

This is the Spring cloud project from Team 13.

1. After you unpack the SADproject.zip, you would find that there is a folder: SADproject, open your terminal, and enter the folder using this command: `cd /SADproject/microservices-demo-master`

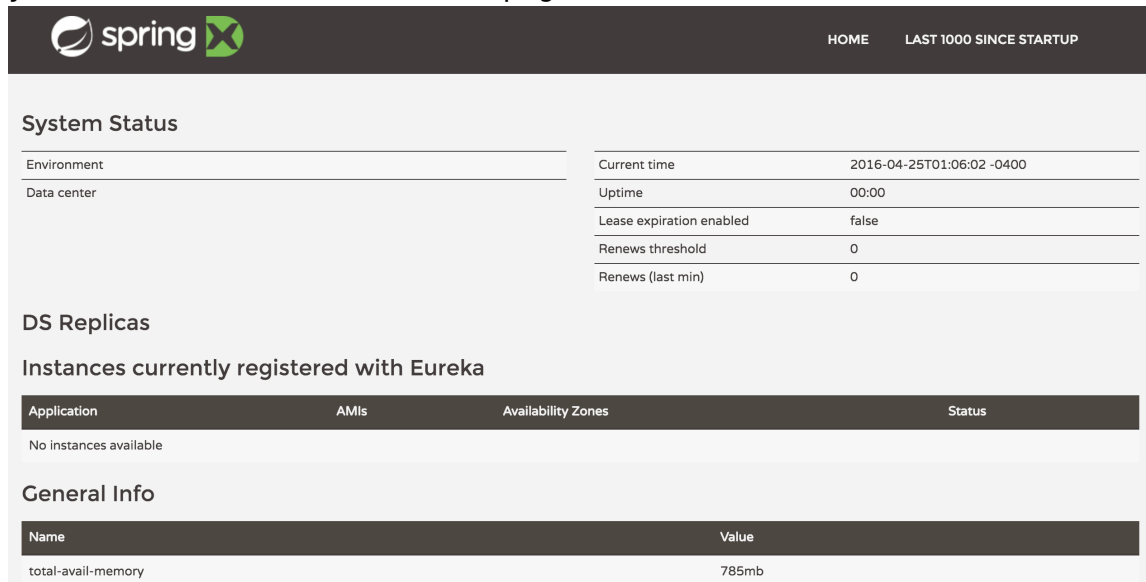
2. And then using the below command, build and deploy the project first:

```
mvn clean package
```

3. Using the below command, open the main service:

```
java -jar target/microservice-demo-0.0.1-SNAPSHOT.jar  
registration
```

So, open your browser, input this link: <http://localhost:1111>, then, you will see the below main page.



The screenshot shows the Spring Cloud Dashboard interface. At the top, there's a navigation bar with the Spring logo and links for 'HOME' and 'LAST 1000 SINCE STARTUP'. The main content area is divided into several sections:

- System Status:** A table showing environment details.

Environment	Current time
Data center	2016-04-25T01:06:02 -0400
	Uptime
	00:00
	Lease expiration enabled
	false
	Renews threshold
	0
	Renews (last min)
	0
- DS Replicas:** A section titled 'Instances currently registered with Eureka'.
- General Info:** A table showing system metrics.

Name	Value
total-avail-memory	785mb

4. For our project, we implement 3 microservice: Weather, Movie and Music. They are all RESTful API service, below is the detail of each service:

For Weather service, user can input the city he wants, the API would return the weather information about the city;

For Movie service, user can input the movie name he wants, the API would return the information about the movie;

For Music service, user can input the music title he wants, the API would return the information about the music.

