



**UNIVERSITI MALAYSIA SARAWAK**  
**Faculty of Computer Science and Information Technology**

## Assignment/Report Cover Sheet

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Subject Code: TMF2034 (G01)	Subject Name : Database Concept & Design
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Assignment Title: PROJECT	Lecturer: Dr Bong Chih How
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Due Date: 23/7/2020	Date Submitted: 23/7/2020
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This cover sheet must be completed, signed and firmly attached to the front of the submission. All work must be submitted by the due date. If an extension of work is granted, an assignment extension acknowledgement slip must be signed by the lecturer/tutor and attached to assignment. Please note that it is your responsibility to retain copies of your assignment.

**Plagiarism and Collusion are methods of cheating that falls under Peraturan Akademik Universiti Malaysia Sarawak para 11: Etika Akademik**

### Plagiarism

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**I also certify that I have taken proper care in safeguarding my work and have made all reasonable efforts to ensure that my work not be able to be copied.**

**MARK :**

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## Introduction

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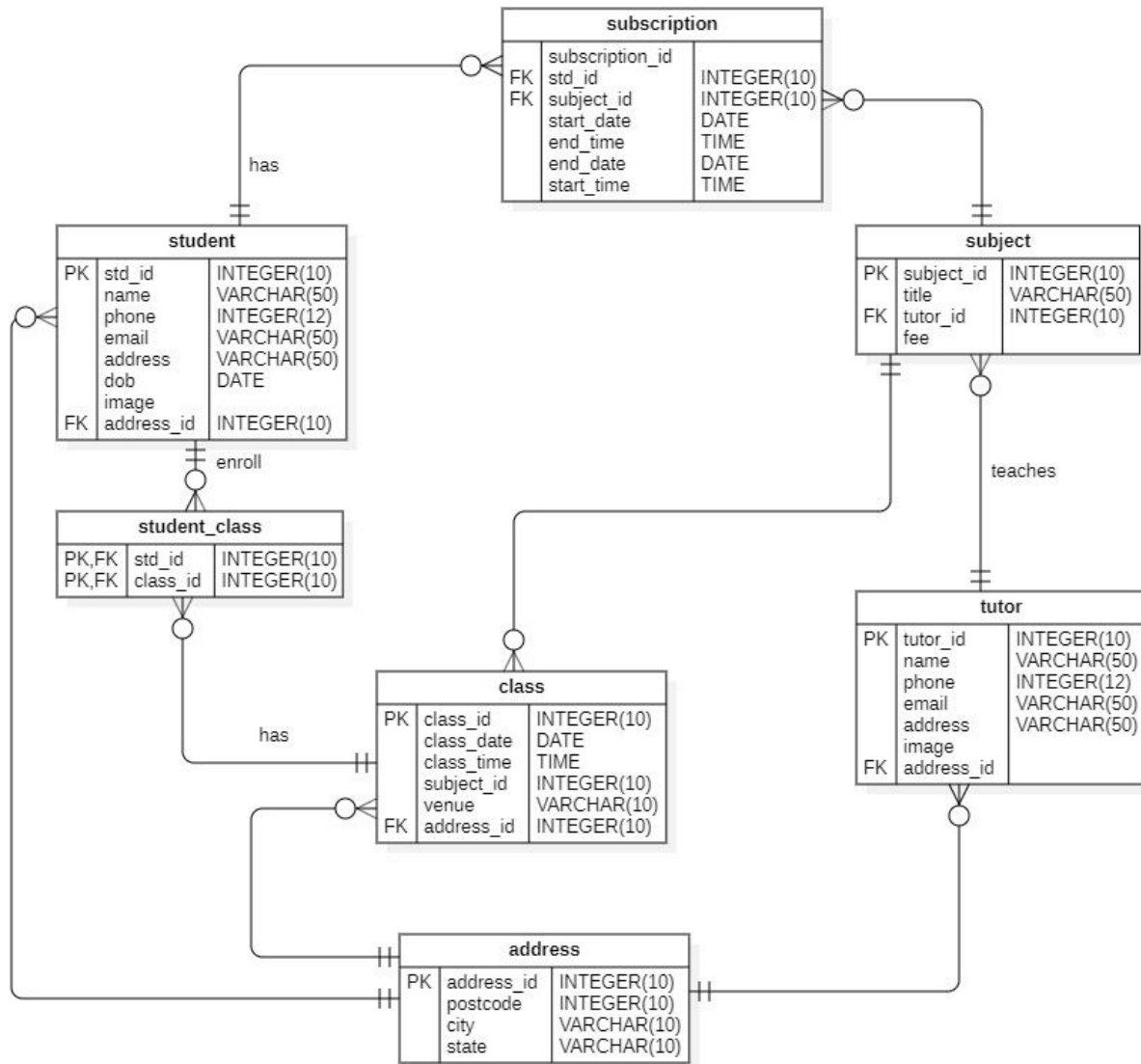
We have created a tuition center management system using Microsoft Access. The system has the main interface shown in the system screenshot section of this report on page 7.

