

Task #1:

Develop backend with REST-like API

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Instructions

- Install node and npm with version 4.4.4
 - <https://www.npmjs.com/>
- Install express
 - % npm install express --save
 - % npm install
- Start
 - % node index.js

Web Based Interface

Buttons

ADD: adds item

UPDATE: updates item

GET: returns list of all objects

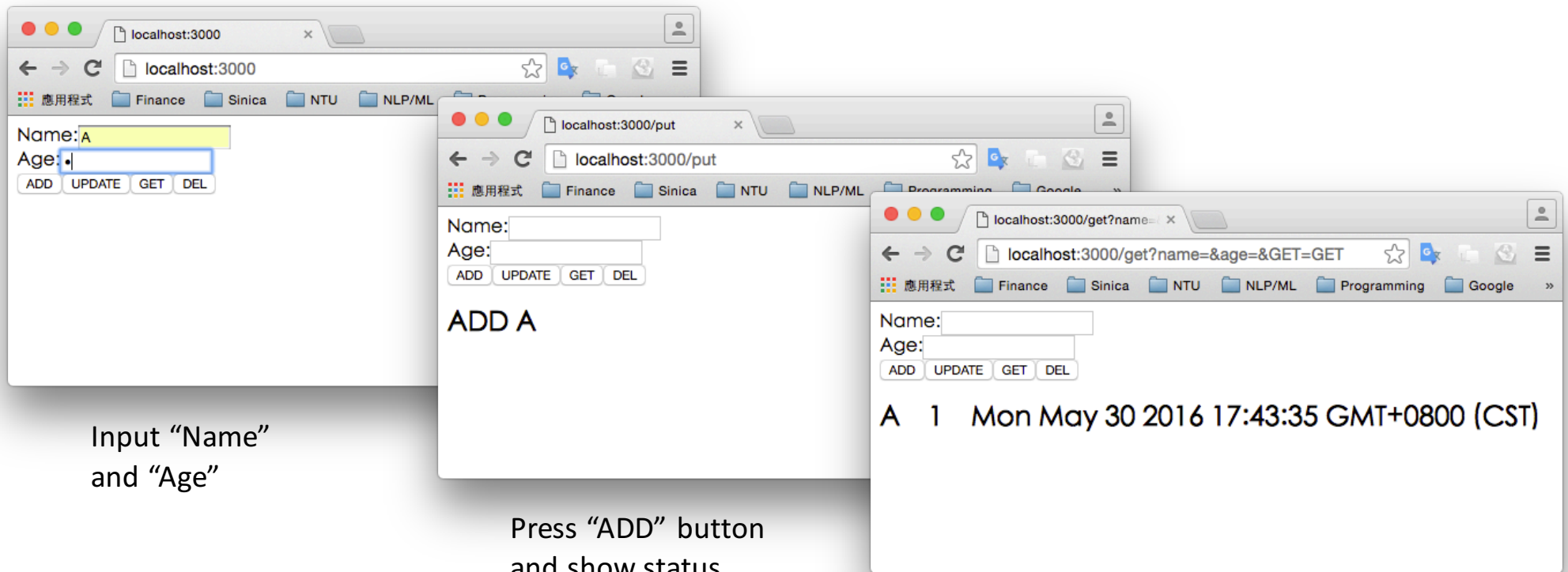
DEL: deletes item

localhost:3000/get?name=/
localhost:3000/
應用程式 Finance Sinica NTU
Name:
Age:
ADD UPDATE GET DEL

Input "Name" and
"Age"

Show list of all
objects

Result: ADD item



Input "Name"
and "Age"

Press "ADD" button
and show status

Press "GET" button and get a list with
request content and timestamp

Result: UPDATE item

The sequence of browser windows illustrates the following steps:

- Get a list**
The age of B is 2
- Input "Name" to B and "Age" to 5**
- Press button "UPDATE" and show status**
- Re-get the list**
The age of B sets to 5

The screenshots show the following data and actions:

- Initial List:**
A 1 Mon May 30 2016 17:43:35 GMT+0800 (CST)
B 2 Mon May 30 2016 17:51:50 GMT+0800 (CST)
C 3 Mon May 30 2016 17:50:00 GMT+0800 (CST)
- Input Fields:**
Name: B
Age: 5
- Action:**
UPDATE B
- Updated List:**
A 1 Mon May 30 2016 17:43:35 GMT+0800 (CST)
B 5 Mon May 30 2016 17:51:50 GMT+0800 (CST)
C 3 Mon May 30 2016 17:50:00 GMT+0800 (CST)

Result: DELETE item

The sequence of browser screenshots illustrates the following steps:

- Get a list**
The list has 3 items
- Input "Name"**
- Press "DEL" button and show status**
- Re-get the list**
The list remains 2 items

The screenshots show the following data and actions:

- Initial List:**
 - A 1 Mon May 30 2016 17:51:50 GMT+0800 (CST)
 - B 5 Mon May 30 2016 17:51:50 GMT+0800 (CST)
 - C 3 Mon May 30 2016 17:50:00 GMT+0800 (CST)
- Action:** Name: A, DEL button pressed
- Status:** DELETE A
- Updated List:**
 - B 5 Mon May 30 2016 17:51:50 GMT+0800 (CST)
 - C 3 Mon May 30 2016 17:50:00 GMT+0800 (CST)

Console Log of Node

```
[cmli@DHCP-19099:~/Desktop/Sinica/me/ntu/bd/android/avast_task1]% node index.js
AVAST_TASK1 listening on port 3000!
Mon May 30 2016 17:43:35 GMT+0800 (CST) [PUT] Add: A
Mon May 30 2016 17:43:44 GMT+0800 (CST) [GET] Name:
Mon May 30 2016 17:49:52 GMT+0800 (CST) [PUT] Add: B
Mon May 30 2016 17:50:00 GMT+0800 (CST) [PUT] Add: C
Mon May 30 2016 17:50:03 GMT+0800 (CST) [GET] Name:
Mon May 30 2016 17:51:50 GMT+0800 (CST) [POST] Updated B
Mon May 30 2016 17:51:59 GMT+0800 (CST) [GET] Name:
Mon May 30 2016 17:59:57 GMT+0800 (CST) [GET] Name: A
Mon May 30 2016 18:00:17 GMT+0800 (CST) [DELETE] A
Mon May 30 2016 18:00:26 GMT+0800 (CST) [GET] Name:
```