

Project Description

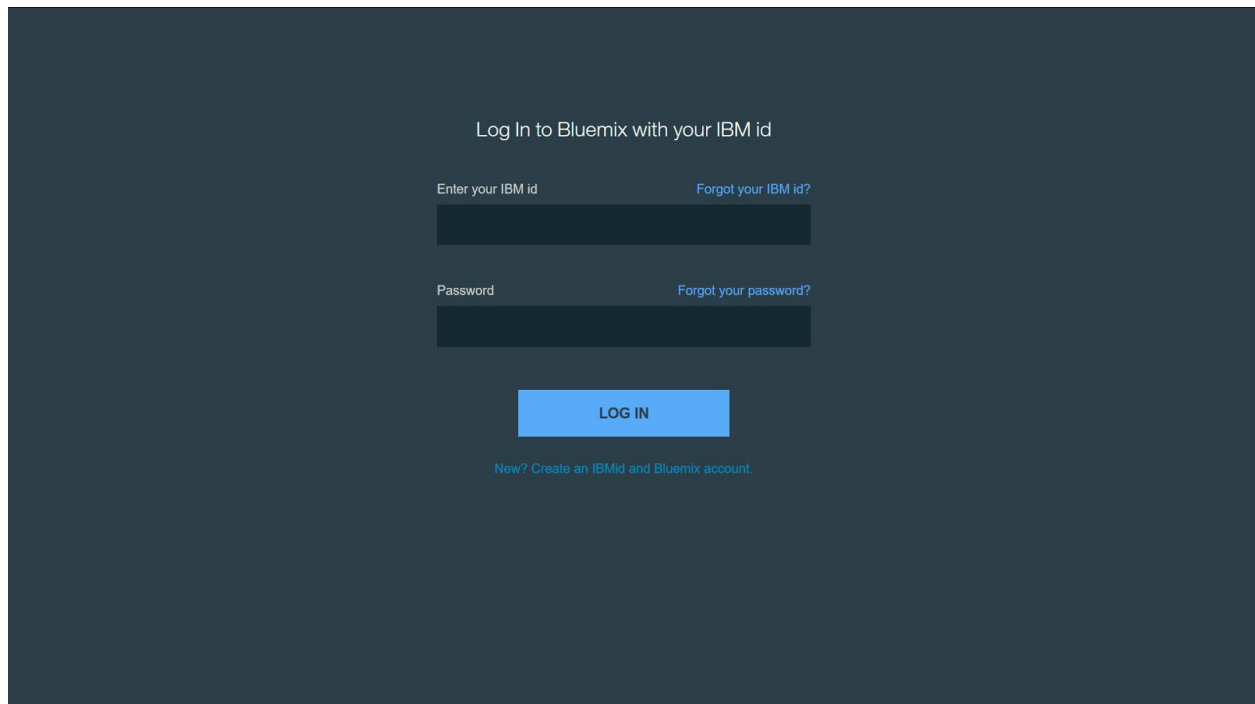
We have created an application that can be used to see weather insights of different cities around the world by using Bluemix Boilerplate and Services. It provides weather insights of 10 days. User can change option to see temperature in celsius or fahrenheit. In addition to temperature, application provides insights for humidity, uv index, wind speed, time for sunrise-sunset-moonrise-moonset also.

- **Github Link:** <https://github.com/nee1/WeatherApp>
- **WeatherApp link:** <http://weather272.mybluemix.net/>

Steps followed:

Step 1:

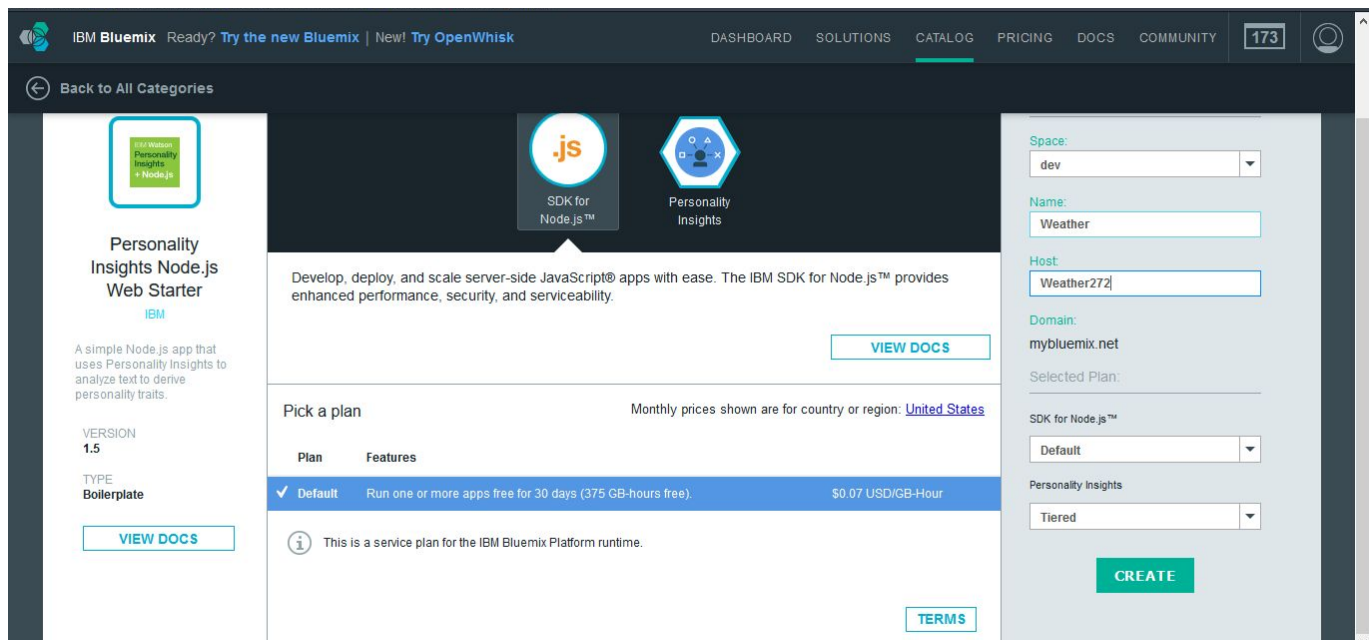
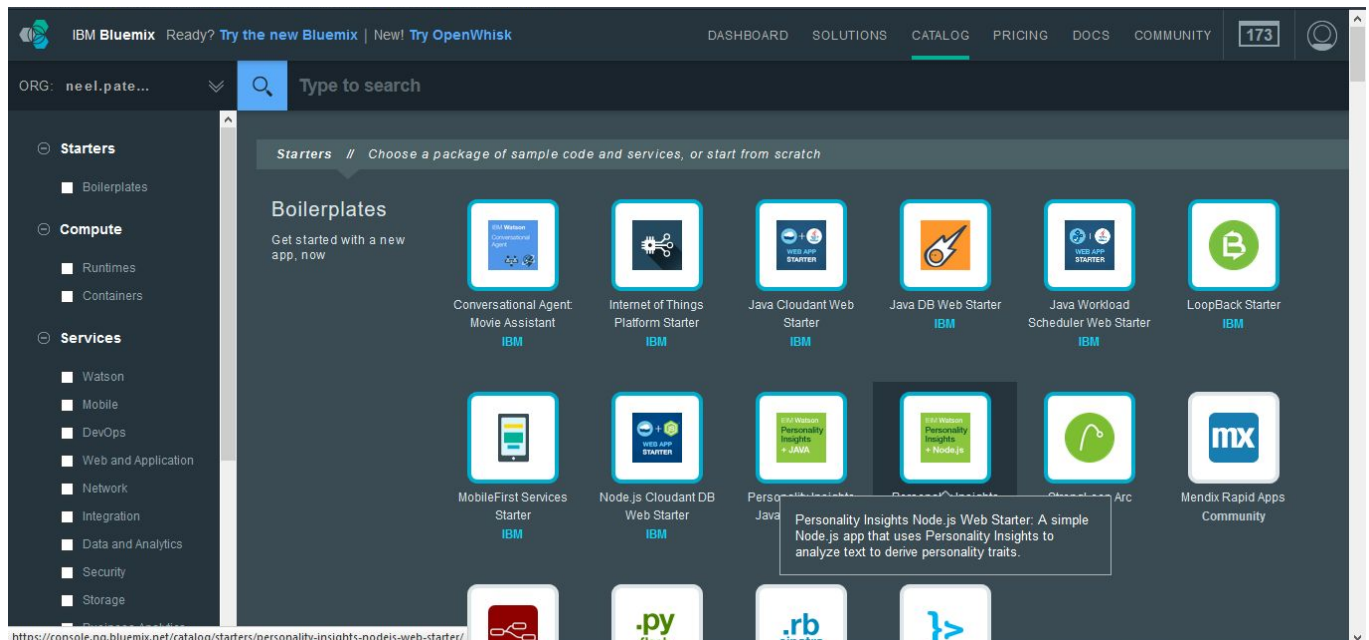
Log in to IBM Bluemix account providing IBM id and password

