New Caprica Database v1.1

# Table Structures

In the following section, the “Type” column describes the format of the data stored in the field. Generic terms are used her. Each type can be mapped to its SQL Server equivalent as follows.

|  |  |  |
| --- | --- | --- |
| **Generic Term** | **SQL Server Equivalent** | **Comments** |
| Boolean | bit | True or False value. The bit data type supports NULL values, but in the database, all Boolean fields are required. |
| Date | datetime | All date related values except for standalone years. |
| Integer | smallint | Used for most non-decimal values. |
| Long | bigint | Mainly used for primary keys values. Some primary key fields have a type of “Long - Auto,” which indicates that the ID value is autogenerated by SQL Server using the IDENTITY field property. |
| Memo | varchar(max) | Long, descriptive text and comments. |
| Number | decimal | All decimal values. |
| Text(*x*) | varchar(*x*) | All variable-length text values other than long comments. |

**UserName** – A user of the program, used to pull up timetables relevant to the user.

| **Field** | **Type** | **Description** |
| --- | --- | --- |
| ID | Long - Auto | Primary key; automatically assigned. Required. |
| LoginID | Text(50) | Username of the user. Required. |
| FirstName | Text(30) | First name of the user. Optional. |
| Surname | Text(50) | Last name of the user. Optional. |
| Password | Text(40) | The password for the user, in encrypted format. Required. |

**Timetable** – The name of a timetable stored in the database

| **Field** | **Type** | **Description** |
| --- | --- | --- |
| TimetableID | Long - Auto | Primary key; automatically assigned. Required. |
| TimetableName | Text(50) | The name of the timetable. Required. |
| UserID | Long | The related user name. Foreign reference to UserName.ID. Required. |
| System | Integer | The system of entry that the timetable is using. Required |

**Year** – Table listing the years number for the timetables

| **Field** | **Type** | **Description** |
| --- | --- | --- |
| YearID | Long - Auto | Primary key; automatically assigned. Required. |
| YearNumber | Integer | The year number of study. Required |
| YearName | Text(30) | The name of the year of study. Optional. |
| TimetableID | Long | The related timetable of the year. Foreign reference to Timetable.ID. Required. |

**Term** – The terms related to a year of study

| **Field** | **Type** | **Description** |
| --- | --- | --- |
| TermID | Long - Auto | Primary key; automatically assigned. Required. |
| Number | Integer | The term number. Required. |
| StartDate | Date | The start date of the term. Optional. |
| FinishDate | Date | The finish date of the term. Optional. |
| WeekStart | Integer | The week number from which the term starts. Required |
| WeekEnd | Integer | The week number from which the term ends. Required |
| YearID | Long | The year that the term is related to. Foreign reference to Year.ID. Required. |
| Weeks | Integer | The number of weeks in a term. Required |

**Entry** – The entries from which the timetable is made up of

| **Field** | **Type** | **Description** |
| --- | --- | --- |
| EntryID | Long - Auto | Primary key; automatically assigned. Required. |
| ContactID | Long | The related contact type. Foreign reference to Contact.ID. Required. |
| ModuleID | Long | The related module. Foreign reference to Module.ID. Required. |
| Duration | Integer | The time, in minutes, the entry lasts for. Required. |
| Time | Integer | The time at which the entry takes place. Required. |
| RoomID | Long | The related room number. Foreign reference to Room.ID. Required. |
| StaffID | Long | The related member of staff for the entry. Foreign reference to Staff.ID. Required. |
| DayID | Integer | The related day on which the entry takes place. Foreign reference to Day.ID. Required. |
| Notes | Memo | Any associated note relating to the entry that aren’t related reading or links. Optional. |
| Optional | Boolean | Indicates whether the inputted entry is optional or not. Required. |
| TimetableID | Long | The related timetable of the year. Foreign reference to Timetable.ID. Required. |

**Contact** – The type of contact that is had, e.g. Lecture, Seminar

| **Field** | **Type** | **Description** |
| --- | --- | --- |
| ContactID | Long - Auto | Primary key; automatically assigned. Required. |
| Type | Text(50) | The type of contact. Required |
| Colour | Text(8) | The hex value of the colour selected to represent the type. Required |
| TimetableID | Long | The related timetable of the year. Foreign reference to Timetable.ID. Required. |
| UserID | Long | The User ID related to this instance. Foreign reference to UserName.ID |

