Database Design

### Tables

Database tables

#### AllowedPaymentOptions

Used to define what payment options are available for a bookable.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Keys, Nulls, Default Values, etc.** | **Description** |
| id | Varchar(36) | PK, NN, UQ | Identifier |
| Name | Varchar(300) | NN | Friendly name of the payment option |
| paymenttype\_id | Varchar(36) | NN, FK | ID of payemtn type (paymenttype.id) |
| Bookable\_id | Varchar(36) | NN, FK | ID of bookable associated with the payment type option |
| Description | Text |  | Long description of the payment type |
| paymentConfiguration | MEDIUMTEXT |  | Configuration string for payment option |
| newCustomerdefault | Tinyint(1) | NN | Boolean indicating if the payment option is automatically available to new customers. |
| createdDate | Datetime | NN | Date row of data created |
| updatedDate | Datetime | NN | Date row of data updated |

#### bookables

Describes the place or item that can be scheduled.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Keys, Nulls, Default Values, etc.** | **Description** |
| id (PK) | Varchar(36) | PK, NN, UQ | Identifier |
| Name | Varchar(300) | NN | Friendly name of the item |
| Owner\_id | Varchar(36) | NN, FK | User who created the bookable (site\_user.id) |
| Type\_id | Varchar(36) | NN, FK | Type ID for bookable (bookabletype.id) |
| Description | Text |  | Long description of the bookable |
| Location\_id | Varchar(36) | NN, FK | ID of the location (locations.id) |
| Brands\_id | Varchar(36) | NN, FK | ID of the brand associated with the bookable (brand.id) |
| showInSearch | TinyINT(1) | NN | A Boolean value indicating if the bookable should appear in search results |
| createdDate | Datetime | NN | Date row of data created |
| updatedDate | Datetime | NN | Date row of data updated |

#### bookabletypes

Used for categorizing bookable items for filtering and other features. Each bookable can only be one type.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Keys, Nulls, Default Values, etc.** | **Description** |
| id (PK) | Varchar(36) | NN, PK, UQ | Identifier |
| Name | Varchar(300) | NN | Bookable type name |
| Description | TEXT |  | Bookable type description |
| createdDate | Datetime | NN | Date row of data created |
| updatedDate | Datetime | NN | Date row of data updated |

#### brands

A brand is used to link multiple bookable items. A bookable item can have no more than brand. .

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Keys, Nulls, Default Values, etc.** | **Description** |
| id (PK) | Varchar(36) | NN, PK, UQ | Identifier |
| ownerID (FK) | Varchar(36) | FK | ID of owner/creator |
| Name | Varchar(300) | NN | Brand name |
| Address | Varchar(45) |  | Street address for brand |
| City | Varchar(100) |  | City for brand |
| State | Varchar(100) |  | State |
| Country | Varchar(50) |  | Country |
| postalCode | Varchar(50) |  | Zip or Postal Code |
| Phone | Varchar(255) |  | Phone number |
| logoImage | BLOB |  | Logo image for brand |
| createdDate | Datetime | NN | Date row of data created |
| updatedDate | Datetime | NN | Date row of data updated |

#### events

A time period, possibly recurring, when a bookable is reserved by a user..

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Keys, Nulls, Default Values, etc.** | **Description** |
| id (PK) | Varchar(36) | NN, PK, UQ | Identifier |
| Name | Varchar(300) | NN | Event name |
| eventType\_id (FK) | Varchar(36) | NN, FK | Event Type (eventtype.id) |
| Bookable\_id (FK) | Varchar(36) | NN, FK | Bookable ID (bookable.id) |
| eventOwner\_id | Varchar(36) | NN, FK | User ID of user who created (owns) the event (siteuser.id) |
| eventStart | DATETIME | NN | Date time first event instance starts |
| eventEnd | DATETIME | NN | Date-time first event instance starts |
| Recurrence\_id (FK) | Varchar(36) | NN, FK | ID of recurrence definition (recurrence.id) |
| eventStatus | Varchar(36) | NN, FK | ID of event status type (eventstatusType.id) |
| createdDate | Datetime | NN | Date row of data created |
| updatedDate | Datetime | NN | Date row of data updated |

#### eventstatustypes

Event status type is used for identifying the state of the event in the scheduling workflow.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Keys, Nulls, Default Values, etc.** | **Description** |
| id (PK) | Varchar(36) | PK, NN, UQ | Identifier |
| Name | Varchar(300) | NN | Event status type name:  Tentative  Requested  Confirmed  Cancelled  Denied |
| Description | TEXT |  | Event status type description |
| createdDate | Datetime | NN | Date row of data created |
| updatedDate | Datetime | NN | Date row of data updated |

|  |  |  |
| --- | --- | --- |
| 0a4dc4c1-43dc-11e5-ab34-549f350764bc | Cancelled | Represents a reservation date and time that has been cancelled |
| 1354a692-43dc-11e5-ab34-549f350764bc | Denied | Represents a reservation date and time that has been denied by the owner |
| bad0b1b8-43db-11e5-ab34-549f350764bc | Tentative | Represents a reservation date and time before it is requested or confirmed |
| f5815b23-43db-11e5-ab34-549f350764bc | Requested | Represents a reservation date and time when it is requested but not confirmed |
| ff59d7b3-43db-11e5-ab34-549f350764bc | Confirmed | Represents a reservation date and time when it is confirmed |
|  |  |  |

