

Academic Year 2024: January - June

Formative Assessment 1: Praxis 2 (HPXS200-1)

NQF Level, Credits: 6, 20

Weighting 40%

Assessment Type: Project

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Examiner: Ralph Mavhunga

Due Date: 28 March 2024

Total: 70 Marks

Instructions

1. This paper consists of 1 database design project requirement.

2. Your submission will consist of **only one PDF document.**

Scenario

A football academy is a dedicated institution that nurtures and develops young football talent. These academies provide a structured environment for individuals to enhance their football skills and game knowledge. The primary objective is to prepare aspiring football players for competitive matches at the youth level, professional clubs, or international competitions. Typically, football academies offer coaching, physical conditioning, competitive games, and educational support to provide a comprehensive platform for player development.

To efficiently oversee the development and performance of players, assess coaching staff, schedule training sessions and matches, and ensure the proper utilisation and maintenance of the training facilities, making the management of the football academy more effective and organised. A football academy should be able to view detailed profiles for each enrolled player, including their name, date of birth, contact information, medical history, position, and performance statistics.

Additionally, a football academy should have access to coaching staff information. Coaching staff information might include coach names, contact details, coaching certifications, coaching history, and the specific teams or age groups they are responsible for.

To analyse training session data, a football academy should record important session details such as date, time, location, and the type of session (whether it's focused on drills, scrimmage, or fitness). Concerning matches, a football academy should track the competitive performance of its teams. Data captured by the football academy might include the games played by our academy, including the opponent, date, location, match outcomes, goals scored, and goals conceded.

Lastly, a football academy captures information about the various facilities available, including the facility name, location, field type (grass or turf), seating capacity, and maintenance schedule.

Use the information above to attempt the following.

- 1. Use the information from above and your knowledge of databases to determine five database entities for a football academy. For each of the entities, summarise the information that the entity stores and all the attributes of the entity.
- 2. Determine three business rules for each entity mentioned in the football academy scenario above.
- 3. Draw an Entity Relationship Diagram of the system database.
- 4. How will the database be used by coaches, players, parents, and administrators?

Use the rubric below to guide you.

No	Criteria	Requirements	Possible Marks
1	Entities (27 marks)	All appropriate database entities are provided The entities regard all the requirements of the system as stated in the passage. (up to 15 marks)	15
		Entities have appropriate attributes and identifiers (up to 7 marks)	6
		Entities and attributes have appropriate names, and there are descriptions where appropriate (up to 6 marks)	6
2	Business rules (15 marks)	Appropriate business rules are given (One mark for each business rule)	15
3	ER Diagram (15 marks)	The diagram shows all the entities and their relationships (up to 10 marks) The diagram is clear, and all the entities and their relationships are clearly shown and arranged neatly (up to 5 marks)	15
4	How will different users use the database?	Two marks for each explanation for each database user. Each explanation should be logical.	8
5	Neatness (5 marks)	The submitted PDF document is neat, with all necessary diagrams laid out neatly and the other requirements are answered logically (up to 5 marks)	5
	Total		70