**Database Schema Design – Supporting Document**

**CARDINALITY**

A **User** has *one* **User\_Profile**.

A **Profile** has *one* **Role**.

A **Role** has *many* **Role\_Permissions**.

*Many* **Role\_Permissions** have *one* individual **Permission** associated.

A **Profile** has *many* **User\_Preferences**.

Many **User\_Preferences** have *one* individual **Preference** associated.

A **User** can have *one* **Calendar** linked to their account.

A **Calendar** can have *zero to many* **Events**.

An **Event** can be in *zero to many* users **Calendars**.

A user can be **Attending** *1 to many* **Events**.

An **Event** can have *1 to many* users **Attending**.

Many **Events** can each have *one* **Date\_time**.

Many **Events** can each have *one* **Event\_Location**.

An **Event\_Location** can have *one* **Event\_Address**.

**TABLES ( Example )**

**( \* Data may not be accurate representation of valid values )**

User

|  |  |  |
| --- | --- | --- |
| **\*user\_ID** | **username** | **password** |
| 1 | ‘bob\_123’ | ‘password1’ |
| 2 | ‘alice\_07’ | ‘password2’ |

User\_Profile

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **\*profile\_ID** | **\*user\_ID** | **first\_name** | **last\_name** | **email** | **image\_url** |
| 1 | 1 | ‘Bob’ | ‘Sanders’ | [bob@gmail.com](mailto:bob@gmail.com) | ‘/dog.jpg’ |
| 2 | 2 | ‘Alice’ | ‘Henderson’ | alice@hotmail.com | ‘/me.png |

Role

|  |  |
| --- | --- |
| **\*role\_ID** | **role\_name** |
| 1 | ‘admin’ |
| 2 | ‘user’ |

User\_Role

|  |  |
| --- | --- |
| **\*role\_ID** | **\*profile\_ID** |
| 1 | 1 |
| 2 | 2 |

Permissions

|  |  |  |
| --- | --- | --- |
| **\*permission\_ID** | **permission\_name** | **active** |
| 1 | ‘manage\_user\_info’ | false |
| 2 | ‘manage\_user’ | false |
| 3 | ‘manage\_events’ | false |
| 4 | ‘Sign-up\_admin’ | false |

Role\_Permissions

|  |  |
| --- | --- |
| **\*permission\_ID** | **\*role\_ID** |
| **1** | **1** |
| **2** | **1** |
| **3** | **1** |
| **4** | **1** |

Prefrences

|  |  |  |
| --- | --- | --- |
| **\*preference\_ID** | **preference\_name** | **active** |
| 1 | ‘email\_response’ | true |
| 2 | ‘email\_availability’ | false |
| 3 | ‘email\_finalised’ | true |
| 4 | ‘email\_cancelled’ | true |

User\_Preferences

|  |  |
| --- | --- |
| **\*preference\_ID** | **\*profile\_ID** |
| 1 | 1 |
| 2 | 1 |
| 3 | 1 |
| 4 | 1 |
| 1 | 2 |
| 2 | 2 |
| 3 | 2 |
| 4 | 2 |

Attending

|  |  |  |
| --- | --- | --- |
| **\*user\_ID** | **\*event\_ID** | **attendance\_type** |
| 1 | 1 | ‘going’ |
| 1 | 2 | ‘available’ |
| 1 | 3 | ‘going’ |
| 2 | 1 | ‘going’ |
| 2 | 2 | ‘owner |
| 2 | 3 | ‘available’ |

Calendar

|  |  |  |
| --- | --- | --- |
| **\*calendar\_ID** | **user\_ID** | **calendar\_url** |
| 1 | 1 | ‘google.com/xyz’ |
| 2 | 2 | ‘google.com/abc’ |

Calendar Events

|  |  |
| --- | --- |
| **\*calendar\_ID** | **\*event\_ID** |
| **1** | **1** |
| **1** | **2** |
| **2** | **1** |
| **2** | **3** |

Event

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **\*event\_ID** | **\*date\_time\_ID** | **\*location\_ID** | **event\_name** | **event\_desc** | **event\_image\_url** | **event\_author** | **num\_attendig** |
| 1 | 1 | 1 | ‘Event 1’ | ‘this is event1… ‘ | ‘./place.jpg’ | ‘Bob’ | 20 |
| 2 | 2 | 2 | ‘Event 2’ | ‘event 2...’ | ‘./another\_place.png’ | ‘Alice’ | 10 |
| 3 | 3 | 3 | ‘Event 3’ | ‘event 3 desc… ‘ | ‘./somewhere.jpg’ | ‘Bob’ | 1 |

Date\_Time

|  |  |  |  |
| --- | --- | --- | --- |
| **\*date\_time\_ID** | **start\_date\_time** | **end\_date\_time** | **event\_duration** |
| 1 | ‘11.05.2022 3:00’ | ’11.05.2022 19:00’ | ‘4 hours’ |
| 2 | ’12.05.2022 7:00’ | ’14.05.2022 7:00’ | ‘2 days’ |
| 3 | ’13.05.2022 13:00’ | ’13.05.2022 14:00’ | ‘1 hour’ |

Event\_Location

|  |  |  |
| --- | --- | --- |
| **\*event\_location\_ID** | **\*event\_address\_ID** | **event\_venue** |
| 1 | 1 | ‘Venue 1’ |
| 2 | 2 | ‘Venue 2’ |
| 3 | 3 | ‘Venue 3’ |

Event\_Address

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| \*event\_address\_ID | street\_number | street\_name | city | postcode | country |
| 1 | 42 | ‘Main st’ | ‘Adelaide’ | 5000 | ‘Australia’ |
| 2 | 24 | ‘Fifth st’ | ‘North Adelaide’ | 2084 | ‘Australia’ |
| 3 | 1 | ‘Test st | ‘Testtown’ | 1234 | ‘China’ |