1. **User Login**
   - *POST* request URL https://128.199.204.199/users/login with Json data
     - POST with parameters
       ```
       {
           "mail" : "the user email",
           "passwd" : "user password"
       }
       ```
     - Server return in Json format
       ```
       {
             "status" : "success of fail",
             "uid" : "user id or null",
              "token": "user token or null"
             "wineries":{
                           {"wid ": "winery id 1", "wname":"winery name"},
                           {"wid ": "winery id 2", "wname":"winery name"}
                                 …
                           }
       }
       ```

2. **Load Ferments**
   - *POST* request URL https://128.199.204.199/ferments/pull
     - Post with parameters
       ```
       {
           "uid": "user id",
           "token" : "user token",
           "wid" : "winery id"
       }
       ```
     - Return in JSON format
       ```
       {
            "status":"success or fail",
           {"fid ": "ferment id 1", "tank_num": " tank number","mid":"mote
            local id", "wname":"winery name", "t_s": "start time"},

           {"fid ": "ferment id 2", "tank_num": " tank number","mid":"mote
            local id", "wname":"winery name", "t_s": "start time"}
                     …
       }
       ```

3. **Load Temperature**
   - **Post** request URL https://128.199.204.199/temp/pull
     - POST with parameters
       ```
       {
             "uid" : "user id",
             "token" : "user token",
             "fid" : "ferment id",
             "wid" : "winery id"
       }
       ```
     - Return in JSON format
       ```
       {
           "status":"success or fail",
       ```

```
              "reading":{
                        "temp":"{"t0":t0, "t1":t1, … "t7": t7}",
                        "update_time":"last time updating the temperature"
                        }
              }
```

4 . Add Ferment
- **Post** request to URL https://128.199.204.199/ferments/add_ferment
  - ○ POST with parameters
    ```
    {
      "uid" : "user id",
      "token" : "user token",
      "wid" : "winery id",
      "tank_num" : "tank number",
      "bid" : "base station id",
      "mid" : "mote id",
      "type" : "ferment type",
    }
    ```
  - ○ Return in JSON format
    ```
    {
      "status" : "success or fail"
    }
    ```