1.user/

1. register/

- ### import_user.php
  - **Method** : POST
  - **Input** : user_name, email, password, type, photo, phone_num
  - **Output** : "true" = added successfully, "false" = something is wrong
  - *link* = /api/user/register/import_user.php

- ### check_mail.php
  - **Method** : GET
  - **Input** : email
  - **Output** : "yes" = the email exists, "no" = the email doesn't exist
  - *link* : /api/user/register/check_mail.php?email=hanfy@gmail.com

2. login/

- ### get_user.php
  - **Method** : POST
  - **Input** : email, password
  - **Output** (JSON) :
    - { status : wrong_email} = email is wrong or doesn't exist
    - { status : wrong_pass } = password and email doesn't match
    - { status : true, user_id : value, user_name : value, email : value, type : value, photo : value, phone_num : value } = email & password match
  - *link* : /api/user/login/get_user.php

2.hardware/

1. get_all_blocks.php
- **Method** : GET
- **Input** : user_id
- **Output (JSON)** : { blocks_ids : ["id0", "id1", "id2", …] ,
  blocks_names : ["name0", "name1", "name2", …] }
- *link* : /api/hardware/get_all_blocks.php?user_id=11

2. get_rooms_block.php
- **Method** : GET
- **Input** : user_id, block_id
- **Output (JSON)** : {"rooms_ids":["id0", "id1", "id2", …],
  "rooms_names":["name0", "name1", "name2", …]}
- *link* : /api/hardware/get_rooms_block.php?user_id=13&block_id=2

3. get_nodes_room.php

- **Method** : GET
- **Input** : user_id, room_id
- **Output (JSON)** : {"nodes_ids"["id0", "id1", "id2", …],
                         "nodes_ips":["ip0","ip1","ip2",...],
                         "connected":["true/false","true/false","true/false",...],
                         "last_request":["2013-09-22 19:53:39"," .. ",".." , ...]}
- *link* : /api/hardware/get_nodes_room.php?user_id=5&room_id=2

4. get_devices_node.php

- **Method** : GET
- **Input** : user_id, node_id
- **Output (JSON)** : {"devices_ids":["id0", "id1", "id2", …],
                         "devices_names":["name0", "name1", "name2", …],
                         "state":["on/off","on/off","on/off",...],
                         "devices_room_id":["id0", "id1", "id2", …],
                         "devices_block_id":["id0", "id1", "id2", …]}
- *link* : /api/hardware/get_devices_node.php?user_id=5&node_id=16

5. get_block_consumtion.php

- **Method** : GET
- **Input** : user_id, block_id
- **Output (JSON)** : {"block_name":"name",
                         "block_reading":"value",
                         "reading_time":"2007-05-28 05:25:28" }
- *Link* : /api/hardware/get_block_consumtion.php?user_id=2&block_id=19

6. get_block_info.php

- **Method** : GET
- **Input** : block_id
- **Output (JSON)** : {"block_name":"name",
                         "block_reading":"value",
                         "reading_time":"2006-04-01 09:25:34"}
- *link* : /api/hardware/get_block_info.php?block_id=1

7. get_room_info.php

- **Method** : GET
- **Input** : room_id
- **Output (JSON)** : {"room_name":"name",
                         "block_id":"id"}
- *link* : /api/hardware/get_room_info.php?room_id=4

8. get_node_info.php
- **Method** : GET
- **Input** : node_id
- **Output (JSON)** : {"node_id":"id",
  "ip_address":"ip",
  "connected":"true/false",
  "last_request":"1970-07-23 12:24:41",
  "room_id":"id"}
- *link* : /api/hardware/get_node_info.php?node_id=5

9. get_device_info.php
- **Method** : GET
- **Input** : device_id
- **Output (JSON)** : {"device_id":"id",
  "device_name":"name",
  "state":"on/off",
  "node_id":"id"}
- *link* : /api/hardware/get_device_info.php?device_id=5

10. add_block.php
- **Method** : GET
- **Input** : user_id, block_name
- **Output** : "done" , "wrong"
- *link* : /api/hardware/add_block.php?user_id=5&block_name=otherSide

11. add_room.php
- **Method** : GET
- **Input** : block_id, room_name
- **Output** : "done" , "wrong"
- *link* : /api/hardware/add_room.php?block_id=9&room_name=batCave

12. add_node.php
- **Method** : GET
- **Input** : room_id, ip_address, connected, last_request
- **Output** : "done" , "wrong"
- *link* : /api/hardware/add_node.php?room_id=5&ip_address=12345678&connected=true

13. add_device.php
- **Method** : GET
- **Input** : node_id, device_name, state
- **Output** : "done" , "wrong"
- *link* :/api/hardware/add_device.php?node_id=6&device_name=stbot&state=off

14. set_device_state.php

- **Method** : GET
- **Input** : device_id, state (on/off/disconnected)
- **Output** : "done" , "wrong"
- *link* :/api/hardware/set_device_state.php?device_id=6&state=off

15. get_devices_room.php

- **Method** : GET
- **Input** : user_id, room_id
- **Output (JSON)** : {"devices_ids":["id0", "id1", "id2", …],
                "devices_names":["name0", "name1", "name2", …],
                "state":["on/off/disconnected","on/off/disconnected","on/off/disconnected",...],
                "devices_node_id":["id0", "id1", "id2", …],}
- *link* : /api/hardware/get_devices_node.php?user_id=11&room_id=29

3. notifications/

1. add_notification.php

- **Method** : GET
- **Input** : user_id, content
- **Output** : "done", "wrong"
  link : /api/notifications/add_notification.php?user_id=2&content=hello

2. get_user_notifications.php

- **Method** : GET
- **Input** : user_id
- **Output** : {"notifications_ids":["id0", "id1", "id2", …],
          "notifications_times":["2016-03-01 14:30:00",...,….,….],
          "content":["value0","value1","value2",…]}
- *link* : /api/notifications/get_user_notifications.php?user_id=2

4. bills/

1. add_bill.php

- **Method** : GET
- **Input** : user_id, month, value, kwh_cost, limit
- **Output** : "done" , "wrong"
- *link* :/api/bills/add_bill.php?user_id=5&value=100&kwh_cost=5&month=March&limit=0

2. set_kwh_cost.php

- **Method** : GET
- **Input** : user_id, month, new_kwh_cost
- **Output** : "done" , "wrong"
- *link* :/api/bills/set_kwh_cost.php?user_id=5&month=March&new_kwh_cost=7

3. get_user_bills.php

- **Method** : GET
- **Input** : user_id
- **Output (JSON)** : {"bills_ids":["id0", "id1", "id2", …],

"bills_months":["January","March", "Month2",...],
"bills_values":["value0", "value1", "value2", …],
"KWH_Cost":["value0", "value1", "value2", …],
"bills_limits": ["value0", "value1", "value2", …]}

- *link* : /api/bills/get_user_bills.php?user_id=5

4. get_current_usage.php

- **Method** : GET
- **Input** : user_id
- **Output (JSON)** : {"blocks_ids" : ["id0", "id1", "id2", …],
  "blocks_names":["name0", "name1", "name2", …],
  "blocks_readings":["value0", "value1", "value2", …],
  "blocks_readings_time":["date0","date1"],
  "user_total_consumption": value }
- *link* : /api/bills/get_current_usage.php?user_id=18

5. set_limit.php

- **Method** : GET
- **Input** : user_id, month, new_limit
- **Output** : "done", "wrong"
- *link* : /api/bills/set_limit.php?user_id=1&month=March&new_limit=7

5.message/

1. send_message.php

- **Method** : GET
- **Input** : device_id, message
- **Output** : "done" , "wrong"
- *link* : /api/message/send_message.php?device_id=117&message=lol

2. request_message.php

- **Method** : GET
- **Input** : node_id
- **Output** : "", "message" this is dynamic as the message changes
- *link* : /api/message/request_message.php?node_id=74

6.schedule/ "done"

1. set_schedule.php

- **Method** : POST
- **Input (JSON)** : data = { device_id : id,
  day : "Sat,Sun,…",
  start_time : datetime,
  end_time : datetime,
  repetition : "once/weekly/this month/this year' }
- **Output** : "done" , "wrong"
- *Hint how to use it:*
  $data = array("device_id" => "18", "day" => "Sun", "start_time" => date('2016-03-01 14:30:00'), "end_time" => date('2016-03-01 14:00:00'), "repetition" => "once");

```
$jsonData = urlencode(json_encode($data));
$url = "http://lindabot.net23.net/AlaaIOT/api/schedule/set_schedule.php";
$ch = curl_init($url);
curl_setopt($ch, CURLOPT_CUSTOMREQUEST, "POST");
curl_setopt($ch, CURLOPT_POSTFIELDS, array("data"=>$jsonData) );
curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1);
$result = curl_exec($ch);
```

2. get_all_durations.php

- **Method** : GET
- **Input** : device_id
- **Output (JSON)** : {"durations_ids":["id0", "id1", "id2", …],
  "days":[["Sun"],["Sun"],["Sun,Mon"],...],
  "start_time":["2016-03-01 14:30:00",…,…,…],
  "end_time":["2016-03-01 14:00:00",…,…,...],
  "repetition":["once/weekly/this month/this year",...],
  "create_date":["2016-06-16 11:04:04",….]}
- **link** : /api/bills/get_all_durations.php?device_id=5

3. get_user_durations.php

- **Method** : GET
- **Input** : user_id
- **Output (JSON)** : {"durations_ids":["id0", "id1", "id2", …],
  "days":[["Sun"],["Sun"],["Sun,Mon"],...],
  "start_time":["2016-03-01 14:30:00",…,…,…],
  "end_time":["2016-03-01 14:00:00",…,…,...],
  "repetition":["once/weekly/this month/this year",...],
  "create_date":["2016-06-16 11:04:04",….]
  "device_ids":["id0", "id1", "id2", …]
  "device_name":["name0", "name1", "name2", …]
  "room_ids":["id0", "id1", "id2", …],
  "room_name":["name0", "name1", "name2", …]
  "block_ids":["id0", "id1", "id2", …]
  "block_name":["name0", "name1", "name2", …]}
- **link** : /api/bills/get_all_durations.php?device_id=5

7.readings/

1. get_block_readings.php

- **Method** : GET
- **Input** : block_id
- **Output** : {"block_name":"name",
  "readings_ids":[["id0","id1","id2",...],
  "readings_times":["2013-04-29 19:47:16","..","..", ...],
  "power_fact":["value0","value1","value2",...],
  "active_power":["value0","value1","value2",...],
  "voltage":["value0","value1","value2",...],
  "current":["value0","value1","value2",...]}
- **link** : /api/readings/get_block_readings.php?block_id=2

2. get_user_total_consumption.php

- **Method** : GET
- **Input** : user_id

- **Output** : {"blocks_ids":["id0","id1","id2",...],
  "blocks_names":["name0","name1","name2"],
  "blocks_consumption":["value0","value1","value2"],
  "total_consumtion":value}
- *link* : /api/readings/get_user_total_consumption.php?user_id=5

3. get_device_readings.php

- **Method** : GET
- **Input** : device_id
- **Output** : {"device_name":"name",
  "readings_ids":["value0","value1","value2",...],
  "readings_times":["2004-08-02 00:23:15","..","..",...],
  "readings_values":["value0","value1","value2",...]}
- *link* : /api/readings/get_device_readings.php?device_id=3

4. add_block_reading.php

- **Method** : GET
- **Input** : block_id, power_fact, active_power, voltage, current
- **Output** : "done", "wrong"
- *link* : /api/readings/add_block_reading.php?
  block_id=3&power_fact=12&active_power=11&voltage=120&current=20

2. add_device_reading.php

- **Method** : GET
- **Input** : device_id, reading
- **Output** : "done", "wrong"
- *link* : /api/readings/add_device_reading.php?device_id=30&reading=55