Manual of Installation and Configuration for SMART-BUS Android Official Pro Version

(Manual version: 1.8
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Content

The android smart-bus free version has only one way control, you can control lighting, mood, HVAC, Music control.

B. Install android application to android device

Step1.please **Form google play stroe downlown apk of name smartBus and install the smartBus APP**

Step2.After you have successfully installed it, you can see the icon "SMART-BUS ", run it.

Notice:
  After you run the app SMART-BUS, this program   will generate a named SMART-BUS folder on your memory card inside,in this folder to generate a default database

C. Install windows software "SQLiteExpertPersSetup for windows.exe" on your computer so that you can modify the SQLite database

If you do not have this software "SQLite Expert Personal for windows", you can download it from SQLite official website.
Or you can go to download from the link I provided

http://www.sqliteexpert.com/download.html

After downlaoding and installing on your computer

D. Open database "database.db3"
Before you make any modification, please backup database "Database.db3" which is under folder "SMART-BUS"
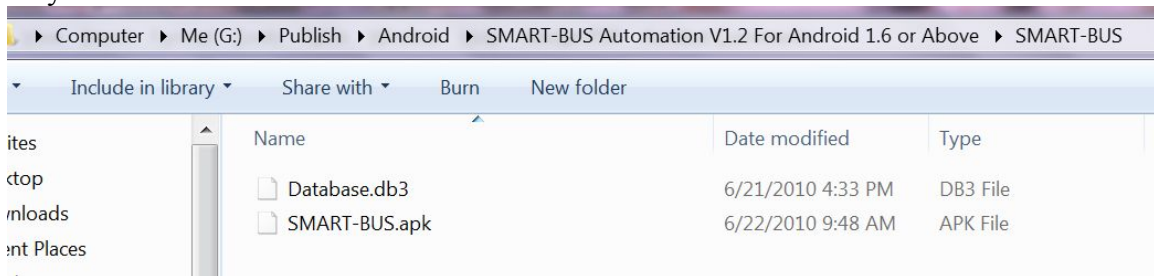
After you install the software **"SQLiteExpertPersSetup for windows.exe", run the**
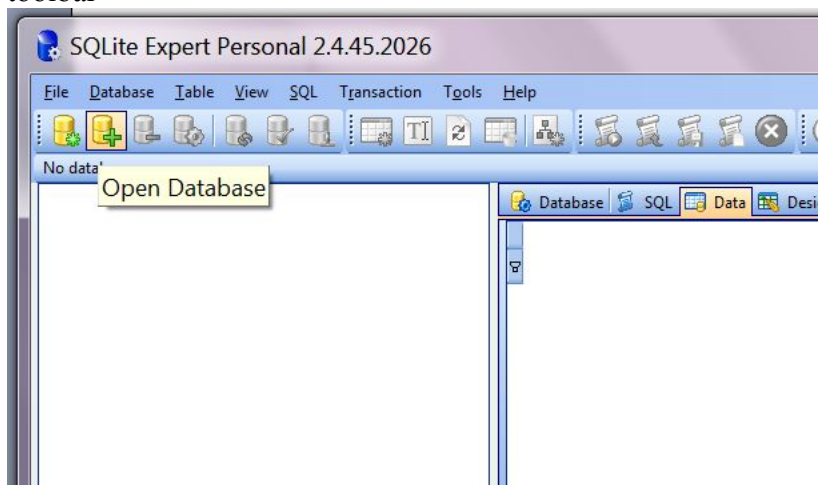

software.
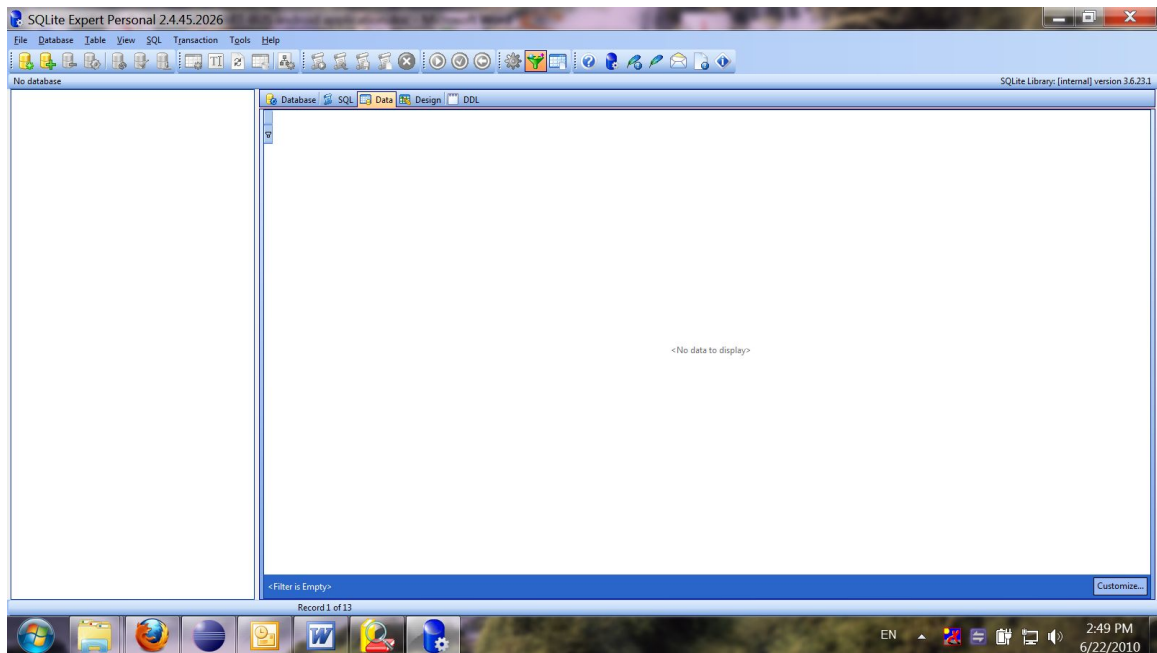
Open the our database "Database.db3"
you will find out database "Database.db3" under the folder "SMART-BUS"