#### eventtypes

Used for categorizing scheduled events for filtering and other features. Each event can only by one type.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Keys, Nulls, Default Values, etc.** | **Description** |
| id (PK) | Varchar(36) | PK, NN, UQ | Identifier |
| Name | Varchar(300) | NN | Event type name:  Blackout  Reservation |
| Description | TEXT |  | Event type description |
| createdDate | Datetime | NN | Date row of data created |
| updatedDate | Datetime | NN | Date row of data updated |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 00e2f007-43dd-11e5-ab34-549f350764bc | Blackout | Creates a blackout date | 2015-08-15 23:06:58 | 2015-08-15 23:06:58 |
| 7e207705-43dd-11e5-ab34-549f350764bc | Reservation | Creates a reservation event date | 2015-08-15 23:10:28 | 2015-08-15 23:10:28 |
|  |  |  |  |  |

#### locations

Location is the physical location of a bookable item. A single location can have multiple bookable items.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Keys, Nulls, Default Values, etc.** | **Description** |
| id (PK) | Varchar(36) | PK, NN, UQ | Identifier |
| Name | Varchar(300) | NN | Location name |
| Address | Varchar(45) |  | Street address for brand |
| City | Varchar(100) |  | City for brand |
| State | Varchar(100) |  | State |
| Country | Varchar(50) |  | Country |
| postalCode | Varchar(50) |  | Zip or Postal Code |
| contactPhone | Varchar(255) |  | Location contact number |
| contactEmail | Varchar(255) |  | Location contact email |
| Latitude | FLOAT |  | Latitude for location |
| Longitude | FLOAT |  | Longitude for location |
| createdDate | Datetime | NN | Date row of data created |
| updatedDate | Datetime | NN | Date row of data updated |

#### paymentoptionsassignments

Allows bookable owner to control if an allowed payment option is available for a particular user.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Keys, Nulls, Default Values, etc.** | **Description** |
| id (PK) | Varchar(36) | NN, PK, UQ | Identifier |
| User\_id | Varchar(36) | NN, FK | ID of user that will be allowed to use the payment option (site\_user.id) |
| paymentoption\_id | Varchar(36) | NN, FK | ID of payment option type that is being allowed (paymenttype.id) |
| Bookable\_id | Varchar(36) | NN, FK | ID of bookable associated with the payment type option assignment (bookable.id) |
| createdDate | Datetime | NN | Date row of data created |
| updatedDate | Datetime | NN | Date row of data updated |

#### paymenttransactions

A table representing separate payment transactions.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Keys, Nulls, Default Values, etc.** | **Description** |
| id (PK) | Varchar(36) | NN, PK, UQ | Identifier |
| Paymenttype\_id | Varchar(36) | NN, FK | The ID of a payment type used for a payment transaction (paymenttype.id) |
| paymentStatus | Varchar(100) | NN | A payment status |
| paymentAmount | Decimal(10,2) | NN | Amount of a payment |
| createdDate | Datetime | NN | Date row of data created |
| updatedDate | Datetime | NN | Date row of data updated |

#### paymentTypes

Represents various payment option types.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Keys, Nulls, Default Values, etc.** | **Description** |
| id (PK) | Varchar(36) | NN, PK, UQ | Identifier |
| Name | Varchar(50) | NN | Friendly name of the payment type |
| Description | TEXT |  | Long description of the payment type |
| paymentConfig | MEDIUMTEXT |  | Configuration string for payment type |
| createdDate | Datetime | NN | Date row of data created |
| updatedDate | Datetime | NN | Date row of data updated |

#### periodtypes

The rate charged for renting the bookable at different times of day or on different days.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Keys, Nulls, Default Values, etc.** | **Description** |
| id (PK) | Varchar(36) | NN, PK, UQ | Identifier |
| Name | Varchar(300) | NN | Friendly name of the periodtype |
| createdDate | Datetime | NN | Date row of data created |
| updatedDate | Datetime | NN | Date row of data updated |

