Cardiff Met Graduate Software Developer application

**Database:**

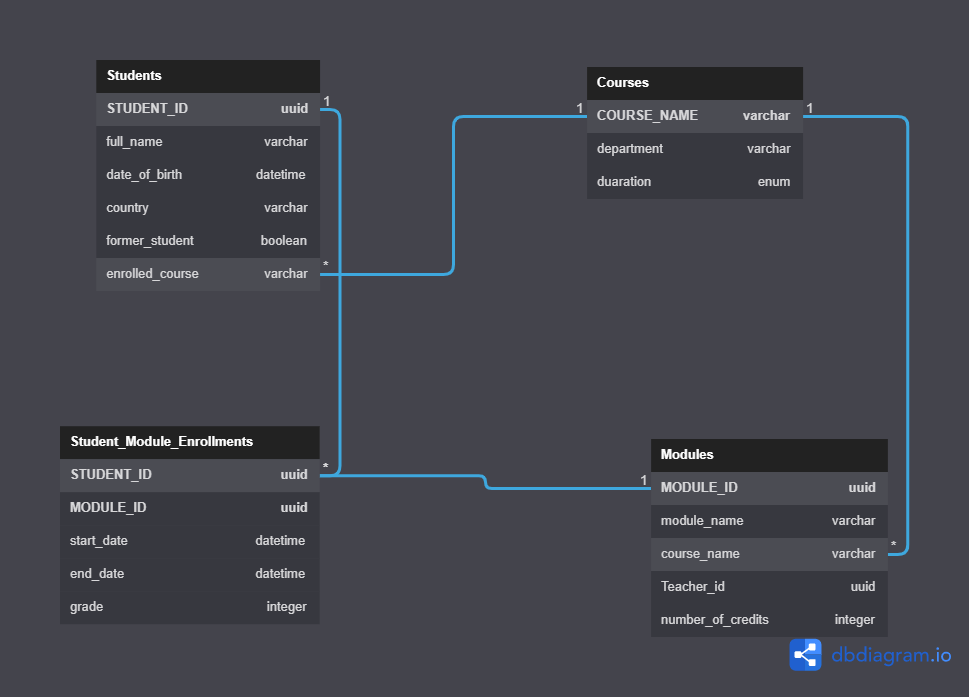
Assumptions:

1-course names are unique.

2-a module can be in more than one course; it will have the same name but it will have a different module\_id for each course it belongs to.

3-No need to view a student’s older courses if he is a former student (only need to store his current enrolled course)

ERD:



MYSQL code:

CREATE TABLE `Students` (

`STUDENT\_ID` BINARY(16) PRIMARY KEY,

`full\_name` varchar(255),

`date\_of\_birth` datetime,

`country` varchar(255),

`former\_student` boolean,

`enrolled\_course` varchar(255)

);

CREATE TABLE `Courses` (

`COURSE\_NAME` varchar(255) PRIMARY KEY,

`department` varchar(255),

`duaration` enum('3','4','5')

);

CREATE TABLE `Modules` (

`MODULE\_ID` BINARY(16) PRIMARY KEY,

`module\_name` varchar(255),

`course\_name` varchar(255),

`Teacher\_id` BINARY(16),

`number\_of\_credits` integer

);

CREATE TABLE `Student\_Module\_Enrollments` (

`STUDENT\_ID` BINARY(16),

`MODULE\_ID` BINARY(16),

`start\_date` datetime,

`end\_date` datetime,

`grade` integer,

PRIMARY KEY (`STUDENT\_ID`, `MODULE\_ID`)

);

ALTER TABLE `Students` ADD FOREIGN KEY (`enrolled\_course`) REFERENCES `Courses` (`COURSE\_NAME`);

ALTER TABLE `Modules` ADD FOREIGN KEY (`course\_name`) REFERENCES `Courses` (`COURSE\_NAME`);

ALTER TABLE `Student\_Module\_Enrollments` ADD FOREIGN KEY (`STUDENT\_ID`) REFERENCES `Students` (`STUDENT\_ID`);

ALTER TABLE `Student\_Module\_Enrollments` ADD FOREIGN KEY (`STUDENT\_ID`) REFERENCES `Modules` (`MODULE\_ID`);

**Front End:**

**Live link:**

**Github link:**

**Code:**

**1)**

public static void solution(int [] arr) {

int score=0;

for(int i=0; i<arr.length; i++) {

if(arr[i]==7) {

score+=5;

break;

}

if(arr[i]==13) {

score-=5;

break;

}

if(arr[i]%2==0) {

score+=2;

}else {

score+=1;

}

}

System.*out*.println(score);

}

}

**2)**

Google Drive link: <https://drive.google.com/file/d/1iYmC-IqJHUgIGSfqAG0wVJUFxqX1s1fA/view>

}

}