On the software "SQLite Expert Personal ", click the button "Open Database" on the toolbar

Choose the file "database.db3"
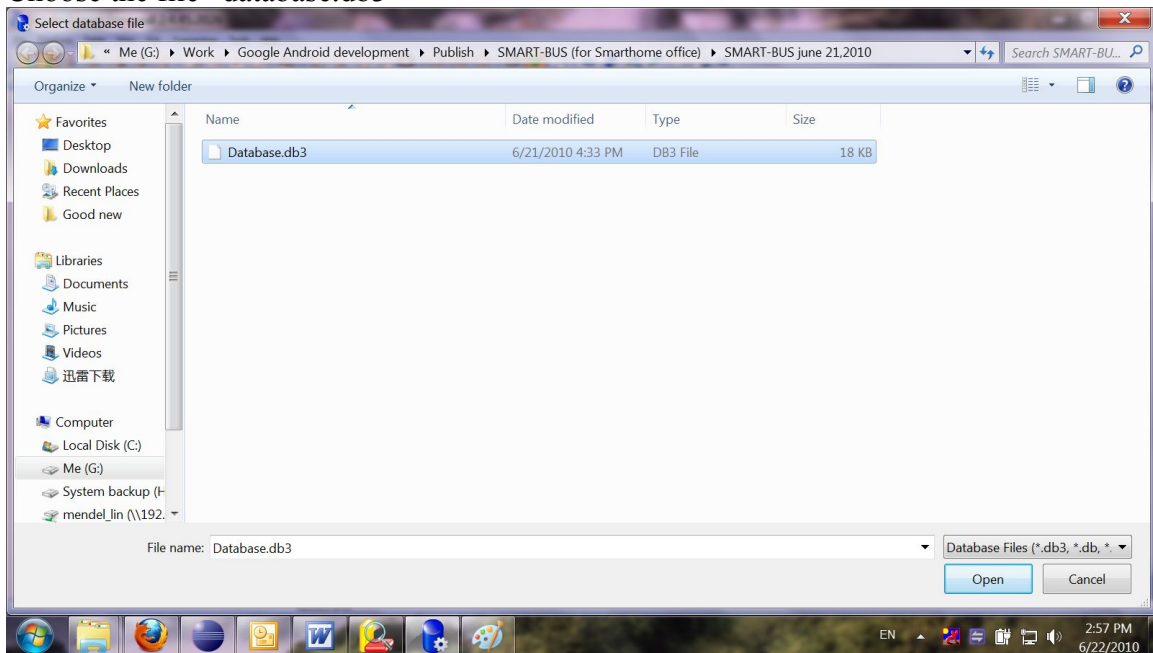
You will view all the tables of this database
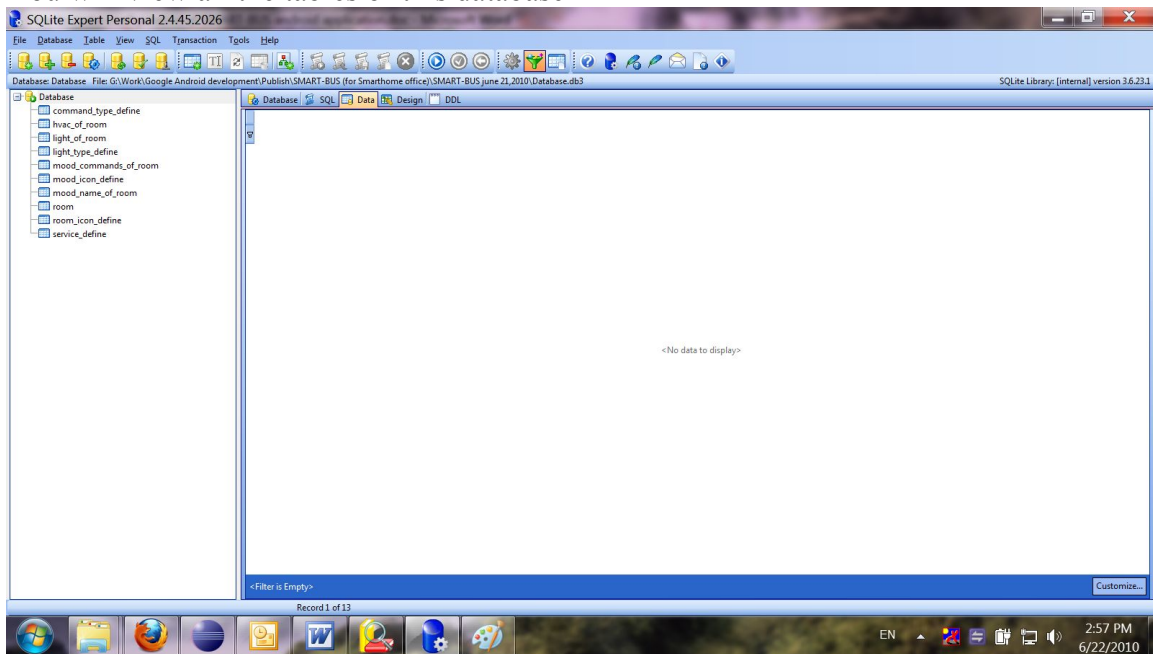
From now on, you can start to make configuration.

E. Room Settings

before we make the configuration on the database, please do not change the structure of database.

        For example:
        Do not delete any table
        Do not change any table name
        Do not add/change/delete any fields of tables

        We just need add/edit/delete data on the tables.

