

Team Name : Int Elligence

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UNITED STATES LOG-ROLLING ASSOCIATION (USLRA)

Database Requirements

1. Entity Types

Entity Type	Attribute	Data Type	Domain
Participant	Participant ID	INT	Any 7 digit number
	First Name	VARCHAR	Atmax 30 letters
	Last Name	VARCHAR	Atmax 30 letters
	Date Of Birth	DATE	Any valid Date
	Gender	VARCHAR	{Male,Female,Others}
	Age	INT	(0,80)
	Height (in cm)	FLOAT	(0,300]
	Weight (in kg)	FLOAT	(0,300]
	BMI	FLOAT	(10,40]
	Email	VARCHAR	Any valid email
	Event ID	INT	Any 7 digit number
	Phone Number	INT	Any 10 digit number
	Address	VARCHAR	Atmax 300 letters
	Country	VARCHAR	Atmax 10 letters
Member	Member ID	INT	Any 7 digit number
	First Name	VARCHAR	Atmax 30 letters
	Last Name	VARCHAR	Atmax 30 letters
	Date Of Birth	DATE	Any valid Date

	Gender	VARCHAR	{Male,Female,Others}
	Email ID	VARCHAR	Any valid email
	Phone Number	INT	Any 10 digit number
	Address	VARCHAR	Atmax 300 letters
	Country	VARCHAR	Atmax 10 letters
	Membership Type	VARCHAR	Atmax 300 letters
	Privileges	VARCHAR	Atmax 50 letters
	Start Date	DATE	Any valid Date
	Expiry Date	DATE	Any valid Date
Event	Event ID	INT	Any 7 digit number
	Start Date	DATE	Any valid Date
	End Date	DATE	Any valid Date
	Location	VARCHAR	Atmax 50 letters
	Number of Participant	INT	Any 4 digit number
Performance			
	Participant ID	INT	Any 7 digit number
	Event ID	INT	Any 7 digit number
	Competition Name	VARCHAR	Atmax 30 letters
	Division	VARCHAR	Atmax 30 letters
Historical Results	Matches Won	INT	Any 3 digit number
	Event ID	INT	Any 7 digit number
	Winner Name	VARCHAR	Atmax 30 letters
Board of Directors	Full Name	VARCHAR	Atmax 30 letters
	Email	VARCHAR	Any valid email
	Position	VARCHAR	Atmax 20 letters
	Year	DATE	Any valid Year
	Salary	INT	Any 15 digit number
Atheletic Injury			
	Participant ID	INT	Any 7 digit number

Event ID	INT	Any 7 digit number
Injury Type	VARCHAR	Atmax 30 letters
Competition Name	VARCHAR	Atmax 30 letters

- a. Participant
- b. Member
- c. Event
- d. Performance
- e. Historical Results
- f. Board of Directors
- g. Athletic Injury

2. Weak-Entity Types

- a. Performance (Owner is Event Entity)

3. Relationship Types

- a. Participant **PARTICIPATES** in Event
- b. **AWARDS** : Relationship between Events and Historical Results

Functional Requirements

1. Insert Operations

- a. Registering Participants and Members.
- b. Adding an Event, Performance, Historical Result, and Athletic Injury.

2. Update Operations

- a. Updating Board of Directors.
- b. Updating Member and Participant details.

3. Delete Operations

- a. Deleting a Member after Expiry Date has passed.
- b. Deleting Participants after completion of Event.

4. BMI formula.

- $BMI = 10^{-4} * \text{weight(in kg)}/\text{height(in cm)}^2$
- Derived attribute as derived from Height and Weight

5. Search and Display

- a. Take input as Event , retrieves and displays its Winner Name.
- b. Take input as Year and retrieves the names of Board of Directors.