

User (User_ID, first_name, last_name, password, email)

Admin (User_ID, limit_no, address)

Admin.User_ID references User.User_ID

Guest (User_ID, address)

Guest.User_ID references User.User_ID

User_Phone (User_ID, mobile_number)

User_Phone.User_ID references User.User_ID

Task (Task_ID, name, status, duration, deadline, priority, category, User_ID)

Task.User_ID references User.User_ID

AdminUpdatesTask (Task_ID, Admin_ID)

AdminUpdatesTask.Task_ID references Task.Task_ID

AdminUpdatesTask.Admin_ID references Admin.User_ID

AdminCreatesTask (Task_ID, Admin_ID)

AdminCreatesTask.Task_ID references Task.Task_ID

AdminCreatesTask.Admin_ID references Admin.User_ID

AdminAssignsTask (Task_ID, Admin_ID1, User_ID2)

AdminAssignsTask.Task_ID references Task.Task_ID

AdminAssignsTask.Admin_ID1 references Admin.User_ID

AdminAssignsTask.User_ID2 references User.User_ID

Calendar (Calendar_ID, User_ID)

Calendar.User_ID references User.User_ID

AdminUpdatesCalendar (Calendar_ID, Admin_ID)

AdminUpdatesCalendar.User_ID references Admin.User_ID

AdminUpdatesCalendar.Calendar_ID references Calendar.Calendar_ID

Event (Event_ID, name, date, description, duration)

UserEvents (Event_ID, User_ID)

UserEvents.User_ID references User.User_ID

UserEvents.Event_ID references Event.Event_ID

CalendarEvent (Event_ID, Calendar_ID)

CalendarEvent.Event_ID references Event.Event_ID

CalendarEvent.Calendar_ID references Calendar.Calendar_ID

UsersOrganizeEvent (Event_ID, User_ID1, User_ID2)

UsersOrganizeEvent.Event_ID references Event.Event_ID

UsersOrganizeEvent.User_ID1 references Guest.User_ID

UsersOrganizeEvent.User_ID2 references User.User_ID

Note (Note_ID, title, content, creation time, category, User_ID)

Note.User_ID references User.User_ID

Trip (Trip_ID, transportation_arrangements, hotel_reservation, flight_itinerary, startDate, endDate, destination, User_ID)

Trip.User_ID references User.User_ID

Payment (Payment_ID, amount, status, deadline)

UserPayments (Payment_ID, User_ID_pay, User_ID_rcv)

UserPayments.Payment_ID references Payment.Payment_ID

UserPayments .User_ID_pay references User.User_ID

UserPayments .User_ID_rcv references User.User_ID

AdminTrackPayment (Payment_ID, Admin_ID)

AdminTrackPayment.Payment_ID references Payment.Payment_ID

AdminTrackPayment.Admin_ID references Admin.User_ID

Health (User_ID, date, hours_slept, type_of_activity)

Health.User_ID references User.User_ID

UserFoodConsumed (User_ID, date, name, calories)

UserFoodConsumed.(User_ID, date) references Health.(User_ID, date)

Message (time_sent, time_rcv, Sender_ID, Rcv_ID, content, title)

Message.Sender_ID references User.User_ID

Message.Rcv_ID references User.User_ID

Recommendation (Rec_ID, category, content, User_ID)

Recommendation.User_ID references User.User_ID

EnergyConsumption (Device_ID, rate, total energy)

EnergyConsumption.Device_ID references Device.Device_ID

HomeInventory (User_ID, supply, stock, exp_date)

HomeInventory.User_ID references User.User_ID

ShoppingList (User_ID, supply, status)

ShoppingList.User_Id references HomeInventory.User_ID

ShoppingList.supply references HomeInventory.supply

Preference (User_ID, pref_name , Rec_ID)

Preference.User_ID references User.User_ID

Preference.Rec_ID references Recommendation.Rec_ID

CalendarRecommendation (Calendar_ID, Rec_ID)

CalendarRecommendation.Calendar_ID references Calendar.Calendar_ID

CalendarRecommendation.Rec_ID references Recommendation.Rec_ID

EnergyPreference (User_ID, pref_name, EnergyPerDevice, Device_ID,rate)

EnergyPreference.User_ID references Preference.User_ID

EnergyPreference.pref_name references Preference.pref_name

EnergyPreference.Device_ID references EnergyConsumption.Device_ID

EnergyPreference.rate references EnergyConsumption.rate

HealthPreference (User_ID, pref_name, caloriesPerDay, sleepHour, date)

HealthPreference.User_ID references Preference.User_ID

HealthPreference.pref_name references Preference.pref_name

HealthPreference.date references Health.date

Reminder (Rem_ID, User_ID)

Reminder.User_ID references User.User_ID

AdminSetsReminder (Rem_ID, Admin_ID)

AdminSetsReminder.Admin_ID references Admin.User_ID

AdminSetsReminder.Rem_ID references Admin.User_ID

TaskReminder (Rem_ID, Task_ID)

TaskReminder.Task_ID references Task.Task_ID

EventReminder (Rem_ID, Event_ID)

EventReminder.Event_ID references Event.Event_ID

Activity (Activity_ID, name, startTime, endTime, timeFrame, User_ID)

Where Activity.timeFrame = Acitivity.endTime – Acitivity.startTime

Activity.User_ID references User.User_ID

Room (Room_ID, type, status, User_ID)

Room.User_ID references User.User_ID

AdminRoomManager (Room_ID, Admin_ID)

AdminRoomManager.Admin_ID references Admin.User_ID

AdminRoomManager.Room_ID references Room.Room_ID

RoomActivity (Activity_ID, Room_ID)

RoomActivity.Activity_ID references Activity.Activity_ID

RoomActivity.Room_ID references Room.Room_ID

Device (Device_ID, type, status, duration, currentLocation, Room_ID, User_ID)

Device.Room_ID references Room.Room_ID

Device.User_ID references User.User_ID

AdminDeviceManager(Device_ID, Admin_ID)

AdminDeviceManager.Admin_ID references Admin.User_ID

AdminDeviceManager.Device_ID references Device.Device_ID

Log (Log_ID, Admin_ID)

Log.Admin_ID references Admin.User_ID

ActivityLog (Log_ID, Activity_ID)

ActivityLog.Log_ID references Log.Log_ID

ActivityLog.Activity_ID references Activity.Activity_ID

RoomLog (Log_ID, Room_ID)

RoomLog.Log_ID references Log.Log_ID

RoomLog.Room_ID references Room.Room_ID

DeviceLog (Log_ID, Device_ID)

DeviceLog.Log_ID references Log.Log_ID

DeviceLog.Device_ID references Device.Device_ID

SecurityCamera (Camera_ID, Room_ID)

SecurityCamera.Room_ID references Room.Room_ID