We store the data of room to table "room", Select the table "room" on the left side
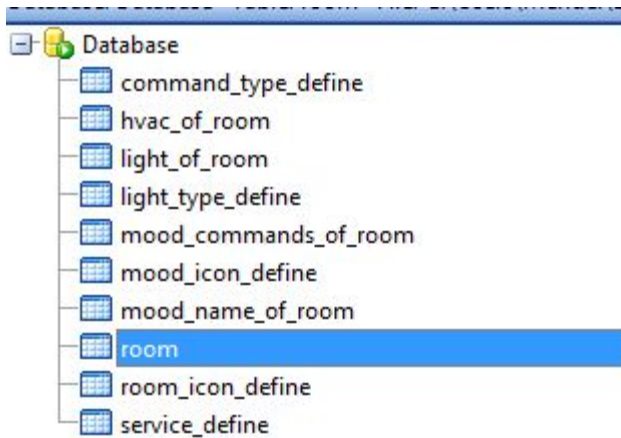
Click "+" to insert record (add room),see below picture
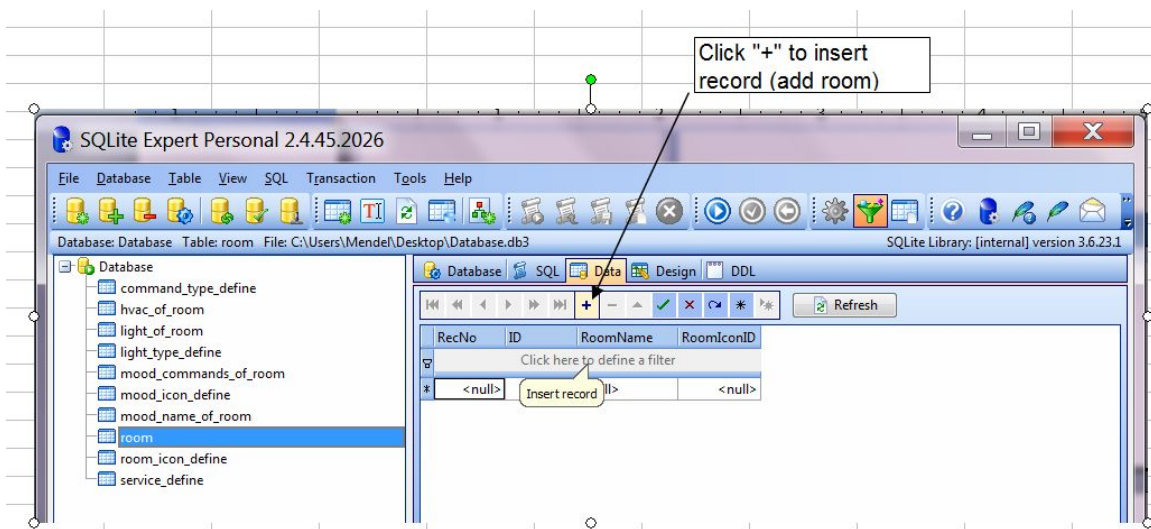
There are 3 fields of table "room", they are ID , RoomName,RoomIconID.

Define of Table "room"

Field Name	Remark	Value
ID	This is room ID, it's very important for programming. It also will be use for other tables.	Number, Start from 1
RoomName	this is room name; it will be show on the room list of main page of android Application.	
RoomIconID	this field is for room icon, Please see the following	from 0 to 15

	define of RoomIconID	

The define of RoomIconID

Define of RoomIconID		
RoomIconID	**Remark**	**Icon**
0	Default icon	
1	Bed room	
2	Dining room	
3	Entrance	
4	Exhibition	
5	Family room	

6	GYM	
7	Guest room	
8	Kitchen	
9	Lobby	
10	Manager room	
11	Master bed room	
12	Office/study room	

13	Outside/garden	
14	Parking	
15	Stair	
16	parlor	
17	Rest room	
18	Training room	
19	Children`s Room	

20	KTV/Bar	
21	Demo kit	
22	Hotel Demo	

Add room
ID=1
RoomName=Meeting Room,
RoomIconID=12   (check the define "**RoomIconID**" above)

If you want to add more rooms, just do it the same as above.

