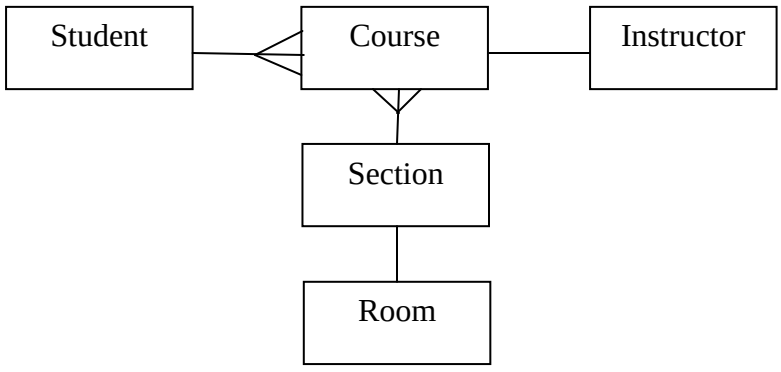
Mihai Dan
Textbook 11th Edition
Assignment #1

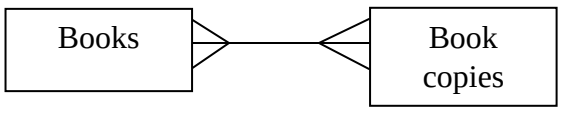
Question 2:

Data	c. facts, text, graphics, images, etc.
Database Application	b. application program(s)
Constraint	l. a rule that cannot be violated by database users
Repository	g. centralized storehouse for all data definitions
Metadata	h. separation of data description from programs
Data warehouse	m. integrated decision support database
Information	a. data placed in context or summarized
User view	j. logical description of portion of database
Database Management system	n. consist of the enterprise data model and multiple user views
Data independence	d. a graphical model that shows the high-level entities for the organization and the relation- ships among those entities
Database	e. organized collection of related data
Enterprise resource planning	i. a business management system that integrates all functions of the enterprise
Systems development life cycle	k. a software application that is used to create, maintain, and provide controlled access to user databases
Prototyping	o. a rapid approach to systems development
Enterprise data model	q. a comprehensive description of business data
Conceptual schema	r. a structured, step-by-step approach to systems development
Internal schema	p. consists of two data models: a logical model and a physical model
External schema	f. includes data definitions and constraints

Problem 1:

a. Student and course
-One to many.
b Books to copies
-Many to many.
c. Course to section
-Many to one.
d. Section to room
-Many to many.
e. Instructor to course
-One to many.





Problem 8:
a. Pet to store
-One to many.
b. Customer and pet
-One to many.
c. Customer and store
-There should not be a relationship here.

Problem 11:
Shipping company, distributing company, and billing company in order to have a product to sell.

Problem 20:
a. It has a defined size maximum of 40.
b. Represented by a (40), which creates a maximum size so the user cannot exceed that size.
c. That is an error check for unsupported data, such as using \ instead of a number.

Problem 21:
a. SalesToDate = (ProductPrice * OrderQuantity)
b. They would need to go beyond the one product ID for the home office product line and run all of them.

Problem 22:
a. Customer ID, order, invoice, payment, order, product, product line
b. Retrieve the name of the customer, then proceed to the fulfilled orders, then to invoice. After that, look up the invoice date and follow for that year alone. Go to payment and search for the amount. Finally, sort by the amount paid and make a list.

StudentInformation.php:

```
<!DOCTYPE html>
<html>
	<body>
		<form action="Confirm.php" method="post">
			Student ID:
				<input type="number" name="id" maxlength="9"><br>
			First Name:
				<input type="text" name="first" maxlength="20">
			Last name:
				<input type="text" name="last" maxlength="20"><br>
			Email:
				<input type="email" name="email" maxlength="40"><br>
			Age:
				<input type="number" name="old" maxlength="2"><br>
			Gender:
				<input type = "radio" name="gender" value="Male"/>Male
				<input type = "radio" name="gender" value="Female"/>Female<br>
			<th colespan=2><input type="submit" name="submit" value="submit"></th><br>
			<a href="http://web.engr.oregonstate.edu/~danm/StudentInformation">Home</a>
			<a href="http://web.engr.oregonstate.edu/~danm/ListOfStudents">List</a>
		</form>
	</body>
</html>
```

ListOfStudents.php:

```
<?php
$dbhost = 'oniddb.cws.oregonstate.edu';
$dbname = 'danm-db';
$dbuser = 'danm-db';
$dbpass = 'vw55X7H8FT2z3VTy';
$con = mysqli_connect($dbhost, $dbuser, $dbpass, $dbname)
   or die("Error connecting. ");
	echo 'You have successfully connected! ';


	$temp = 'SELECT * FROM StudentInfo';
	$result = mysqli_query($con, $temp);
		echo "<strong>Here is a list of all the students!</strong><br>";
		echo "<br>";
		while($row = mysqli_fetch_array($result)){
			echo "<strong>Student ID:</strong><br>";
			echo $row['StudentID'];
			echo "<br><strong>Student name:</strong> <br>";
			echo $row['first'] . ' ' . $row['last'];
			echo "<br><strong>Student age:</strong> <br>";
			echo $row['age'];
			echo "<br><strong>Student email: </strong><br>";
			echo $row['email'];
			echo "<br><strong>Student gender:</strong> <br>";
			echo $row['sex'];
			echo "<br> <br>";
		}
	mysqli_close($con);
?>
<html>
	<a href = "http://web.engr.oregonstate.edu/~danm/StudentInformation">Home</a>
	<a href="http://web.engr.oregonstate.edu/~danm/ListOfStudents">List</a>
</html>
```

Confirm.php:

```
<?php
$dbhost = 'oniddb.cws.oregonstate.edu';
$dbname = 'danm-db';
$dbuser = 'danm-db';
$dbpass = 'vw55X7H8FT2z3VTy';
$con = mysqli_connect($dbhost, $dbuser, $dbpass, $dbname)
   or die("Error: connection not successful. ");
        echo 'You have successfully connected! ';

        $id = $_POST['id'];
        $first = $_POST['first'];
        $last = $_POST['last'];
        $email = $_POST['email'];
        $age = $_POST['old'];
        $gender = $_POST['gender'];

        $insert = "INSERT INTO StudentInfo(StudentID, first, last, email, age, sex)
                VALUES ('$id','$first','$last', '$email', '$age', '$gender')";

        $query = mysqli_query($con, $insert);
   if(! $query)
        {
                die(' could not enter data: ' .mysql_error());
        }
        echo '<br> Your data has been submitted to the database! ';

        echo 'Thank you ' . $first . ' ' . $last .' for submitting your form! <br>';
?>
<html>
        <body align="center">
                        <a href = "http://web.engr.oregonstate.edu/~danm/StudentInformation">Home</a>
                        <a href="http://web.engr.oregonstate.edu/~danm/ListOfStudents">List</a>
        </body>
</html>
```

My website:
http://web.engr.oregonstate.edu/~danm/StudentInformation.php

MySQL Database: