CMT321
Management & Engineering of Databases

1

Total : 115 Students CMT321
(23 GROUPS OF 5 STUDENTS)
3 NOVEMBER 2023 (FRIDAY)

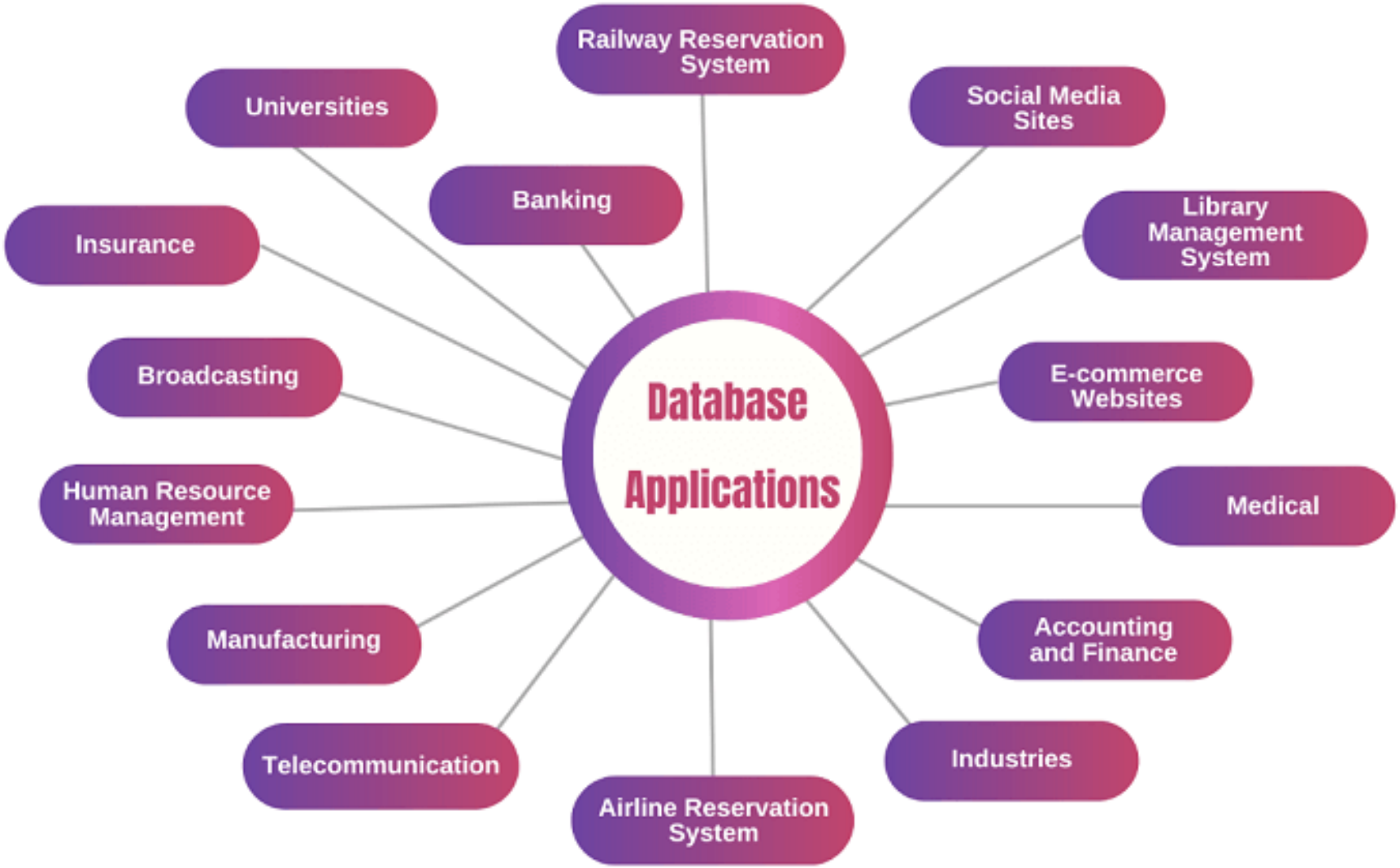
CMT 321

	NO	GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5
DATABASE AND TRANSACTION						
* GROUP LEADER	1 *	NUR DZAFIRAH BINTI MD FAUZI	MUHAMMAD HASIF BIN MOHD HANIF	SYAZA SUFIA BINTI ROSELAN	THEYVIISHAA A/P GHANA SAMBANTHAM	CHUAH MEI WAI
	2	SITI NUR FARZANA BINTI AWANG @ MOHD AKMAL HELMIE	CHUSNUL MARIYAH BINTI MUHAMAD	NURUL IZZAH BINTI MOHD ZAMLI	PAVITRA GANESON	BEH JIAN YONG
	3	MUHAMMAD IRFAN BIN ZAINAL	MUHAMMAD ALIF BIN MASDAR	NUR ANIS UMAIRAH BINTI NOR AZMI	SANTOSH K.CUMARESVARAN	CHAN YEE TING
	4	MOHAMMAD NAJMI FARHAN BIN SHAHARMAINI	LI CHENXI	KEE JIUNN MING	LOGEN NAIDU A/L SURESH	NG WAI LING
	5	AZRI ZAMRUD BIN KIMIN	MAYRATDAA A/P EH SING	ANISHA SYAZWANA BINTI ROSLY	Li Run Ze	YOHAN LAU SOON HONG
	NO	GROUP 6	GROUP 7	GROUP 8	GROUP 9	GROUP 10
DATABASE AND TRANSACTION						
* GROUP LEADER	1 *	OOI PEI YIN	ANGEL ANG	NG WEN PING	KUGANRAJ A/L SELVARAJ	THEN TAI YU
	2	LEE YING HOOI	CHING JIA YING	LAM QIAN HUI	MUHAMMAD HAZIQ BIN MOHAMAD WAHID	DANISH IRFAN BIN MOHAMAD SHAMIRUDIN
	3	LOOI WEI EN	GWEE PER MING	GO ENG KHEE	NUR IKMAL HAKIM BIN KHALID	DICKSON TAN DI SHENG
	4	WONG JIA YI	LIM CHIN FENG	OOI KOK JUN	HANA SHAH BINTI FAIZAL SHAH	DHARSHAAN A/L BALASUBRAMANIAM
	5	TAN KIAN HON	YEONG YEN TING	YEE WEI EN	INTAN NUR SAIDATUL AQILAH BINTI MOHD FADDIL	YEO YING SHENG
	NO	GROUP 11	GROUP 12	GROUP 13	GROUP 14	GROUP 15
DATABASE AND TRANSACTION						
* GROUP LEADER	1 *	NUR ZULAIKHA BINTI MOHD ZAKI	KAVINDHREN A/L VISVANATHAN	THEINMOLIIE A/P R JAYARAJU	MUHAMMAD ILHAM MULHIM BIN ABD RAHMAN	NOR AWATIF BINTI BAKHARI