Modify room
Select the row of table "room" , you can modify the room

Database: Database   Table: room   File: C:\Users\Mendel\Desktop\Database.db3
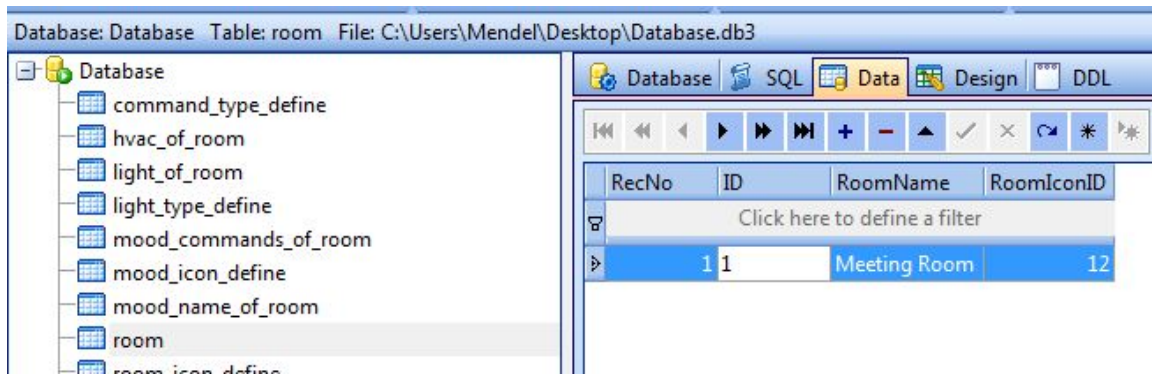
Delete room
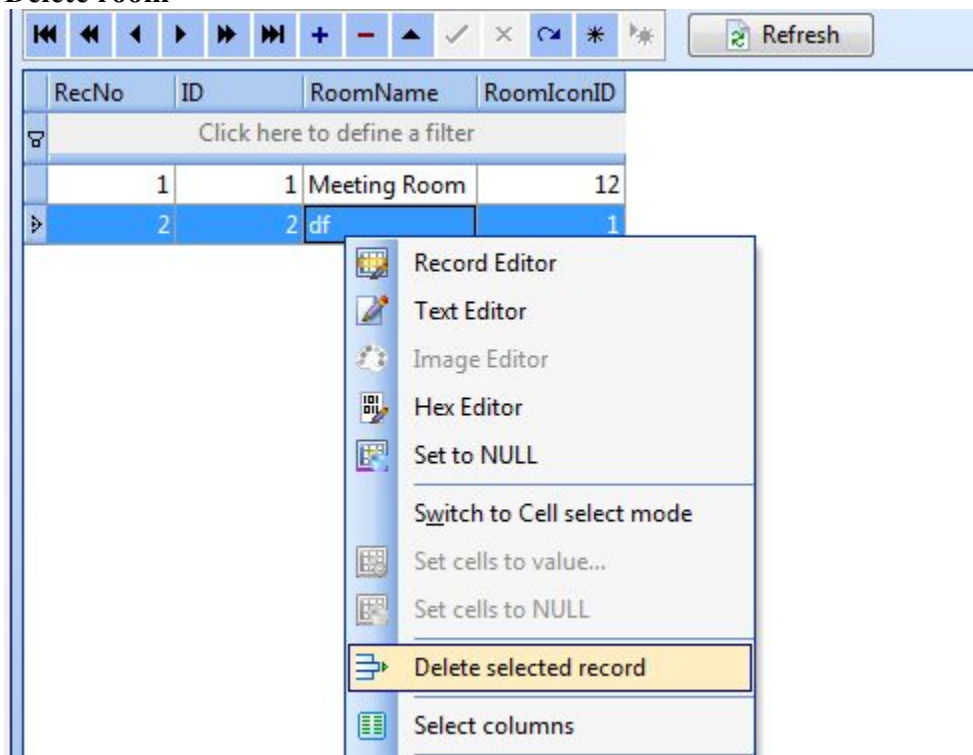
F. Lighting settings of the room

Select the table "**light_of_room**"
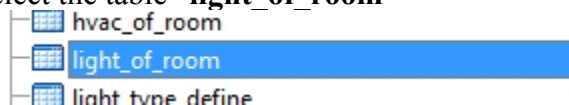
The table "**light_of_room**" has 9 fields ,please see the define following:

Table "light_of_room"

Field	Remark	Value
RoomID	You can know the RoomID from the table "room". For example , the RoomID of meeting room is 1 which we have already added above	Start from 1
LightID	ID of light	Start from 1
LightRemark	Light remark	
SubnetID	SubnetID and DeviceID are the address of Dimmer of Relay	0-254
DeviceID	SubnetID and DeviceID are the address of Dimmer of Relay	0-254
ChannelNo	Channel no of light	0-254
BrightnessValue	This is the percentage of lighting brightness , 0-100	0-100
CanDim	0 or 1 (1: the light can be dimmed, 0 : the light can not be dimmed the light, only on/off)	0 or 1
LightTypeID	Light type icon define (please see the following define)	1-4

The define of LightTypeID

LightTypeID	Remark	Icon
1	incandescent light	

2	spot light	
3	fluorescent light	
4	chandelier light	
5	Table lamp ligth	
6	Table lamp ligth2	
7	lamp	
8	Table lamp ligth3	

6

Add light 1 "surround" , Press
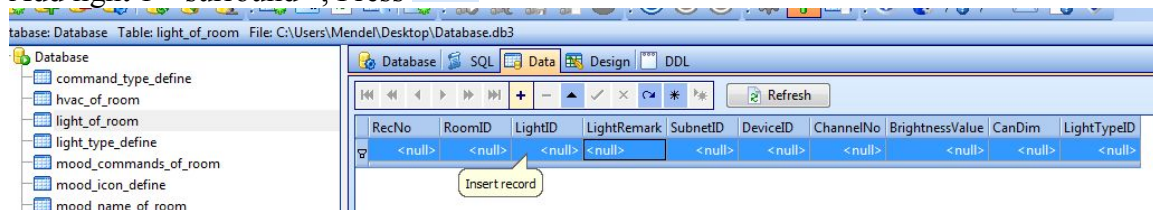
Input data of light

Add light 2 "fluorescent"
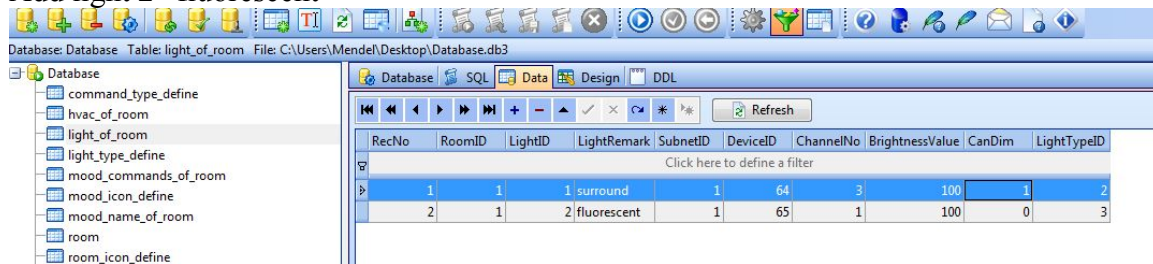
So you can add limitless lights to this room.

