the lecturer to view and add comment into the studen logbook progress		
Responsibility			
	Attributes Name	Attributes Type	
	Logbook_ID	String	
	Student_ID	String	
	Student_Name	String	
	Student_Title	String	
Attributes	Week	String	
	Date	String	
	Time	String	
	Current_Progress	String	
	Upcoming_Progress	String	
	Add_Comment	String	
	Method Name	Description	
Methods	ViewProgress()	Method to view the logbook progress details	
	AddComment()	Method to add comment into the logbook progress	
	ViewProgress()		
	BEGIN		
	GET Logbook_ID FROM logbook table;		
	System query from database;		
	DISPLAY Student_Name, Student_Title, Week, Date, Time, Current_Progress, Upcoming_Progress ACCORDING		
	Logbook ID.		
Algorithm	END		
3			
	AddComent()		
	BEGIN		
	INSERT Add_Comment INTO logbook table;		
	System query from database		
	DISPLAY ViewProgress page		
	END		

## 4.6.4 ApproveLogbook [SDD-REQ-604]

Class Type	Boundary Class		
Responsibility	An interface for the lecturer to approve the student logbook progress		
Attributes	Attributes Name	Attributes Type	
Attributes	Status_Approval	String	
Methods	Method Name	Description	
Methous	ApproveLogbook() Method to approve the student logbook progre		
	ApproveLogbook()		
	BEGIN		
Algorithm	INSERT Status_Approval INTO logbook table;		
7 ligorium	System query from database;		
	DISPLAY ViewProgress page		
	END		

## 4.6.5 LogbookController [SDD-REQ-605]

Class Type	Controller Class		
Responsibility	This class control the flow of data between ManageLogbookInterface and ManageLogbookModel		
	Attributes Name	Attributes Type	
	Logbook_ID	String	
	Student_ID	String	
	Student_Name	String	
	Student_Title	String	
Attributes	Week	String	
Allibutes	Date	String	
	Time	String	
	Current_Progress	String	
	Upcoming_Progress	String	
	Add_Comment	String	
	Status_Approval	String	
	Method Name	Description	
	AddProgress()	Method to add and save the logbook progress details into database	
	ViewProgress()	Method to view the logbook progress details	
Methods	EditProgress()	Method to edit and save the logbook progress details into database	
	AddComment()	Method to add comment into the logbook progress	
	ApproveLogbook()	Method to approve the logbook progress	
Algorithm			

```
AddProgress()
BEGIN
  IF AddProgress() is called
    THEN create object student add progress to connect to
   ManageLogbookModel
    RETURN to AddProgress page
  END IF
END
ViewProgress()
BEGIN
  IF ViewProgres() is called
    THEN create view student progress details to connect to
   ManageLogbookModel
    RETURN to ViewProgress page
  END IF
END
EditProgress()
BEGIN
  IF EditProgress() is called
    THEN create object edit progress to connect to
   ManageLogbookModel
    RETURN to EditProgress page
  END IF
END
```

### AddComment()

#### **BEGIN**

IF AddComment is called

THEN create object lecturer add comment to connect to

ManageLogbookModel

**RETURN** to ViewProgress page

**END IF** 

**END** 

### ApproveLogbook()

#### **BEGIN**

IF ApproveLogbook is called

THEN create object lecturer approve logbook to connect to

ManageLogbookModel

**RETURN** to ViewProgress page

**END IF** 

**END** 

## 4.6.6 LogbookModel [SDD-REQ-606]

Class Type	Entity Class		
Responsibility	This model class is to store and retrieve the data from the database		
	Attributes Name	Attributes Type	
	Logbook_ID	String	
	Student_ID	String	
	Student_Name	String	
	Student_Title	String	
Attributes	Week	String	
Attributes	Dat	String	
	Time	String	
	Current_Progress	String	
	Upcoming_Progress	String	
	Add_Comment	String	
	Status_Approval	String	
	Method Name	Description	
	AddProgress()	Method to add and save the logbook progress	
		details into database	
	ViewProgress()	Method to view the logbook progress details	
Methods	EditProgress()	Method to edit and save the logbook progress	
		details into database	
	AddComment()	Method to add comment into the logbook	
		progress	
	ApproveLogbook()	Method to approve the logbook progress	
Algorithm			

```
AddProgress()
BEGIN
   GET Student Name, Student Title, Week, Date, Time,
  Current Progress, Upcoming Progress
   FROM AddProgress() Class
   SEND Student_Name, Student_Title, Week, Date, Time,
  Current_Progress, Upcoming_Progress
   TO logbook table
END
ViewProgress()
BEGIN
   RETRIEVE Student_Name, Student_Title, Week, Date, Time,
  Current Progress, Upcoming Progress
  FROM logbook table
  WHERE Logbook ID = Logbook ID
   SEND Student Name, Student Title, Week, Date, Time,
  Current Progress, Upcoming Progress TO LogbookController FOR
  ViewProgress() class
END
EditProgress()
BEGIN
   UPDATE Student_Name, Student_Title, Week, Date, Time,
  Current_Progress, Upcoming_Progress
   FROM logbook table
   WHERE Logbook ID = Logbook ID
   SEND Student_Name, Student_Title, Week, Date, Time,
  Current_Progress, Upcoming_Progress TO LogbookController FOR
  EditProgress() class
END
```

```
AddComment()
BEGIN

GET Add_Comment
FROM AddComment() Class
SEND Add_Comment
TO logbook table
END

ApproveLogbook()
BEGIN
GET Status_Approval
FROM ApproveLogbook() class
SEND Status_Approval
TO logbook table
END
```