Our system will store data of the student, tutor, subject, payment, and each class schedule. The database is fully created using the Microsoft Access software, our system will have a home page and a side menu to navigate through each table and manipulate data inside the entire database.

the ERD Diagram for our system is shown on page 3 which shows the relationships and our system database design.

In the end, on page 12, we show some reports generated from our system for user subscriptions and receipts for each student.

## ERD Diagram

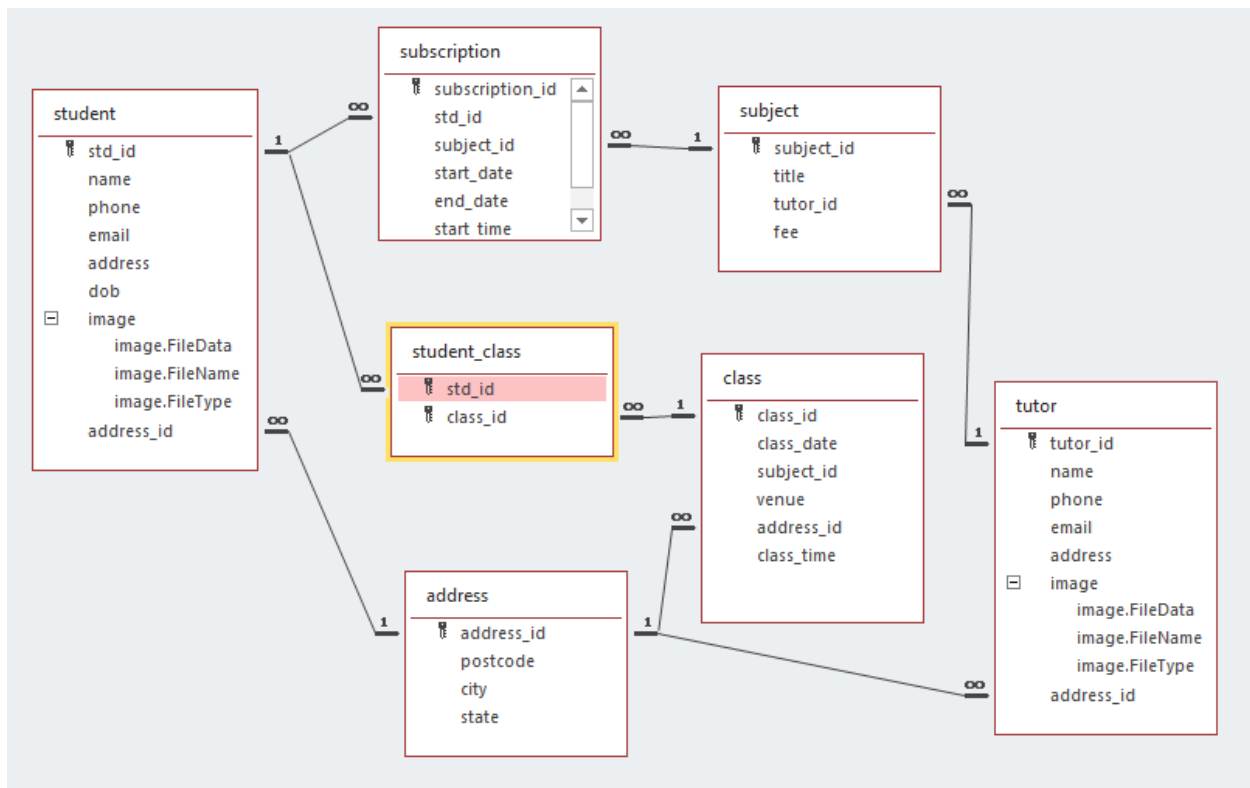


## Entities

Entities that included in this Tuition Centre Management System are: -

1. Subscription: belongs to a student and a subject
2. Student: has many subscriptions and many classes
3. Student\_class (Composite entity)
4. Subject: has many subscriptions, and being taught by one teacher
5. Tutor: teaches many subjects
6. Class: has many students
7. Address: belongs to many students, tutors, and classes