Modify Light of room

Delete the light of room
Select the row that you want to delete, right click and select "Delete selected record"
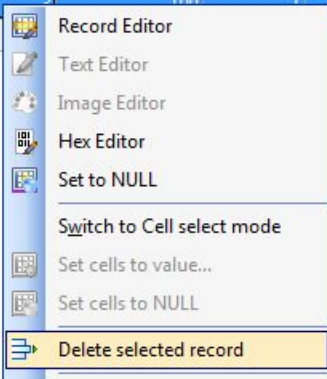
RecNo	RoomID	LightID	LightRemark	SubnetID	DeviceID	ChannelNo	BrightnessValue	CanDim	LightTypeID
				Click here to define a filter					
1	1	1	surround	1	64		100	1	2
2	1	2	fluorescent	1	65				3

Record Editor
Text Editor
Image Editor
Hex Editor
Set to NULL

Switch to Cell select mode
Set cells to value…
Set cells to NULL

Delete selected record

<mark>G. Moods Settings of Room</mark>

There are 2 steps to setup mood of room
Step 1: add mood name to current room
(Table "mood_name_of_room")

Step2: add commands to current mood of current room
(Table "mood_commands_of_room")

Step 1:
Select the table "mood_commands_of_room"
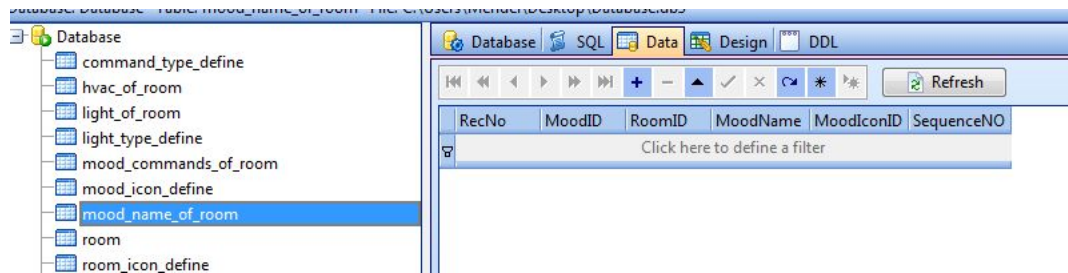
The define of table "mood_name_of_room"

Field	Remark	Value
MoodID	The id of mood	Start from 1
RoomID	The id of room, you can find out the RoomID from the table "room"	
MoodName	Mood name	
MoodIconID	This is the mood icon id, you can choose the icon that you want to use from our icon library, please see the define of MoodIconID	
SequenceNo	Sequence ID, this field like the "Order By", it will arrange the sequence of show	Start from 0,
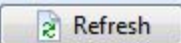
Define of mood icon ID

MoodIconID	Remark	Icon
0	Default mood	
1	Goodbye	
2	Listen to music	
3	Mafia	
4	Meeting	
5	Presentation	
6	Relax	
7	Romantic	
8	watch movie	
9	watch TV	

10	All on	💡

Add mood name to the room

Press [+] ,then input the data like the following

RecNo	MoodID	RoomID	MoodName	MoodIconID	SequenceNO
1	1	1	All on	10	1

Modify mood name of room

RecNo	MoodID	RoomID	MoodName	MoodIconID	SequenceNO
<null>	1	1	All on	10	1

Delete mood name of room
select the row of table that you want to delete, then right click and select "Delete selected record"

RecNo	MoodID	RoomID	MoodName	MoodIconID	SequenceNO
<null>	1	1	All on		

- Record Editor
- Text Editor
- Image Editor
- Hex Editor
- Set to NULL
- Switch to Cell select mode
- Set cells to value...
- Set cells to NULL
- Delete selected record

Step 2:

Add commands of current mood
select the table "mood_commands_of_room"

The define of table "mood_commands_of_room"

FieldName	Remark	Value
RoomID	See the table "room"	Start from 1
MoodID	See the table "mood_name_of_room"	Start from 1
CommandID	Command ID	Start from 0
SequenceNo	Sequence No, this is the sequence of your commands of current mood which to be executed	Start from 0
Remark		
SubnetID	Address of module	0-254
DeviceID	Address of module	0-254
CommandTypeID	Command type,see the define below	0-12
FirstParameter	It has different meaning depend on the field "CommandTypeID",see the define below	0-255
SecondParameter	It has different meaning depend on the field "CommandTypeID",see the define below	0-255
ThirdParameter	It has different meaning depend on the field "CommandTypeID",see the define below	0-65535
DelayMillisecondAfterSend	Delay time after sent current command. **1 second=1000 millisecond Ex. If you want to delay 1 second, should input 1000**	Start from 0 , unit: Millisecond

The define of Command Type

CommandTypeID	Name	Remark	FirstParameter	SecondParameter	ThirdParameter
0	Scene control		Zone No (0-254)	Scene No (0-254)	Unused (set 0)
1	Sequence Control		Zone No (0-254)	Sequence No (0-254)	Unused (set 0)
2	Univers		Universal	Switch	Unused

			Switch ID (0-255)	Control status (255:on 0: off)	(set 0)
	al Switch Control				
3	Invalid	Invalid command, it will not take any actions	Any value (0-255)	Any value (0-255)	Any value (0-65535)
4	Single Channel Control		Channel No (1-254)	Brightness percentage (0 -100)	Running Time, unit: second (0 -3600)
5	Broadcast scene	Run the specific scene in all area of current module	Broadcast area (Must be set 255)	Scene No (0-254)	Unused (set 0)
6	Broadcast All channels	Control all the channels of current module	Broadcast all channels (Must be set 255)	Brightness percentage (0 -100)	Running Time, unit: second (0 -3600)
7	Curtain Control	Control curtain if you are using our curtain module	Curtain No (1-4)	Curtain Control Status (0: Stop 1: Open 2: Close)	Unused (set 0)
8	Timer Control		Channel No (1-255)	Control Status (255: open 0 : close)	Unused (set 0)
9	GPRS Control	Control our GPRS module (SMS module) , Before you use this GPRS command, You need use GPRS management software	Type ID (0: invalid 1: SMS Message)	GPRS Command No (0-255)	Unused (set 0)

