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

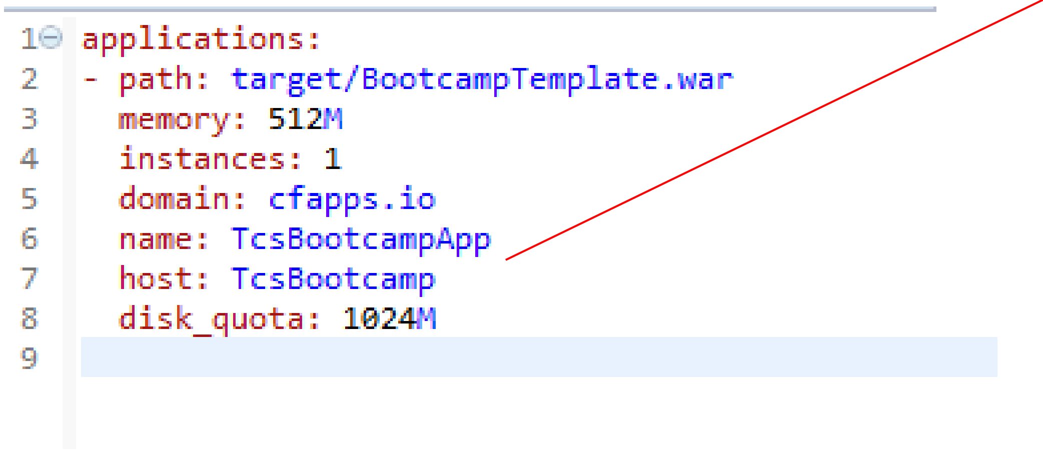
Preparing your cloud application

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



```
applications:
- path: target/BootcampTemplate.war
  memory: 512M
  instances: 1
  domain: cfapps.io
  name: TcsBootcampApp
  host: TcsBootcamp
  disk_quota: 1024M

```

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)

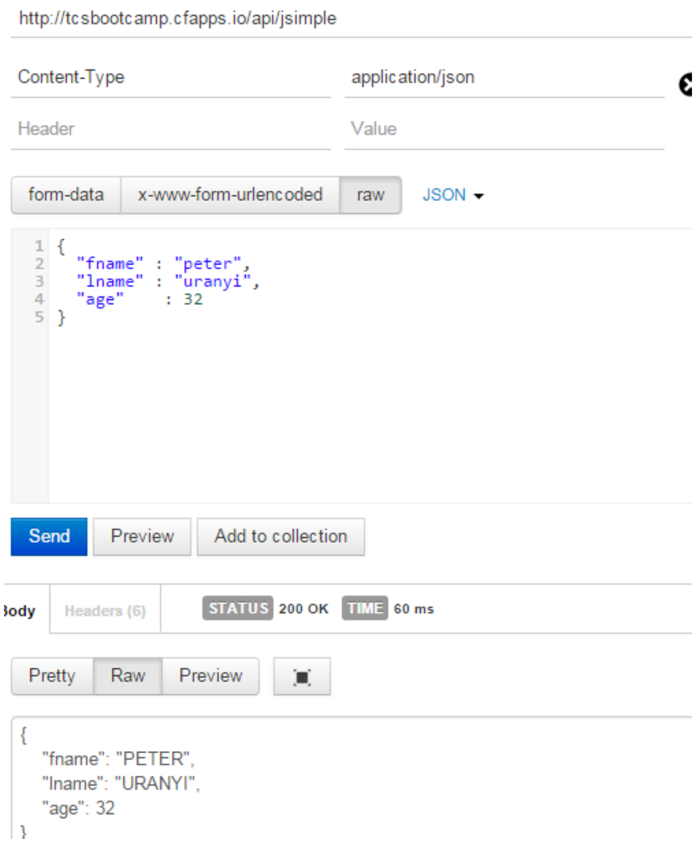
Suggestion: Install the original application & test before making changes

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

```
{
  "fname" : "peter",
  "lname" : "uranyi",
  "age"    : 32
}
```

STATUS 200 OK TIME 60 ms

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

Creating single page applications

1. Download the samples from
   https://github.com/rajrin/Single-Page-Apps-Sample/tree/master

2. Change the API URL/Endpoint in ajax calls

3. Change the form fields/ids and populate data recevd 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

From Java

Add POM dependency

```
<dependency>
		<groupId>org.mongodb</groupId>
		<artifactId>mongo-java-driver</artifactId>
		<version>1.3</version>
</dependency>
```

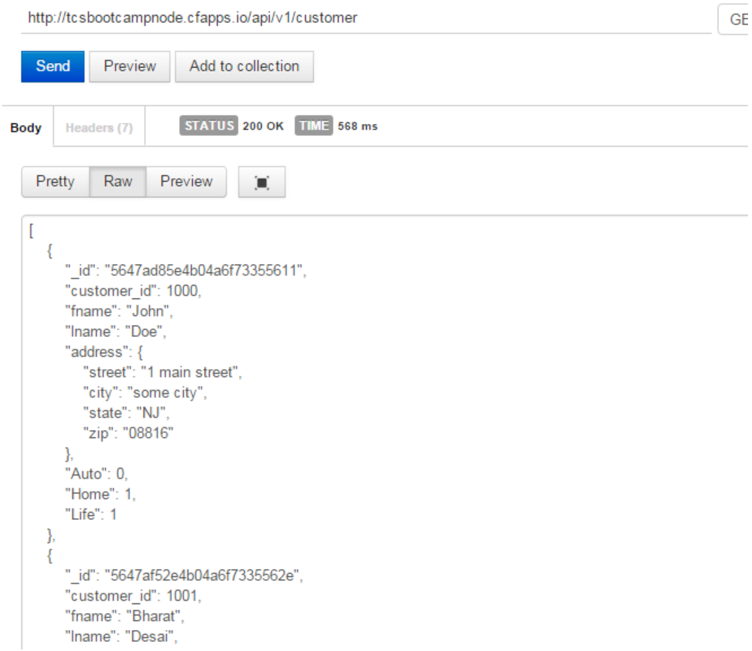
NodeJS API Template

https://github.com/rajrin/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



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

STATUS 200 OK TIME 568 ms

```
[
  {
    "_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",
```

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