## Relationships



## Tables with data

address				
address_id	postcode	city	state	
1	94300	Samarahan	Sarawak	

class						
class_id	class_date	class_time	subject_id	venue	address_id	
7	1/8/2020	10:00:00 AM	1	TR 1	1	

student								
std_id	phone	name	email	address	dob	@	address_id	
2	1112131415	James Walker	jw@gmail.com	avenu 1	10/12/1995	@(1)	1	

student_class	
std_id	class_id
2	9

subject			
subject_id	title	tutor_id	fee
1	DATABASE	1	RM10.20

subscription						
subscription_id	start_date	end_date	start_time	end_time	std_id	
1	1/8/2020	30/9/2020	12:00:00 AM	11:59:00 PM	2	

tutor							
tutor_id	name	phone	email	address	@	address_id	
1	Diego Roel	601455560	em11dr@gmai	avenu 33	@(1)	8	

## System Screenshot

HOME
add/edit students
add/edit tutors
add/edit subjects
add/edit classes
add/edit addresses
enroll student in a class
add student subscription
student list
subject list
class list
subscriptions list



## Welcome To Our tuition Management System

Select option from the left menu

When user open the system this home page will show

HOME
add/edit students
add/edit tutors
add/edit subjects
add/edit classes
add/edit addresses
enroll student in a class
add student subscription
student list
subject list
class list
subscriptions list



## student form

name	<input type="text" value="James Walker"/>
phone	<input type="text" value="1112131415"/>
email	<input type="text" value="jw@gmail.com"/>
street address	<input type="text" value="avenu 1"/>
date of birth	<input type="text" value="10/12/1995"/>
upload image	<input type="text" value=""/>
select address id	<input type="text" value="94300"/>

This page used to add, update or delete students in the database

Add Student	Update Student	Delete Student
◀	▶	CANCEL

HOME

add/edit students

add/edit tutors

add/edit subjects

add/edit classes

add/edit addresses

enroll student in a class

add student subscription

student list

subject list

class list

subscriptions list

tutor form

name

Diego Roel

phone

601455560


email

em11dr@gmail.com

street address

avenu 33

upload image



select address id

63000

Add Tutor

Update Tutor

Delete Tutor

◀

▶

CANCEL

This page used to add, update, or delete tutors in the database

HOME

add/edit students

add/edit tutors

add/edit subjects

add/edit classes

add/edit addresses

enroll student in a class

add student subscription

student list

subject list

class list

subscriptions list

subject

title

DATABASE

select tutor

1

fee

RM10.20

Add Subject

Update Subject

Delete Subject

◀

▶

CANCEL

This page used to add, update, or delete subjects in the database



HOME  
add/edit students  
add/edit tutors  
add/edit subjects  
add/edit classes  
add/edit addresses  
enroll student in a class  
add student subscription  
student list  
subject list  
class list  
subscriptions list

class form

class date   
class time (24:00)   
select subject   
type venue details   
select address id

Add Class Update Class Delete Class  
< > CANCEL

This page used to add, update, or delete classes in the database

HOME  
add/edit students  
add/edit tutors  
add/edit subjects  
add/edit classes  
add/edit addresses  
enroll student in a class  
add student subscription  
student list  
subject list  
class list  
subscriptions list

address

postcode   
city   
state

Add Address Update Address Delete Address  
< > CANCEL

This page used to add, update, or delete addresses in the database

HOME  
add/edit students  
add/edit tutors  
add/edit subjects  
add/edit classes  
add/edit addresses  
enroll student in a class  
add student subscription  
student list  
subject list

enroll a student in a class

select student   
select class

Add enroll Update enroll Delete enroll  
< > CANCEL

This page used to add, update, or delete student enrolment in a class, max student per class is 15

HOME  
add/edit students  
add/edit tutors  
add/edit subjects  
add/edit classes  
add/edit addresses  
enroll student in a class  
add student subscription  
student list  
subject list  
class list  
subscriptions list

subscription

select student id   
select subject   
start date   
end date   
start time (24:00)   
end time (24:00)