#### rates

The rate charged for renting the bookable at different times of day or on different days.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Keys, Nulls, Default Values, etc.** | **Description** |
| id (PK) | Varchar(36) | NN, PK, UQ | Identifier |
| Name | Varchar(300) | NN | Friendly name of the rate |
| Bookable\_id | Varchar(36) | NN, FK | ID of bookable associated with the rate (bookable.id) |
| Amount | Decimal(10,2) | NN | The rate amount |
| Period\_id | Varchar(36) | NN, FK | ID for one of several predefined period types (periodtypes.id) |
| minimumPeriods | Int(11) | NN, ‘0’ | Minimum number of periods for which the bookable must be rented |
| Description | Text |  | Detailed description of the rate |
| startDate | DATE | NN | The first date the rent rate is in effect. |
| endDate | DATE | NN | The last date the rent rate is in effect |
| monStart | TIME |  | The start time on Mondays that the rate is in effect. |
| monEnd | TIME |  | The time on Mondays when the rate ends being in effect. |
| tueStart | TIME |  | The start time on Tuesdays that the rate is in effect. |
| tueEnd | TIME |  | The time on Tuesdays when the rate ends being in effect. |
| wedStart | TIME |  | The start time on Wednesdays that the rate is in effect. |
| wedEnd | TIME |  | The time on Wednesdays when the rate ends being in effect. |
| thuStart | TIME |  | The start time on Thursdays that the rate is in effect. |
| thuEnd | TIME |  | The time on Thursdays when the rate ends being in effect. |
| friStart | TIME |  | The start time on Fridays that the rate is in effect. |
| friEnd | TIME |  | The time on Fridays when the rate ends being in effect. |
| satStart | TIME |  | The start time on Saturdays that the rate is in effect. |
| satEnd | TIME |  | The time on Saturdays when the rate ends being in effect. |
| sunStart | TIME |  | The start time on Sundays that the rate is in effect. |
| sunEnd | TIME |  | The time on Sundays when the rate ends being in effect. |
| createdDate | Datetime | NN | Date row of data created |
| updatedDate | Datetime | NN | Date row of data updated |

#### ratings

Allows users to rate the bookable.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Keys, Nulls, Default Values, etc.** | **Description** |
| id (PK) | Varchar(36) | NN, PK, UQ | Identifier |
| User\_id | Varchar(36) | NN, FK | ID of user that will be allowed to use the payment option (site\_user.id) |
| Bookable\_id | Varchar(36) | NN, FK | ID of bookable associated with the payment type option assignment (bookable.id) |
| ratingValue | Int(11) | NN | Value rating |
| Comments | Text |  | Text comment |
| createdDate | Datetime | NN | Date row of data created |
| updatedDate | Datetime | NN | Date row of data updated |

#### recurrences

Defines the recurrence pattern for a recurring event.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Keys, Nulls, Default Values, etc.** | **Description** |
| id (PK) | Varchar(36) | NN, PK, UQ | Identifier |
| Event\_id (FK) | Varchar(36) | NN, FK | ID of event (event.id) |
| Instances | Int(11) | NN, 0 | Number of instances |
| yearInterval | Int(11) | NN, 0 | Years between instances |
| monthInterval | Int(11) | NN, O | Months between instances |
| weekInterval | Int(11) | NN, O | Weeks between instances |
| dayInterval | Int(11) | NN, 0 | Days between instances |
| createdDate | Datetime | NN | Date row of data created |
| updatedDate | Datetime | NN | Date row of data updated |

#### shoppingcartitems

A relationship table that is used to connect users, events, rates, and payment transactions. Each shopping cart session will relate to just one event, and one payment transaction, but a single payment transaction can relate to multiple shopping cart sessions.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Keys, Nulls, Default Values, etc.** | **Description** |
| id (PK) | Varchar(36) | NN, PK, UQ | Identifier |
| Event (FK) | Varchar(36) | NN, FK | The id of the event being paid for (event.id) |
| Rate | Varchar(36) | NN, FK | ID for rate associated with this event (rates.id) |
| paymentTotal | Decimal(10,2) | NN | Total amount (rate x periods) for the cart item |
| paymentTransaction | Varchar(36) | FK | ID for payment transaction associated with this shopping cart (paymenttransactions.id) |
| createdDate | Datetime | NN | Date row of data created |
| updatedDate | Datetime | NN | Date row of data updated |

#### siteUsers

Site user is a registered user on the site, and can be the owner of a bookable item or can be someone who schedules a bookable item

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Keys, Nulls, Default Values, etc.** | **Description** |
| id (PK) | Varchar(36) | NN, PK, UQ | Identifier |
| firstName | Varchar(50) | NN | First Name |
| lastName | Varchar(60) | NN | Last Name |
| eMail | Varchar(255) | NN | Email address |
| Phone | Varchar(255) |  | Phone number |
| Address | Varchar(500) |  | Street address |
| City | Varchar(100) |  | City |
| State | Varchar(100) |  | State |
| postalCode | Varchar(50) |  | Zip or Postal Code |
| profileImage | Blob |  | Profile image of user |
| Password | Varchar(128) | NN | User password |
| createdDate | Datetime | NN | Date row of data created |
| updatedDate | Datetime | NN | Date row of data was updated |