

Preparing the environment

1. Install Eclipse

<https://www.eclipse.org/downloads/packages/eclipse-ide-java-ee-developers/lunasr1>

2. Install Postman on Google Chrome

3. Install CF CLI

<https://github.com/cloudfoundry/cli/releases>

Preparing your cloud application

1. Download the zip file from GitHub
<https://github.com/rajrin/BootcampJaxRS>
2. Import the zip file in eclipse as a new project (for Node simply unzip in desired folder)
3. Edit the manifest file for the application

Change Host & Name

```
1① applications:  
2 - path: target/BootcampTemplate.war  
3   memory: 512M  
4   instances: 1  
5   domain: cfapps.io  
6   name: TcsBootcampApp  
7   host: TcsBootcamp  
8   disk_quota: 1024M  
9
```

Managing your cloud application

1. Create an account on <http://run.pivotal.io>

Login to your account

You should see one organization with the name “Main Org”

Create a new space called “Bootcamp”

2. In the command window do the following:

Type cf login –a <https://api.run.pivotal.io>

Provide email/password

3. Use the following commands as needed

- To push your application to *Pivotal*, go to the root directory of your project and type the command **cf push**
- To **stop** your application type the command **cf stop app_name**
- To **start** your application type the command **cf start app_name**
- To check **logs** (tailing) **cf logs app_name**
- Deployment target **cf target** (edit it using **-o -s**)

Suggestion: Install the original application & test before making changes

Test your Application

1. Use the postman on chrome
2. Make sure you are using the right method (GET, POST ...)
3. Make sure the content-type is set

http://tcsbootcamp.cfapps.io/api/jsimple

Content-Type application/json

Header Value

form-data x-www-form-urlencoded raw JSON ▾

```
1 {  
2   "fname" : "peter",  
3   "lname" : "uranyi",  
4   "age"    : 32  
5 }
```

Send Preview Add to collection

Body Headers (6) STATUS 200 OK TIME 60 ms

Pretty Raw Preview

```
{  
  "fname": "PETER",  
  "lname": "URANYI",  
  "age": 32  
}
```

Creating single page applications

1. Download the samples from
<https://github.com/rajin/Single-Page-Apps-Sample/tree/master>
2. Change the API URL/Endpoint in ajax calls
3. Change the form fields/ids and populate data received from API invocation

Mongo DB

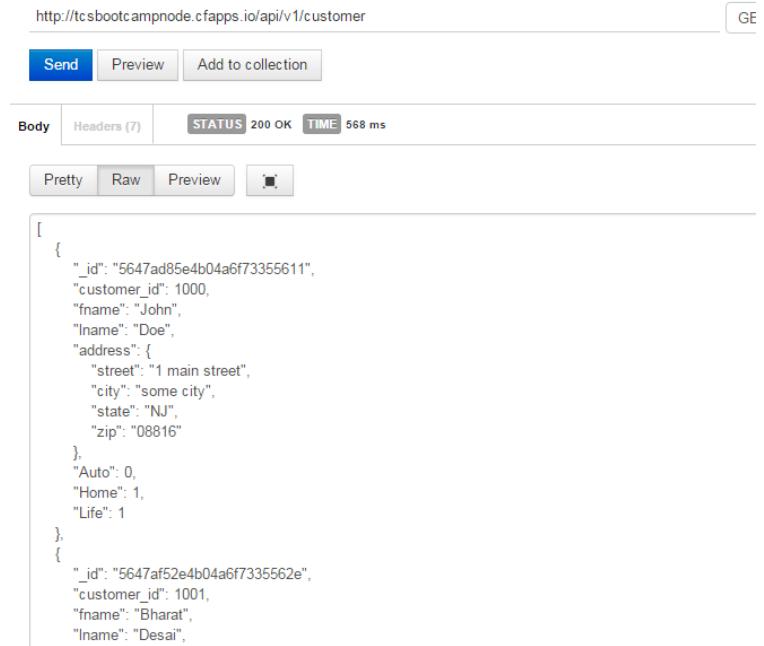
1. Create the mongo db account on <https://mongolab.com/>
2. Create the database
3. Create the collections
4. Create the user(s)
5. Download & install mongo 3.x for local development

NodeJS API Template

<https://github.com/rajin/BootcampNodeJS.git>

1. Download the template from above – it has everything you need for creating a REST API with Mongo DB
2. Try out a running instance of the template @ [I may bring this app down so contact me if you need an overview – 768988]

<http://tcsbootcampnode.cfapps.io/api/v1/customer>



The screenshot shows a REST API tool interface. At the top, the URL `http://tcsbootcampnode.cfapps.io/api/v1/customer` is entered. Below the URL are three buttons: `Send`, `Preview`, and `Add to collection`. Underneath these buttons, there are tabs for `Body`, `Headers (7)`, `STATUS 200 OK`, and `TIME 568 ms`. Below the tabs, there are three more buttons: `Pretty`, `Raw`, and `Preview`. The `Pretty` button is selected. The response body is displayed as a JSON array:

```
[  
  {  
    "_id": "5647ad85e4b04a6f73355611",  
    "customer_id": 1000,  
    "fname": "John",  
    "lname": "Doe",  
    "address": {  
      "street": "1 main street",  
      "city": "some city",  
      "state": "NJ",  
      "zip": "08816"  
    },  
    "Auto": 0,  
    "Home": 1,  
    "Life": 1  
  },  
  {  
    "_id": "5647af52e4b04a6f7335562e",  
    "customer_id": 1001,  
    "fname": "Bharat",  
    "lname": "Desai",  
    "address": {  
      "street": "1 main street",  
      "city": "some city",  
      "state": "NJ",  
      "zip": "08816"  
    },  
    "Auto": 0,  
    "Home": 1,  
    "Life": 1  
  }]
```

Git – Your code

<https://git-scm.com/book/en/v2/Git-Basics-Recording-Changes-to-the-Repository>

Create an account on GitHub

Download the Git shell on your machine

Upload project to a repo – share with *Rajeev*

OR

You can provide the source to Rajeev – will upload to common repo

Download Mongo DB

<https://www.mongodb.org/downloads#production>

Download Aptana studio (for Node & Single page app)

<http://www.aptana.com/products/studio3/download.html>