Add Update Delete

CANCEL

This page used to add, update, or delete student subscription

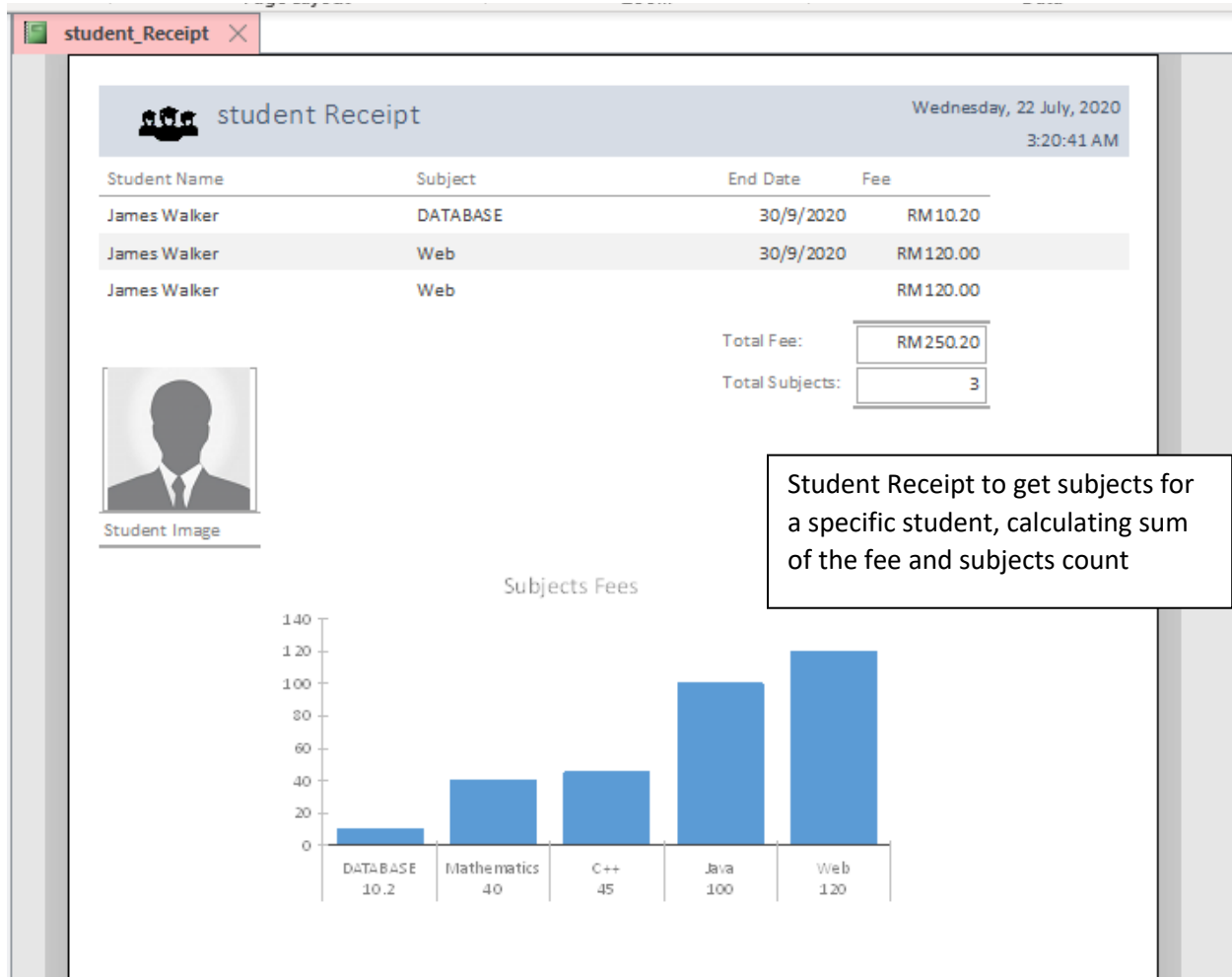
HOME  
add/edit students  
add/edit tutors  
add/edit subjects  
add/edit classes  
add/edit addresses  
enroll student in a class  
add student subscription  
student list  
subject list  
class list  
subscriptions list

