Field Definition grid for Attributes of Entity Trail

**Entity name**: Trail Provides the details of a trail that will be accessed by users on a trail microservice.

**Synonyms**: Route

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| **Attribute name** | **Description** | **Synonym(s)** | **Data type** | **Size**  **(\*=max)** | **Possible data values** | **Optional?** | **Validation rules** | **Key?** |
| Trail ID | Unique number to ID the trail table. |  | Int | N/A | Any. | No | Autoincremented | PK |
| Trail Name | Name of the trail | Route Name | Varchar | 50\* | Any. | No | Not NULL |  |
| Length | Length of trail in KM | Distance | Varchar | 8\* | Any. | No | Not Null. |  |
| Elevation Gain | Total elevation gain in M | N/A | Varchar | 6\* | Any. | No | >= 0. Not Null |  |
| Average Completion Time | Estimate average time of complete | N/A | Varchar | 6\* | Any. | Yes | Optional (NULL). |  |
| Rating | Average rating for trail | N/A | Decimal | 4\* | Between 0.00 and 5.00 | Yes | Must be between 0.00 and 5.00 |  |
| Route Type | Type of route | N/A | Varchar | 25\* | Any. | No | Not Null. |  |
| Difficulty | Difficulty level of trail | N/A | Varchar | 8\* | Any. | No | Predefined values. “Easy”, “Moderate”, “Hard”, “Very Hard” |  |
| Best Time to Visit | Recommended season or time of year to visit | N/A | Varchar | 25\* | Any. | Yes | Optional(NULL) |  |
| Location | General location of where the trail is | N/A | Varchar | 100\* | Any | No | NOT NULL. |  |
| Description | Brief description of the trail and what to expect. | N/A | Varchar | 500 | Any | Yes | Optional(NULL) |  |

Field Definition grid for Attributes of Entity Trail Features

**Entity name**: Trail Features Linking each route to the different features that it may contain

**Synonyms**: N/A Junction table between Trail and Features

|  |  |  |  |  |  |  |  |  |
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| **Attribute name** | **Description** | **Synonym(s)** | **Data type** | **Size**  **(\*=max)** | **Possible data values** | **Optional?** | **Validation rules** | **Key?** |
| Trail ID | Unique ID Foreign key identifying the trail table |  | Int | N/A | Any | No | N/A | FK |
| Features ID | Unique ID Foreign key identifying the features table |  | Int | N/A | Any | No | N/A | FK |

Field Definition grid for Attributes of Entity Features

**Entity name**: Features Provides the features that a route may contain

**Synonyms**: N/A

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| **Attribute name** | **Description** | **Synonym(s)** | **Data type** | **Size**  **(\*=max)** | **Possible data values** | **Optional?** | **Validation rules** | **Key?** |
| Features ID | Unique ID Foreign key identifying each feature of the features table |  | Int | N/A | Any | No | Autoincremented | FK |
| Feature | A feature of the trail |  | Varchar | 20\* | Any. | No | Not Null |  |