

## **Coding Bootcamp**

## **Individual Project Brief – PART B**

Following PART A you need to implement the following functionality:

- 1. Make a draft design of a database that can keep data for the main entities of the assignment and name the tables as: Students, Trainers, Assignments, Courses [15 marks]
- 2. Identify any other tables you need based on your implementation and construct them [15 marks]
- 3. Design the ERD of your system and verify it through an online tool such as <a href="https://sqldbm.com/">https://sqldbm.com/</a> (it requires a free account) [15 marks]
- 4. Populate the tables of the database with enough data [10 marks]
- 5. You need to produce sql queries that output the following [19 marks in total]:
  - A list of all the students [2 marks]
  - A list of all the trainers [2 marks]
  - A list of all the assignments [2 marks]
  - A list of all the courses [2 marks]
  - All the students per course [2 marks]
  - All the trainers per course [2 marks]
  - All the assignments per course [2 marks]
  - All the assignments per course per student [2 marks]
  - A list of students that belong to more than one courses [3 marks]
- 6. You also need to produce a small project that [26 marks]
  - a. makes a connection to the database and executes the above sql queries [9 marks]

- b. makes a connection to the database and inserts input data from the keyboard to the following tables,
  - i. students [2 marks]
  - ii. trainers [2 marks]
  - iii. assignments [2 marks]
  - iv. courses [2 marks]
  - v. students per course [3 marks]
  - vi. trainers per course [3 marks]
  - vii. assignments per student per course [3 marks]