			FirstParameter (TypeID)	SecondParameter (Value)	ThirdParameter (unused)
		to make some configurations			
10	Panel control		0 (invalid)	0	0
			1 (enable/disable IR receive function of DLP)	0: (disable) 1: (enable)	0
			2 (enable/disable key lock of DLP)	0: disable key lock of DLP 1: enable key lock of DLP	0
			3 (Power on/off of Air condition)	0: (power off) 1: (power on)	0
			4 (Set cool temperature)	0-30 (cool settings temperature, you can see the temperature range from DLP of SBUS software)	0
			5 (FAN Speed)	0: (auto) 1: (High) 2: (Medium) 3: (low)	0
			6 (AC mode)	0: (Cool) 1: (Heat) 2: (FAN) 3: (Auto)	0
			7 (Set Heat	0-30 (heat	

			temperature)	settings temperature, you can see the temperature range from DLP of SBUS software)	
11	Security Mode control		Zone no (1-8)	Mode No 1: vacation 2: away 3: night 4: Night with guest 5: Day 6: Disarm	Unused (set 0)
12	Security Alarm		Zone no (1-8)	Alarm No 1: vacation 2: Away 4: Night 8: Night with guest 16: Day 32: Siren 64: Power 128: Temperature 256: Fire 512: Gas 1024: Panic 2048: Emergency 4096: Current	Unused (set 0)

Add command of mood

RecNo	RoomID	MoodID	CommandID	SequenceNo	Remark	SubnetID	DeviceID	CommandTypeID	FirstParameter	SecondParameter	ThirdParameter	DelaySecondAfterSend
					Click here to define a filter							
1	1	4	1	1	goodbye in meeting room 1	1	65	4	1	0	0	0
2	1	4	2	2	goodbye in meeting room 2	1	64	0	1	0	0	0

Modify command of mood

RecNo	RoomID	MoodID	CommandID	SequenceNo	Remark	SubnetID	DeviceID	CommandTypeID	FirstParameter	SecondParameter	ThirdParameter	DelaySecondAfterSend
					Click here to define a filter							
1	1	4	1	1	goodbye in meeting room 1	1	65	4	1	0	0	0
2	1	4	2	2	goodbye in meeting room 2	1	64	0	1	0	0	0

Delete command of mood

RecNo	RoomID	MoodID	CommandID	SequenceNo	Remark	SubnetID	DeviceID	Comm
					Click here to define a filter			
1	1	4	1	1	goodbye in meeting room 1	1	65	
2	1	4	2			1	64	

- Record Editor
- Text Editor
- Image Editor
- Hex Editor
- Set to NULL
- Switch to Cell select mode
- Set cells to value...
- Set cells to NULL
- Delete selected record

H. HVAC Settings of Room

We will control HVAC by DLP panel, so we just need to set the address of DLP.
Select the table "hvac_of_room"

Database
- command_type_define
- hvac_of_room
- light_of_room

Define of table "hvac_of_room"

Field	Remark	Value
RoomID	See the table "room"	

SubnetIDOfDLP	The address of DLP	0-254
DeviceIDOfDLP	The address of DLP	0-254

Setup HVAC of room
For example:
The address of DLP in current room is:
Subnet ID: 1
Device ID: 6

I:

Add shades to the Zone

select table ShadesInZone

Table: ShadesInZone	
FileName	**DESC**
ZoneID	ZoneID can get from the table Zones
ShadeID	ShadeID start from 1
ShadeName	The Name of shade
ShadeIconID	Always 1
SequenceNo	The order of show

HasStop	If has the function of shade stop, please put 1, otherwise put 0

Suppose to the zone ID=3

Commands for the shade

Select table **ShadesCommands**

Table name: ShadesCommands

Fields | Indexes | Foreign Keys | Constraints

Index	Name	Declared Type
1	ZoneID	INT
2	ShadeID	INT
3	ShadeControlType	INT
4	CommandID	INT
5	SequenceNo	INT
6	Remark	NVARCHAR(50)
7	SubnetID	INT
8	DeviceID	INT
9	CommandTypeID	INT
10	FirstParameter	INT
11	SecondParameter	INT
12	ThirdParameter	INT
13	DelayMillisecondAfterSend	INT

Table: **ShadesCommands**	
FileName	**DESC**
ZoneID	ZoneID can get from the table Zones

ShadeID	ShadeID start from 1,check the table ShadesInZone
ShadeControlType	Open shade: 1 Close Shade: 0 Stop shade:2
CommandID	check the table ShadesInZone
SequenceNo	The order of the command executing.
Remark	
SubnetID	Address of Relay module / IR Emitter / 9in1
DeviceID	
CommandTypeID	See the commandTypeID definition below if you use relay module to control shade, you need to choose *Single channel control*; If you control shade by IR, you need to choose *Universal Switch Control.*
FirstParameter	Please see the table below
SecondParameter	Please see the table below
ThirdParameter	Please see the table below
DelayMillisecondAfterSend	Delay after this command has been sent Unit=millisecond

