

Database Systems Development

M30232

CW2

Group 19

UP2206270, UP2118085, UP2160428

Contribution Description

UP NUMBER	Description (if not equally counted)	Signature
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Data Dictionary

students					
<i>Attribute_Name</i>	<i>KEY</i>	<i>Data Type & Size</i>	<i>Domains & Constraints</i>	<i>FK Reference</i>	<i>Description</i>
stut_id	PK	SERIAL			
course_id	FK	INT	NOT NULL	courses.course_id	
stu_first_name		VARCHAR(50)	NOT NULL		
stu_last_name		VARCHAR(50)	NOT NULL		
stut_email		VARCHAR(150)	NOT NULL		
stu_phone_number		VARCHAR(15)	NOT NULL		
stu_country		VARCHAR(60)	NOT NULL		
stu_addr1		VARCHAR(50)	NOT NULL		
stu_addr2		VARCHAR(50)			
stu_ciity		VARCHAR(80)	NOT NULL		
stu_postcode		CHAR(8)	NOT NULL		
stu_enroll_date		DATE	NOT NULL		

courses					
<i>Attribute_Name</i>	<i>KEY</i>	<i>Data Type & Size</i>	<i>Domains & Constraints</i>	<i>FK Reference</i>	<i>Description</i>
course_id	PK	SERIAL			
departments_id	FK	INT	NOT NULL	departments.dept_id	
course_name		VARCHAR(50)	NOT NULL		
academic_level		ENUM			Data allowed: Level 4, Level 5, Level 6 and Level 7

module_course					
<i>Attribute_Name</i>	<i>KEY</i>	<i>Data Type & Size</i>	<i>Domains & Constraints</i>	<i>FK Reference</i>	<i>Description</i>
module_id	PK/FK	INT	NOT NULL	modules.module_id	
course_id	PK/FK	INT	NOT NULL	courses.course_id	

modules					
<i>Attribute_Name</i>	<i>KEY</i>	<i>Data Type & Size</i>	<i>Domains & Constraints</i>	<i>FK Reference</i>	<i>Description</i>
module_id	PK	SERIAL			
module_name		VARCHAR(50)	NOT NULL		

modules_grades					
<i>Attribute_Name</i>	<i>KEY</i>	<i>Data Type & Size</i>	<i>Domains & Constraints</i>	<i>FK Reference</i>	<i>Description</i>
module_id	PK/FK	INT	NOT NULL	modules.module_id	
stu_id	PK/FK	INT	NOT NULL	students.stu_id	
cw_id	PK	INT	NOT NULL		
grade		DECIMAL(5,2)			

departments					
<i>Attribute_Name</i>	<i>KEY</i>	<i>Data Type & Size</i>	<i>Domains & Constraints</i>	<i>FK Reference</i>	<i>Description</i>
departments_id	PK	SERIAL			
dept_name		VARCHAR(50)	NOT NULL		
dept_type		ENUM	NOT NULL		
dept_addr1		VARCHAR(50)	NOT NULL		
dept_addr2		VARCHAR(50)			
dept_building		VARCHAR(60)	NOT NULL		
dept_postcode		CHAR(8)	NOT NULL		

Staff_member					
<i>Attribute_Name</i>	<i>KEY</i>	<i>Data Type & Size</i>	<i>Domains & Constraints</i>	<i>FK Reference</i>	<i>Description</i>
staff_id	PK	SERIAL			
departments_id	FK	INT	NOT NULL	departments.dept_id	
staff_first_name		VARCHAR(50)	NOT NULL		
staff_last_name		VARCHAR(50)	NOT NULL		
staff_email		VARCHAR(150)	NOT NULL		
staff_phone_number		VARCHAR(15)	NOT NULL		

Staff_roles					
<i>Attribute_Name</i>	<i>KEY</i>	<i>Data Type & Size</i>	<i>Domains & Constraints</i>	<i>FK Reference</i>	<i>Description</i>
role_id	PK\FK	INT	NOT NULL	roles.role_id	
staff_id	PK\FK	INT	NOT NULL	staff_member.staff_id	

roles					
<i>Attribute_Name</i>	<i>KEY</i>	<i>Data Type & Size</i>	<i>Domains & Constraints</i>	<i>FK Reference</i>	<i>Description</i>
role_id	PK	SERIAL			
role_name		VARCHAR(50)	NOT NULL		

teachers_session					
<i>Attribute_Name</i>	<i>KEY</i>	<i>Data Type & Size</i>	<i>Domains & Constraints</i>	<i>FK Reference</i>	<i>Description</i>
staff_id	PK\FK	INT	NOT NULL	staff_member.staff_id	
session_id	PK\FK	INT	NOT NULL	sessions.session_id	

