User (User\_ID, first\_Name, last\_name, password, email)

Admin (User\_ID, limit\_no, address)

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*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)

---------------------------

*CalendarRecommendartion.Calendar\_ID references Calendar.Calendar\_ID*

*CalendarRecommendartion.Rec\_ID references Recommendation.Rec\_ID*

EnergyPreference (User\_ID, pref\_name, EnergyPerDevice, Device\_ID,rate)

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*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)

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*Reminder.User\_ID references User.User\_ID*

AdminSetsReminder (Rem\_ID, Admin\_ID)

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*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)

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*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)

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*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)

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*Log.Admin\_ID references Admin.User\_ID*

ActivityLog (Log\_ID, Activity\_ID)

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*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.Log\_ID references Device.Device\_ID*

SecurityCamera (Camera\_ID, Room\_ID)

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*SecurityCamera.Room\_ID references Room.Room\_ID*