# 5. REQUIREMENT TRACEABILITY

### 5.1 Manage Lecturer Expertise [SRS-REQ-100]

Siti Nurasma' binti Hashim [CB19123]

Requirement ID	Description	Design ID
SRS-REQ-101	The system shall be able to allow the lecturer to add new lecturer expertise.	SDD-REQ-101
SRS-REQ-102	The system shall be able to allow the lecturer to view their expertise details.	SDD-REQ-101
SRS-REQ-103	The system shall be able to allow the lecturer to edit the existing expertise details.	SDD-REQ-101
SRS-REQ-104	The system shall be able to allow the student to view the lecturer expertise details.	SDD-REQ-102

### 5.2 Manage Profile [SRS-REQ-200]

Nur Ali Shahira binti Mohd Zaidi [CB19141]

Requirement ID	Description	Design ID
SRS-REQ-201	The system shall be able to display the lecturer profile	SDD-REQ-202
	'	
SRS-REQ-202	The system shall be able to display the student profile	SDD-REQ-201
SRS-REQ-203	The lecturer should be able to edit and add information to his/her profile.	SDD-REQ-202
SRS-REQ-204	The system must be able to display the list of students under lecturer supervision.	SDD-REQ-203

### 5.3 Manage Supervisor Hunting [SRS-REQ-300]

Muhammad Afif bin Ab Rahman [CB19007]

Requirement ID	Description	Design ID
SRS-REQ-301	The system shall allow the student to view available for supervisor	SDD-REQ-301
SRS-REQ-302	The system shall allow the student to view supervisor detailed information	SDD-REQ-302
SRS-REQ-303	The system shall allow the student to filter supervisor	SDD-REQ-301
SRS-REQ-304	The system shall allow the student to book the supervisor	SDD-REQ-301

### 5.4 Manage Title from Student and Lecturer [SRS-REQ-400]

Nabilah Ayuni binti Mohd Nasir [CB19125]

Requirement ID	Description	Design ID
SRS-REQ-401	The system shall allow the lecturer to add their title	SDD-REQ- 401
SRS-REQ-402	The system shall allow the lecturer to view, edit and delete their title information	SDD-REQ- 403
SRS-REQ-403	The system shall allow the lecturer to edit lecturer's title details.	SDD-REQ- 402
SRS-REQ-404	The system shall allow the student to view the title list.	SDD-REQ- 404

### 5.5 Manage Approval and Proposal Submission [SRS-REQ-500]

Muhammad Ilman Nashran bin Mohd Nasruddin [CB19014]

Requirement ID	Description	Design ID
SRS-REQ-501	The system shall allow the student to add and submit proposal submission.	SDD-REQ-501
SRS-REQ-502	The system shall allow the lecturer to view submitted proposals from students.	SRS-REQ-502
SRS-REQ-503	The system shall allow the lecturer to reject or accept submitted proposals from students.	SRS-REQ-502

### 5.6 Manage Logbook [SRS-REQ-600]

Nureen Nasuha binti Mohd Rosli [CB19124]

Requirement ID	Description	Design ID
SRS-REQ-601	The system shall allow the student to add new progress, view and edit the progress	SDD-REQ-601
SRS-REQ-602	The system shall allow the student to generate the logbook	SDD-REQ-602
SRS-REQ-603	The system shall allow the lecturer to view and add comments into the student under supervision progress	SDD-REQ-603
SRS-REQ-604	The system shall allow the lecturer to approve the student under supervision logbook progress	SDD-REQ-604