sessions					
<i>Attribute_Name</i>	<i>KEY</i>	<i>Data Type & Size</i>	<i>Domains & Constraints</i>	<i>FK Reference</i>	<i>Description</i>
session_id	PK	SERIAL			
module_id	FK	INT	NOT NULL	modules.module_id	
sesssion_date		DATE	NOT NULL		
session_time		TIME	NOT NULL		
session_addr1		VARCHAR(50)	NOT NULL		
session_addr2		VARCHAR(50)			

session_building		VARCHAR(50)	NOT NULL		
session_postcode		CHAR(8)	NOT NULL		

Attendances					
<i>Attribute_Name</i>	<i>KEY</i>	<i>Data Type & Size</i>	<i>Domains & Constraints</i>	<i>FK Reference</i>	<i>Description</i>
stut_id	PK\FK	INT	NOT NULL	students.stu_id	
session_id	PK\FK	INT	NOT NULL	sessions.session_id	
attendance		BOOLEAN	NOT NULL		

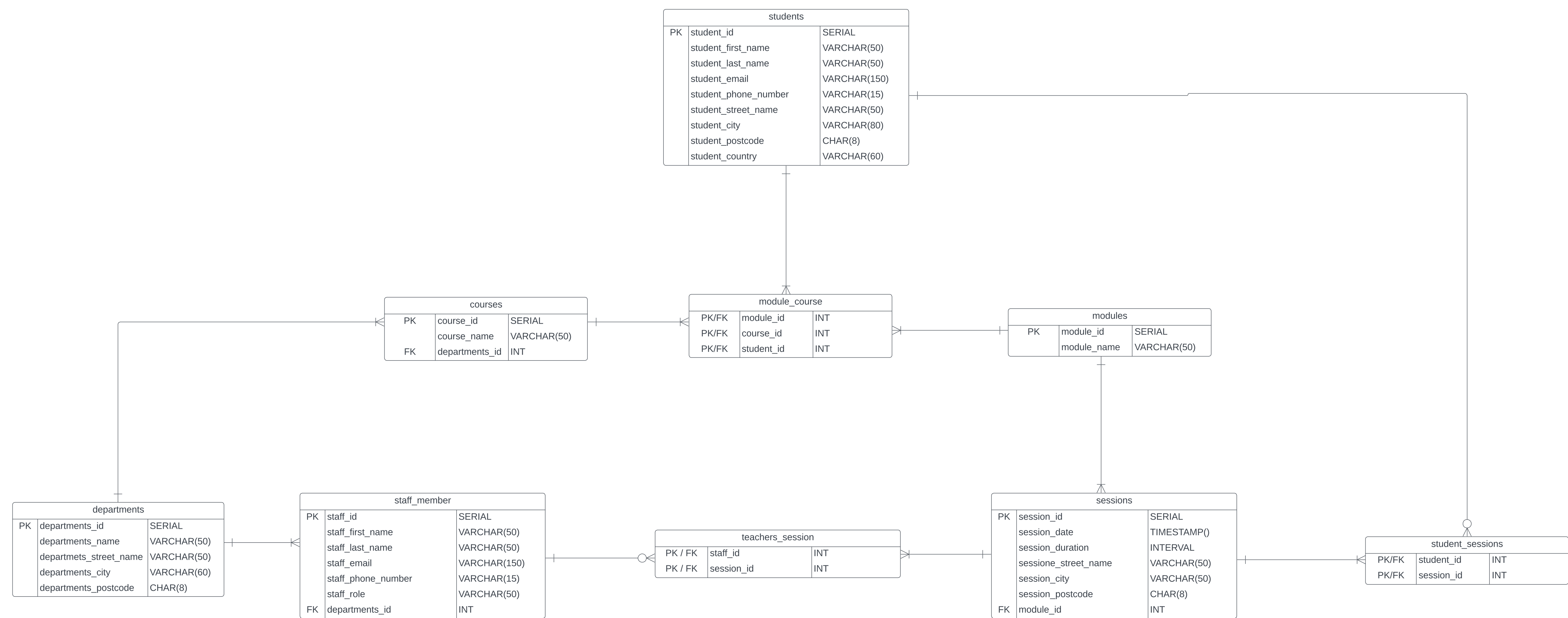
Assumptions

Tables	Assumption
Departments	<p>The department table consists of all the staff members in the department with the data peculiar to them.</p> <p>The departments have enum data type because we only want to allow the users to select from the options we have provided</p>
Staff Member	A staff member can have one or multiple roles at the same time. For example, a staff member can be a head teacher and a programming teacher at the same time.
Courses	<p>A course can have one or multiple students. For example, programming can be taken by just one and multiple students.</p> <p>The courses have enum data type because we only want to allow the users to select from the options we have provided</p>
Sessions	TIME is used because we only wanted to

Group 19

	<p>store the time of the day the session will take place.</p> <p>Multiple students can have multiple sessions thus we use an intersection table to make that possible.</p>
Student/Teacher session	Students and teachers don't always have a session.

Previous ERD from CourseWork 1



ERD of CourseWork 2

