**Cycling Club Database**

For this project I am going to model and design an SQL database on a cycling club. I’ve been a keen cyclist from a young age so I felt it was something I could model in a effective way. I have made 6 relational tables, they are : Members, Coaches, Races, Training, Equipment and Registration. Within each relation, each one has a primary key. For each of my relational tables I decided to have 5 attributes for each relation as I felt like it accurately displayed the relational table

Members contains the attributes Members\_ID, Members\_Name, Email, Speciality and Phone\_Number. The primary key is the members Email as it is unique to the member, no two members can have the same email.

Coach contains the attributes Coaches\_ID, Coaches\_Name, Email, Position and Phone\_Number. Once again the primary key is the Email as it is unique to each coach, no two coaches can have the same email.

Races contains the attributes Race\_ID, Race\_Name, Distance\_KM, Terrain and Race\_Organisers. The primary keep in this table is the Race\_ID as it is unique to each race.

Training contain the attributes Date, Location, Training\_Distance, Terrain and Coaches\_ID, each training session has to have one coach on it and each coach has a coach ID. It is for this reason that the primary key for training is Coaches\_ID.

Equipment contains the attributes Name, On\_Loan, Value, How\_Old\_Years and Equipment\_ID. The primary keep for this table is the Equipment\_ID as it is unique to each piece of Equipment.

Registration contains the attributes Member\_Name, Previous\_Member, Registration\_Fee, Members\_Age and Members\_ID. The primary key is the Members\_ID as its unique to each registration.

**Entity Relationship Diagram**

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Description automatically generated

**Relational Schema Diagram**

**Members**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Members\_ID | Members\_Name | Email | Speciality | Phone\_Number |

**Coach**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Coaches\_ID | Coaches\_Name | Email | Position | Phone\_Number |

**Races**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Race\_ID | Race\_Name | Distance\_KM | Terrain | Race\_Organisers |

**Training**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date | Location | Training\_Distance | Terrain | Coaches\_ID |

**Equipment**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | On\_Loan | Value | How\_Old\_Years | Equipment\_ID |

**Registration**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Member\_Name | Previous\_Member | Registration\_Fee | Members\_Age | Members\_ID |