5. After we open the main service, we can start open our 3 services using below command:

```
java -jar target/microservice-demo-0.0.1-SNAPSHOT.jar weather  
java -jar target/microservice-demo-0.0.1-SNAPSHOT.jar movie
```

```
java -jar target/microservice-demo-0.0.1-SNAPSHOT.jar music
```

6. After we input above commands, wait a while, you will see the main page update just like below:

DS Replicas			
Instances currently registered with Eureka			
Application	AMIs	Availability Zones	Status
MOVIE-SERVICE	n/a (1)	(1)	UP (1) - YuZheng.wv.cc.cmu.edu
MUSIC-SERVICE	n/a (1)	(1)	UP (1) - YuZheng.wv.cc.cmu.edu
WEATHER-SERVICE	n/a (1)	(1)	UP (1) - YuZheng.wv.cc.cmu.edu

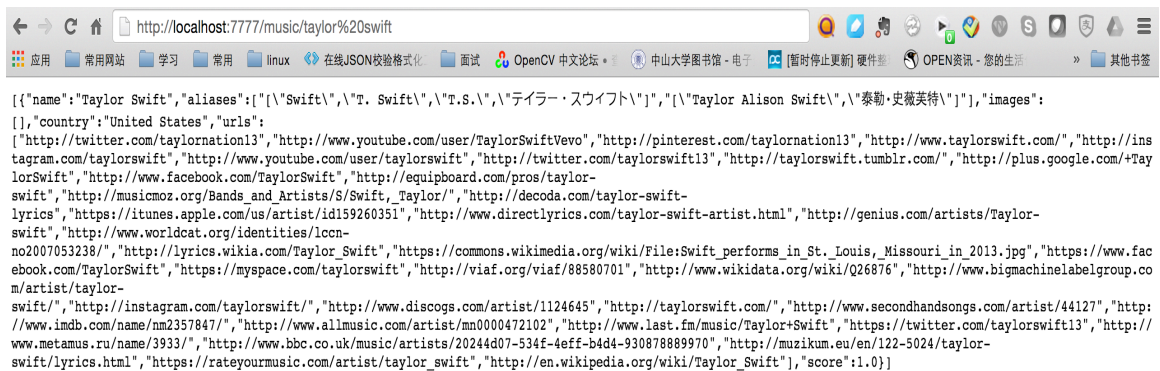
We can see that all three service: movie, music and weather is open now.

7. First, let us test the MOVIE service, the port of movie service is: 5555. We can input the this link to test : <http://localhost:5555/moive/frozen>, you can see the JSON format result like below:



We can see the all detail about movie: FROZEN.

8. Second, we can test the MUSIC service. The port of music service is: 7777. We can input this link to test: <http://localhost:7777/music/taylor%20swift>, you will see the result like below:



We can see it just shows all the information about Taylor Swift.

9. Finally, we just test the WEATHER service. The port of the weather service is: 4444. We can input this link to test: <http://localhost:4444/weather/pittsburgh>, so, we can get

the weather information about Pittsburgh. The result just show below:



So, we can see the all weather information about Pittsburgh.

10. After we finish all the API function. We can set up a front-end web service using below command. The port of the Web service is: 3333:

```
java -jar target/microservice-demo-0.0.1-SNAPSHOT.jar web
```

Once we see the main page update like below, we can go to the next step:

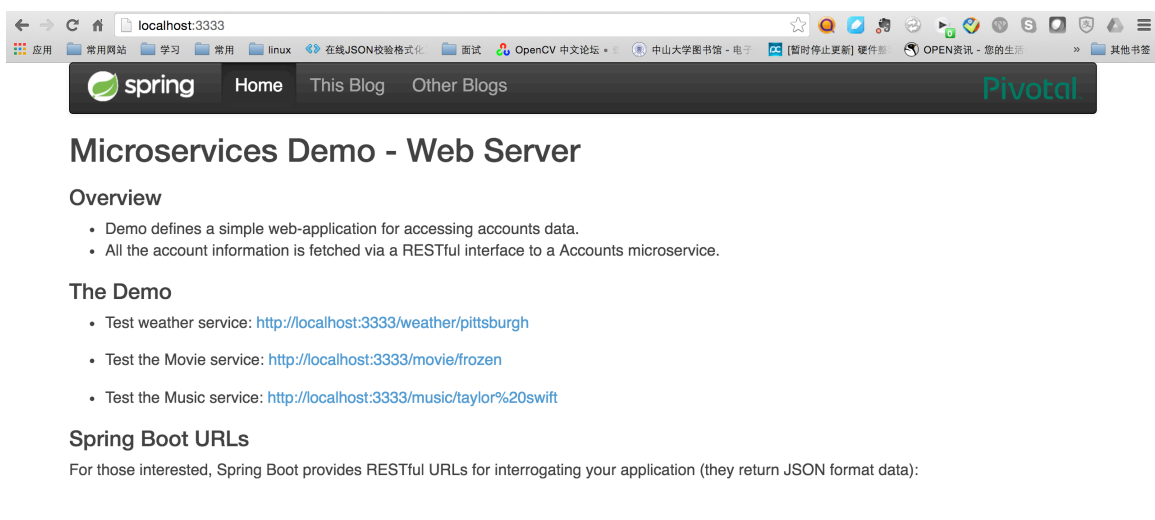
DS Replicas

Instances currently registered with Eureka

Application	AMIs	Availability Zones	Status
MOVIE-SERVICE	n/a (1)	(1)	UP (1) - YuZheng.local
MUSIC-SERVICE	n/a (1)	(1)	UP (1) - YuZheng.local
WEATHER-SERVICE	n/a (1)	(1)	UP (1) - YuZheng.local
WEB-SERVICE	n/a (1)	(1)	UP (1) - YuZheng.local

General Info

11. We can input this link enter the web: <http://localhost:3333>, so, we can enter the web service home page like below:



As we can see, we have three service link to the web service. So, you can click the demo

link or input the key word you want to search:

For Weather service, please input: <http://localhost:3333/weather/{city name}>;

For Movie service, please input: <http://localhost:3333/movie/{movie name}>;

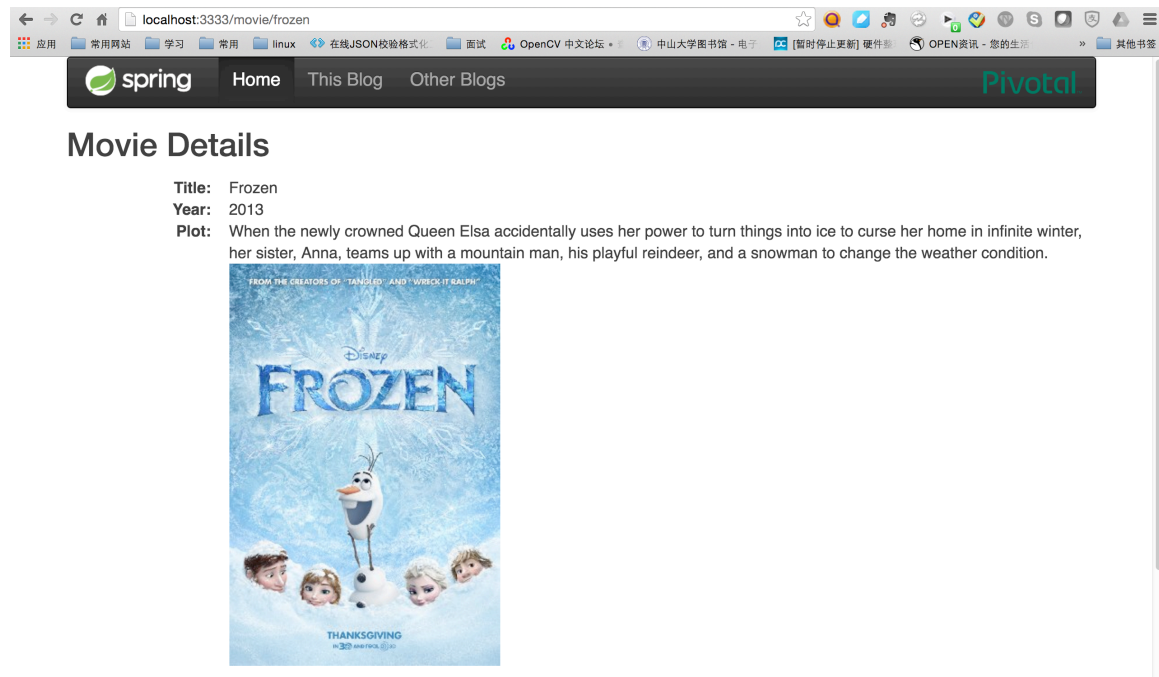
For Music service, please input: <http://localhost:3333/music/{singer name}>.

Here are some examples show how these service display in the web service:

For weather:



For movie:



For Music:

Music Details

Name:

Taylor Swift

Aliases:

["Swift","T. Swift","T.S.","テイラー・スウィフト"]

Country:

United States

Options: [Searching Master](#)