Table: sensor		
Column	Data type	Constraints
sensor_idnr	INTEGER	•PRIMARY KEY
sensor_type	TEXT	•NOT NULL •UNIQUE
sensor_unit	TEXT	•NOT NULL

Table: sensordata		
Column	Data type	Constraints
mac_address	TEXT	•NOT NULL •REFERENCES wastebin (mac_adress)
sensor_idnr	INTEGER	•NOT NULL
sensor_value	INTEGER	•NOT NULL
timestamp	TEXT	•NOT NULL

Table: settings		
Column	Data type	Constraints
mac_adress	TEXT	•REFERENCES wastebin (mac_adress)
SSID	TEXT	•NOT NULL
password	TEXT	
mqtt_server	TEXT	•NOT NULL
mqtt_username	TEXT	
mqtt_password	TEXT	
mqtt_port	INTEGER	•NOT NULL
sensor_data_topic	TEXT	•NOT NULL

Table: testperson		
Column	Data type	Constraints
idnr	INTEGER	•PRIMARY KEY
surname	TEXT	•NOT NULL
birthyear	INTEGER	
nrofroommates	INTEGER	
postalcode	TEXT	•NOT NULL
housenr	TEXT	•NOT NULL
streetname	TEXT	•NOT NULL

Table: wastebin		
Column	Data type	Constraints
mac_adress	TEXT	•REFERENCES testperson (idnr)
testperson	INTEGER	•PRIMARY KEY
wastebinnr	INTEGER	•UNIQUE •NOT NULL

View: view_al_testpersons_with_wastebinnr
Query:

```
SELECT tp.*,
       wb.wastebinnr
  FROM testperson AS tp
       JOIN
       wastebin AS wb ON tp.idnr = wb.testperson
```

View: view_all_sensors_data

Query:

```
SELECT s.sensor_type,
       CASE WHEN sensor_type = "lidposition" AND
                 sd.sensor_value = 1 THEN 'closed' WHEN sensor_type = "lidposition" AND
                                                        sd.sensor_value = 0 THEN 'open' ELSE sd.sensor_value END AS sensorvalue,
       sd.timestamp,
       sd.mac_address
  FROM sensor AS s
       JOIN
       sensordata AS sd ON s.sensor_idnr = sd.sensor_idnr
```

View: view_all_wastebin_settings

Query:

```
SELECT w.wastebinnr,
       w.mac_adress,
       s.SSID,
       s.password,
       s.mqtt_server,
       s.mqtt_username,
       s.mqtt_password,
       s.mqtt_port,
       s.sensor_data_topic,
       w.testperson
  FROM wastebin AS w
       JOIN
       settings AS s ON w.mac_adress = s.mac_adress
```

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