	2	MUHAMAD SHAFWAN NADZMEE BIN MOHD ZAKIYUDDIN	GAOTIANJUN	NORATIKA CHUNG CHE WEI	MUHAMMAD AL HAKIM BIN ANUAR	NUR ANIESYA ATHIQAH BINTI KAMARUZAMAN
	3	MOHAMAD IRFAN BIN TAHIR	AHMAD ARIF HAZIQ BIN MUHAMMAD ZAHIR	CHOO WEI MIN	MOHAMAD ZIQREEY BIN RAHMAT	NURSYAMIMI BINTI MUHAMAD ROSLEE
	4	SYAFIE NAZMI SIDDIQ BIN SAINAL ABIDIN	MUHAMMAD AMAR BIN AZIZ	KOVARTHINI A/P MOHAN	NUR ANIS ASYIKIN BINTI RAHIMI	NUR FATIHAH BINTI AZIZI
	5	MUHAMMAD AMIR JAD BIN MOHD JAPRI	UMAR ABDUL AZIZ BIN FEISAL	THANEES A/L SEHKAR	ANIS FARIHAH BINTI MOHD FUAD	NUR AININ SOFIYA BINTI MOHD HARIRI
	NO	GROUP 16	GROUP 17	GROUP 18	GROUP 19	GROUP 20
DATABASE AND TRANSACTION						
* GROUP LEADER	1 *	KAMALDEEN YUSUFF	LAU YEE XUAN	MUHAMMAD IZZAT BIN HABIB	TAN KAI XIN	ARIZ MUFLIH MUTTAQI
	2	ANANT DUBEY	TAN WEI XIANG	MUHAMMAD FIRDAUS BIN JAMLUDIN	YEO KIAT MING	RIZKI HELMI
	3	GAO SHENG JIE	DEW KHAI YEK	NOR AFIZAL BIN NOR AZARI	ZHANG, YICHI	ALOYSIUS DUSTIN DEALSON
	4	RAMAN ADIL ABDALLA	TAN XIN YEE	MUHAMMAD RUSYDI BIN RASIN	LEOW HUI XIN	ALEXANDER JUSTIN DEALSON
	5	LI YANG	ENG JIA YING	MUHAMMAD AIMAN MUSTAQIM BIN MOHD ZAWAWI	JONATHAN LAU YIXUAN	NAFIS ASLAM
	NO	GROUP 21	GROUP 22	GROUP 23	GROUP 24	GROUP 25
DATABASE AND TRANSACTION						
* GROUP LEADER	1 *	TUAN AMSYAR HAZIM BIN TUAN MOHAMAD	Mohammad Nor Aziq Bin Mohamed Ayub	Yang Shuxian		
	2	MUHAMMAD HAIQAL BIN RAFIQUZZAMAN	Ma, Shuai	Tang ZiHeng		
	3	MUHAMAD HAZIM BIN AZMAN	Kaveen A/L Ellangopan	Huang GuanBin		
	4	MUHAMMAD KHAWARIZMI BIN JEFRI	Lyu Haoxuan	Wang ZeYu		
	5	MUHAMMAD SAFFUAN BIN MOHAMMAD SAFFERY	Yegheshwaran Sangara Nanda	Li AnJun		