ConmandTypeID Definition

Command TypeID	Command Type Name	Remark	FirstParameter	SecondParameter	ThirdParameter
0	Scene control		Zone No (1-254)	Scene No (0-254)	Unused (set 0)
1	Sequence Control		Zone No (1-254)	Sequence No (0-254)	Unused (set 0)
2	Universal Switch Control		Universal Switch ID (0-255)	Switch Control status (255:on 0: off)	Unused (set 0)
3	Invalid	Invalid command, it will not take any actions	Any value (0-255)	Any value (0-255)	Any value (0-65535)
4	Single Channel Control		Channel No (1-255)	Brightness percentage (0 -100)	Running Time, unit: second (0 -3600)
5	Broadcast scene	Run the specific scene in all	Broadcast area (Must be set 255)	Scene No (0-254)	Unused (set 0)

		area of current module			
6	Broadcast All channels	Control all the channels of current module	Broadcast all channels (Must be set 255)	Brightness percentage (0 -100)	Running Time, unit: second (0 -3600)
7	Curtain Control	Control curtain if you are using g3 curtain module	Curtain No (1-4)	Curtain Control Status (0: Stop 1: Open 2: Close)	Unused (set 0)
8	Timer Control		Channel No (1-255)	Control Status (255: open 0 : close)	Unused (set 0)
9	SMS Control	Control G3 SMS module	Type ID (0: invalid 1: SMS Message)	SMS Command No (0-255)	Unused (set 0)
10	Panel control				

Panel control for A/C

FirstParameter (TypeID)	SecondParameter (Value)	ThirdParameter
0=(invalid)	0	0
1=(enable/disable IR receive function of DLP)	0: (disable) 1: (enable)	0
3=(Power on/off A/C)	0: (power off) 1: (power on)	0
4=(cool Set point)	0-30 c 32-86F	0
5=(FAN Speed)	0: (auto) 1: (High) 2: (Medium) 3: (low)	0
6=(AC mode)	0: (Cool) 1: (Heat) 2: (FAN) 3: (Auto)	0
7=(Heat set point)	0-30 c 32-86F	
8=(Auto Set point)	0-30 c 32-86F	
Invoking DDP Button	18	1 byte DDP button number Scope 1-32 1 = left of the first button of Pag1 from top to bottom 2 = right of the first button of Pag1 from

					top to bottom 3 = left of the second button from top to bottom of Pag1 4 = 2R P1 , 5 = 3L P1, 6 = 3R P1, 7 = 4L P1, 8 = 4R P1; 9 = 1L P2, 10 = 1R P2, 11 = 2L P2, 12 = 2R P2, 13 = 3L P2, 14 = 3R P2 …………… 32 = right of the fourth button of Pag4
			Turn on/off all AC controlled by one DDP	18	33 Has one more byte,(0=All off;1=All on)
			Go to Page	0x16	Page No 1-7
11	Security Mode control		Zone no (1-8)	Mode No 1: vacation 2: away 3: night 4: Night with guest 5: Day 6: Disarm	Unused (set 0)
12	Security Alarm		Zone no (1-8)	**Alarm No** 1: vacation 2: Away 4: Night 8: Night with guest 16: Day 32: Siren 64: Power 128: Temperature 256: Fire 512: Gas 1024: Panic 2048: Emergency 4096: Current	Unused (set 0)
18	Z-Audio		Z-Audio		

			FirstParameter (Type ID)	SecondParameter (Value)	ThirdParameter
			1=Music Source	Music Source No SD card =1 Audio In =2 FTP Server =3 FM Radio =4	N/A
			3=Song List / Radio List Control	**Type of list Control** PREV. Song List =1 Next Song List=2 Specify Song List No=3 PREV Radio Channel=4 Next Radio Channel =5 Specify Radio No=6	Song List No / Radio No (only available when Second Parameter is equal 3 or 6)
			4=Play Control	Previous Song=1 Next Song=2 Play=3 Stop=4	N/A
			5=Volume Control	Percentage of VOL (0~ 100, 100% is max. VOL, 0 is mute)	N/A
			6=Specify Song Control	Song List No (1byte,0-255, Song List No 0 is for alarm voice)	**Song No** (1 – 999)

Example Settings if control shade by relay module
Command Type: Single Channel control (ID=4)
ShadeControlType: Open shade(ID=1)

Example Settings if control shade by relay module
Command Type: Single Channel control (ID=4)
ShadeControlType: Close shade (ID=0)

RecNo	ZoneID	ShadeID	ShadeControlT...	Comman...	Seque...	Remark	SubnetID	DeviceID	CommandTypeID	FirstParameter	SecondParameter	ThirdPar...	Delay...
1	1	1	1	1	1	open shade	1	65	4	1	100	0	2000
2	1	1	1	2	2	open	1	64	2	1	0	0	2000
3	1	1	1	1	3	open	1	64	2	1	6	0	2000
4	1	1	0	1	1	close	1	64	2	1	7	0	2000
5	1	1	0	1	3	close	1	64	4	1	8	0	2000
6	1	1	2	2	3	stop	1	65	4	1	0	0	2000
7	1	1	0	2	2	close	1	65	4	1	0	0	0
8	3	1	1	1	1	Open shade	1	3	4	1	100	0	0
9	3	1	0	1	1	close shade	1	3	4	2	100	0	0

Example Settings if control shade by relay module
Command Type: Single Channel control (ID=4)
ShadeControlType: Stop shade (ID=2)

RecNo	ZoneID	ShadeID	ShadeControlT...	Comman...	Seque...	Remark	SubnetID	DeviceID	CommandTypeID	FirstParameter	SecondParameter	ThirdPar...	Delay...
1	1	1	1	1	1	open shade	1	65	4	1	100	0	2000
2	1	1	1	2	2	open	1	64	2	1	0	0	2000
3	1	1	1	1	3	open	1	64	2	1	6	0	2000
4	1	1	0	1	1	close	1	64	2	1	7	0	2000
5	1	1	0	1	3	close	1	64	4	1	8	0	2000
6	1	1	2	2	3	stop	1	65	4	1	0	0	2000
7	1	1	0	2	2	close	1	65	4	1	0	0	0
8	3	1	1	1	1	Open shade	1	3	4	1	100	0	0
9	3	1	0	1	1	close shade	1	3	4	2	100	0	0
10	3	1	2	1	1	Stop shade	1	3	4	1	0	0	0
11	3	1	2	2	2	Stop shade	1	3	4	2	0	0	0