**Module** – The module information for an entry

| **Field** | **Type** | **Description** |
| --- | --- | --- |
| ModuleID | Long - Auto | Primary key; automatically assigned. Required. |
| Code | Text(10) | The module code associated with a module. Required. |
| Name | Text(100) | The name of the module. Optional. |
| UserID | Long | The User ID related to this instance. Foreign reference to UserName.ID |
| TimetableID | Long | The related timetable of the year. Foreign reference to Timetable.ID. Required. |
| StaffID | Long | The module leader. Foreign reference to Staff.ID. Required. |

**Room** – Details of which room the entry takes place in.

| **Field** | **Type** | **Description** |
| --- | --- | --- |
| RoomID | Long - Auto | Primary key; automatically assigned. Required. |
| Number | Text(10) | The number of the room. Required. |
| UserID | Long | The User ID related to this instance. Foreign reference to UserName.ID |
| TimetableID | Long | The related timetable of the year. Foreign reference to Timetable.ID. Required. |
| Department | Text(100) | The department the room is in. Optional. |

**Staff** – Members of staff associated with contacts and module leaders

| **Field** | **Type** | **Description** |
| --- | --- | --- |
| StaffID | Long - Auto | Primary key; automatically assigned. Required. |
| Initials | Text(5) | The initials of the member of staff. Required. |
| Salutation | Text(10) | The salutation of the staff member. Required |
| FirstName | Text(70) | The first names of the member of staff. Optional. |
| Surname | Text(50) | The last name of the member of staff. Optional. |
| RoomID | Long | The room/office in which the member of staff is based. Optional |
| UserID | Long | The User ID related to this instance. Foreign reference to UserName.ID |
| TimetableID | Long | The related timetable of the year. Foreign reference to Timetable.ID. Required. |
| Email | Text(300) | The email address of the member of staff. Optional |

**Day** – The day table

| **Field** | **Type** | **Description** |
| --- | --- | --- |
| ID | Long - Auto | Primary key; automatically assigned. Required. |
| Day | Text(15) | The days of the week. Required |

The following days are defined.

* 1 – Monday
* 2 – Tuesday
* 3 – Wednesday
* 4 – Thursday
* 5 – Friday
* 6 – Saturday
* 7 – Sunday

**TermEntryWeek** – This table will contain the term and week that each entry corresponds to.

| **Field** | **Type** | **Description** |
| --- | --- | --- |
| TermEntryWeekID | Long | Automatically assigned. Required. |
| TermID | Long | Primary key; the related Term of the entry and week. Foreign reference to Term.ID. Required. |
| EntryID | Long | Primary key; the related entry of the term and week. Foreign reference to Entry.ID. Required. |
| Week | Integer | Primary key; the week of the term that corresponds to the entry. Required. |

**Resources** – This table will contain details of any reading or other resources relating to an entry

| **Field** | **Type** | **Description** |
| --- | --- | --- |
| ResourcesID | Long - Auto | Primary key; automatically assigned. Required. |
| TypeID | Long | The related type of the resource. Foreign reference to Type.ID. Required. |
| Details | Memo | The details of the resource, such a book and a page or website. Required. |

**Type** – The type of resource

| **Field** | **Type** | **Description** |
| --- | --- | --- |
| TypeID | Long - Auto | Primary key; automatically assigned. Required. |
| Type | Text(100) | The type of the resource used. Required. |

The following types are pre-defined

* 1 – Book
* 2 – File
* 3 – Website

**ResourcesEntry** – This table will contain which resources are related to which entries

| **Field** | **Type** | **Description** |
| --- | --- | --- |
| ResourcesEntryID | Long - Auto | Primary key; automatically assigned. Required. |
| ResourcesID | Long | The related resource entry of the entry. Foreign reference toResources.ID. Required. |
| TermEntryWeekID | Long | The related term entry week ID of the resource. Foreign reference to TermEntryWeek.TermEntryWeekID |