1 WORD

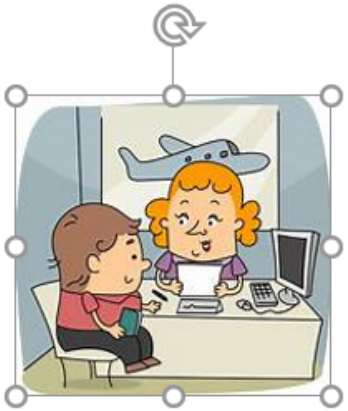
Systematic Operational System

DATABASE APPLICATION → DATABASE TRANSACTIONS



Examples of Database Transaction

- Purchases from the supermarket
- Purchases using your credit card
- Booking a holiday either online or at the travel agents
- Using the local library
- Taking out insurance
- Using the Internet/social media
- Studying at university



E-LEARN SUBMISSION ASSIGNMENT 1

4 December - 10 December

WEEK 8

Assignment 1 Submission Dateline

Group Leader upload in this format:

Example: Assign1 Group 1.

The ONLY file format accepted is .pdf ONLY.

Date: 4th of December **2023 (Monday)**

Time: 10.00 **a.m.**

Format: 1 PDF FILE ONLY (Upload - Max 4GB)

The Group Leader will Upload Assignment 1

*No extensions will be given for this assignment.

*Failure to do so will result in you getting 0 (no marks) for this assessment.

THANK YOU

FORMAT ASSIGNMENT 1

TOPIC : Choose 1 from the Example of database Transaction Given

PART 1: Study the present database transactions.

PART 2: The idea of PART 1 is investigating the Processing Technology to operate DBMS.

1. Preventing denial-of-service attacks (DoS) on database systems. Databases are a vulnerable point in many Web sites, because it is often possible for attackers to make some simple request that causes the Web site to issue queries asking the database to do a lot of work. By issuing many such requests, and attacker can effectively issue a denial-of-service attack against the Web site by disabling the database.
2. The goal of this topic would be to **study existing of techniques** to counter this problem — for example, one approach might be to modify the database scheduler so that it doesn't run the same expensive queries over and over.

MAXIMUM LENGTH : 15 PAGES ONLY

FONT : TIMES NEW ROMAN (10 -12 pt Font)

MARGIN : 1.5 inch

LINE SPACING : 1. 5 ONLY

INSTRUCTIONS

Report:

Your report should introduce (introduction) and motivate the problem/issues/challenges of the topic, describe related works in the topic, and compare with other system

Example: FLIGHT RESERVATION SYSTEM

PART 1: Study the present database transactions.

PART 2: The idea of PART 1 is investigating the Processing Technology to operate DBMS.

- **Part 1**: Make comparison with similar scenario or environment (Theatre Reservation System)
- **Part 2**: compare the techniques used to prevent DoS in database and then you could also explain techniques in preventing DoS in cloud database or premise database and etc.
- Conclusion/Summary for each topic: explain the how each topic helps you to understand better DBMS
- References (APA Formatting and Citation (7th Ed.)
- Similarity less than 25% (Provide the Proof)

ASSIGNMENT SYNOPSIS
WHAT TO ACHIEVE IN THIS DBMS ASSIGNMENT

- Concepts
- Techniques and protocols related to transaction
- Concurrency control
- Recovery
- Security of databases
- Characteristics components
- Students also will investigate issues and latest development in database applications and technologies.

RUBRIC MARKS

NO	ASSIGNMENT	RUBRIC MARKS
1	Select A Database	2
2	Select A Transaction (No. 1)	3
3	Select A Similar Transaction (No. 2)	5
4	Make A Comparison on Transactions (No. 2 and 3)	10
5	Study the present Problems (No. 2 and 3)	10
6	Study the technique to address the problems (No.5)	25
7	**FOR (NO 1 – 6) AS ABOVE:** Focusing on **Technical aspects of DBMS on Processing Technology** which you have learned in class discuss and justify on: ❑ Transaction Management and the Architecture ❑ Concurrency Control of the Transaction ❑ Database Recovery Methods ❑ Database Security The Processing Technology to operate DBMS >The parallel or distributed approach and architecture >The Query selection, Query Processing and Optimization >The Software and Hardware >The scheduler for concurrency transaction >Serializability >Locking method >Deadlock >And others UNTIL **SECURITY**	30
8	Propose a solution to overcome the problem	15
	TOTAL MARKS	**100 MARKS (15%)**

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THANK YOU