Example Settings if control shade by IR
Command Type: Universal Switch (ID=2)
ShadeControlType: Open shade(ID=1)

RecNo	ZoneID	ShadeID	ShadeControlT...	Comman...	Seque...	Remark	SubnetID	DeviceID	CommandTypeID	FirstParameter	SecondParameter	ThirdPar...	Delay...
1	1	1	1	1	1	open shade	1	65	4	1	100	0	2000
2	1	1	1	2	2	open	1	64	2	1	0	0	2000
3	1	1	1	1	3	open	1	64	2	1	6	0	2000
4	1	1	0	1	1	close	1	64	2	1	7	0	2000
5	1	1	0	1	3	close	1	64	4	1	8	0	2000
6	1	1	2	2	3	stop	1	65	4	1	0	0	2000
7	1	1	0	2	2	close	1	65	4	1	0	0	0
8	3	1	1	1	1	Open shade	1	3	4	1	100	0	0
9	3	1	0	1	1	close shade	1	3	4	2	100	0	0
10	3	1	2	1	1	Stop shade	1	3	4	1	0	0	0
11	3	1	2	2	1	Stop shade	1	3	4	2	0	0	0
12	3	2	1	1	1	Open shade	1	3	2	1	255	0	0
13	3	2	0	1	1	close shade	1	3	2	2	255	0	0

Example Settings if control shade by IR
Command Type: Universal Switch (ID=2)
ShadeControlType: Close shade(ID=0)

RecNo	ZoneID	ShadeID	ShadeControlT...	Comman...	Seque...	Remark	SubnetID	DeviceID	CommandTypeID	FirstParameter	SecondParameter	ThirdPar...	Delay...
1	1	1	1	1	1	open shade	1	65	4	1	100	0	2000
2	1	1	1	2	2	open	1	64	2	1	0	0	2000
3	1	1	1	1	3	open	1	64	2	1	6	0	2000
4	1	1	0	1	1	close	1	64	2	1	7	0	2000
5	1	1	0	1	3	close	1	64	4	1	8	0	2000
6	1	1	2	2	3	stop	1	65	4	1	0	0	2000
7	1	1	0	2	2	close	1	65	4	1	0	0	0
8	3	1	1	1	1	Open shade	1	3	4	1	100	0	0
9	3	1	0	1	1	close shade	1	3	4	2	100	0	0
10	3	1	2	1	1	Stop shade	1	3	4	1	0	0	0
11	3	1	2	2	2	Stop shade	1	3	4	2	0	0	0
12	3	2	1	1	1	Open shade	1	3	2	1	255	0	0
13	3	2	0	1	1	close shade	1	3	2	2	255	0	0

Fan control

Like this setup into database

RecNo	RoomID	FanID	FanRemark	SubnetID	DeviceID	ChannelNo	FanTypeID	SequenceNo
1	18	1	fan1	1	5	1	1	1
2	18	2	fan2	1	5	2	2	2
3	18	3	fan3	1	5	3	3	3
4	18	4	fan4	1	5	4	4	4

1	
2	
3	
4	

J. Copy your database to android device

You need to know that before do it:

Do not change the database name
Do not change the location of folder "SMART-BUS"
Do not change the folder name "SMART-BUS"

After you finished the modification of database, you need to copy the database to android device
(SMART-BUS android application is located under folder "SMART-BUS" of the root directory of android device)

Step1.You need to close the software "SQLite Expert Personal" before you copy the database "Database.db3"

Step2. Connect your android device to your computer by cable.

Step3. The "SMART-BUS" android application is located under the folder "SMART-BUS" of android device, before you update database, you'd better backup your old database.
Then copy your latest database that you have modified under the folder "SMART-BUS" of android device, and replace it.
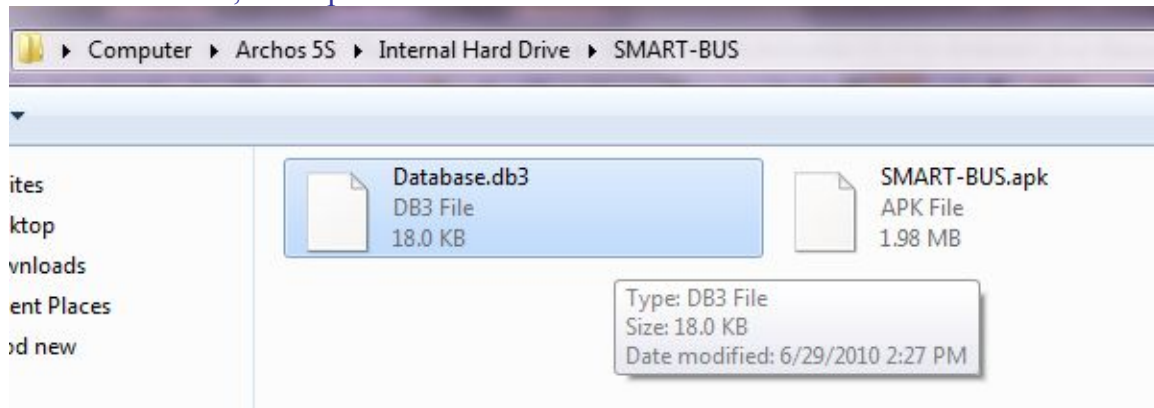
You don't need install the application again, because you just modify the database, the application file APK and database is separated.

Go to run "SMART-BUS" application, you will see the results what you did.

If have anything wrong, please check your database settings.

If you have any questions, please contact me.