Users
+username (primary key)
+password

Events
+id (primary key)
+title
+date
+duration
+creation_date
+description

Schedule
+username
+event_id
+alert_date

Recurring Schedule
+username
+event_id
+alert_date

Recurring Events
+id (primary key)
+title
+date
+duration
+creation_date
+description
+days_cycle

has schedule ▶ 1 ... 0 ... *
is scheduled ▶ 1
has schedule ▶ 1
is scheduled ▶ 0 ... *

Database

Users is a table for user authentication purposes.

Schedule/Recurring Schedule are a table for connecting the specific user with his events.

Events/ Recurring Events are a table with detailed data about a specific event.

Every user has a schedule with events. Due to the connection between tables, it is possible to gather data about events of a specific user (searching, picking a specific group of events) in optimal complexity. It is possible and welcomed to expand Events table with more detailed or specific information if needed in future iterations and beyond.

As another useful feature we added are Recurring Events. They are separated from "normal" events due to being more complex and for engine related reasons.