student Query


std_id	name	phone	email	address	dob	@	postco
2	James Walker	1112131415	jw@gmail.com	avenu 1	10/12/1995	0(1)	
16	Rina Slater	601555578	rs@gmail.com	avenu 45	13/8/1999	0(1)	
3	Velma Clemor	1213141516	vc@gmail.com	avenu 2	15/7/1993	0(1)	
5	Phyllis Paul	601455530	pp@gmail.com	kuching	17/9/1998	0(1)	
20	Ann Devon	601256640	ad@gmail.com	avenu 34	17/9/1993	0(1)	
6	Zenaida Decke	601255542	zd@gmail.com	miri	9/7/1990	0(1)	
9	Solomon Ray	601655591	sr@gmail.com	avenu 40	17/9/994	0(1)	
13	Maria Anders	601955530	ma@gmail.cor	avenu 33	3/9/1990	0(1)	
10	John Marshall	601555598	jm@gmail.com	avenu 11	11/9/1996	0(1)	
15	Ana Trujillo	601655557	at@gmail.com	avenu 99	13/10/2000	0(1)	
21	Aria Cruz		ac@gmail.com	avenu 1	10/7/2000	0(1)	
14	Griffin Mcleod	601855574	gm@gmail.cor	avenu 80	12/8/1997	0(1)	
17	Thomas Hardy	601555551	th@gmail.com	avenu 67	13/5/1993	0(1)	
8	Constance B...	601355577	ch@gmail.com	avenu 15	18/9/1980	0(1)	

Green menu items for listing students, subjects, classes, and subscriptions inside database combining multiple tables to show related data together

## Reports



subscriptions\_report X


**subscriptions**
Wednesday, 22 July, 2020  
3:24:13 AM

Student Name	Subject	End Date	Fee
James Walker	DATABASE	30/9/2020	RM10.20
Velma Clemons	DATABASE	30/9/2020	RM10.20
Kibo Underwood	DATABASE	30/9/2020	RM10.20
James Walker	Web	30/9/2020	RM120.00

Subscriptions report to list all subscription in the database and calculating sum of all subscription and number of subscriptions

subscriptions_report			
Student Name	Subject	End Date	Fee
Solomon Ray	Web	30/9/2020	RM120.00
John Marshall	Web	30/9/2020	RM120.00
Maria Anders	DATABASE	30/9/2020	RM10.20
James Walker	Web		RM120.00
TOTAL Fees:			RM2,277.00
TOTAL Subscriptions:			35

## Queries

```

1 SELECT *
2 FROM class
3 WHERE class_id IN (
4 SELECT class_id
5 FROM student_class
6 GROUP BY class_id
7 HAVING COUNT(*) <= 15
8 )
9 OR class_id NOT IN (
10 SELECT class_id
11 FROM student_class
12 );
13

```

max\_class\_student:

to only show classes in enrol menu if the class has less than 15 students registered in this class or the class has not any students registered

```

1 SELECT student.[image], student.[name] AS [Student NAME],
2 subject.[title] AS Subject, subscription.[end_date] AS [End DATE],
3 subject.[fee] AS Fee
4 FROM (subscription
5 INNER JOIN student ON subscription.[std_id] = student.[std_id])
6 INNER JOIN subject ON subscription.[subject_id] = subject.[subject_id]
7 WHERE student.[std_id] = [Enter Student ID];
8

```

Student\_subscription:

to get student receipt and displaying his image, subjects he subscribed to and end date of subscription and fee per each subject

```
1 SELECT class.[class_id], class.[class_date], class.[class_time],
2 class.[venue], subject.[title] AS [subject Title]
3 FROM class INNER JOIN subject ON class.[subject_id] = subject.[subject_id];
4
5 SELECT student.[std_id], student.[name], student.[phone],
6 student.[email], student.[address], student.[dob], student.[image],
7 address.[postcode], address.[city], address.[state]
8 FROM student INNER JOIN address ON student.[address_id] = address.[address_id];
9
10 SELECT subject.[subject_id], subject.[title], subject.[fee],
11 tutor.[name] AS [Tutor Nmae], tutor.[phone] AS [Tutor Phone],
12 tutor.[email] AS [Tutor Email], address.[city] AS [Tutor City],
13 address.[state] AS [Tutor State]
14 FROM (subject INNER JOIN tutor ON subject.[tutor_id] = tutor.[tutor_id])
15 INNER JOIN address ON tutor.[address_id] = address.[address_id];
16
17 SELECT student.[name] AS [Student Name], subject.[title] AS Subject,
18 subscription.[end_date] AS [End Date], subject.[fee] AS Fee
19 FROM (subscription INNER JOIN student ON subscription.[std_id] = student.[std_id])
20 INNER JOIN subject ON subscription.[subject_id] = subject.[subject_id]
21 ORDER BY student.[name];
22
```

class\_list\_query: display class schedules list

student\_list\_query: display students list

subject\_list\_query: display subjects list

subscriptions\_query: display subscriptions list

Thank you...