The image shows a login page for IBM Bluemix. The background is a dark blue-grey. At the top, the text "Log In to Bluemix with your IBM id" is centered in white. Below this, there are two input fields. The first is labeled "Enter your IBM id" in white, with a link "Forgot your IBM id?" in light blue to its right. The second is labeled "Password" in white, with a link "Forgot your password?" in light blue to its right. Below the input fields is a blue button with the text "LOG IN" in white. At the bottom, there is a link "New? Create an IBMid and Bluemix account." in light blue.

Step 2:

Select IBM Bluemix Boilerplate you want to use.

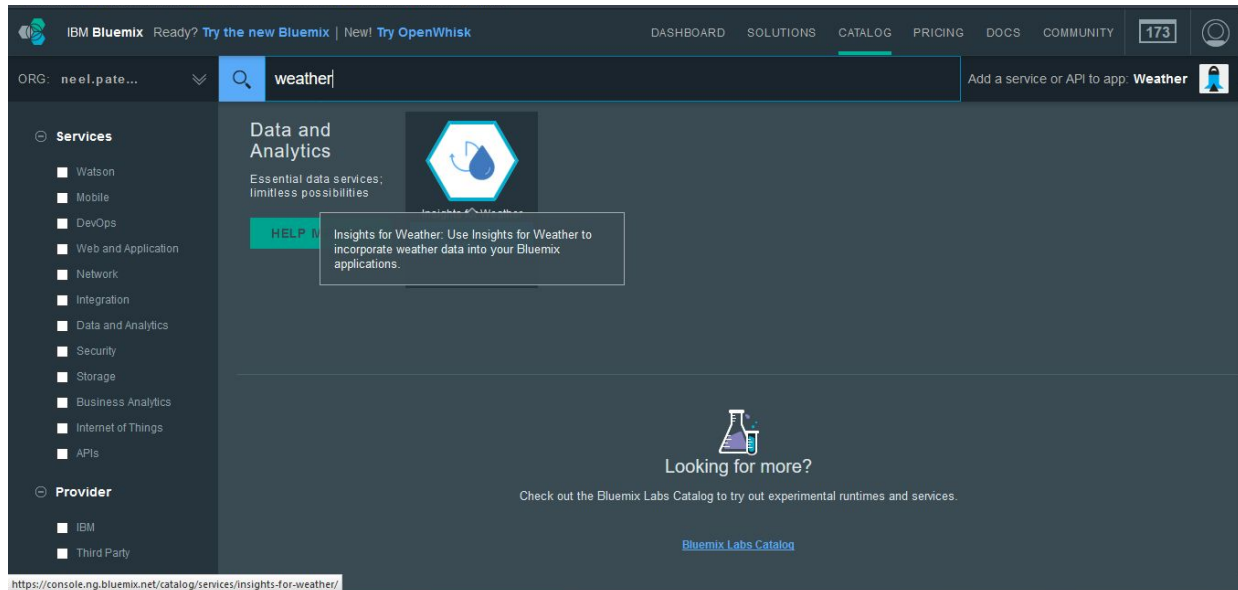
Here we have selected Boilerplate -Personality Insights Node.js Web starter. After that give name of application and host and click create.



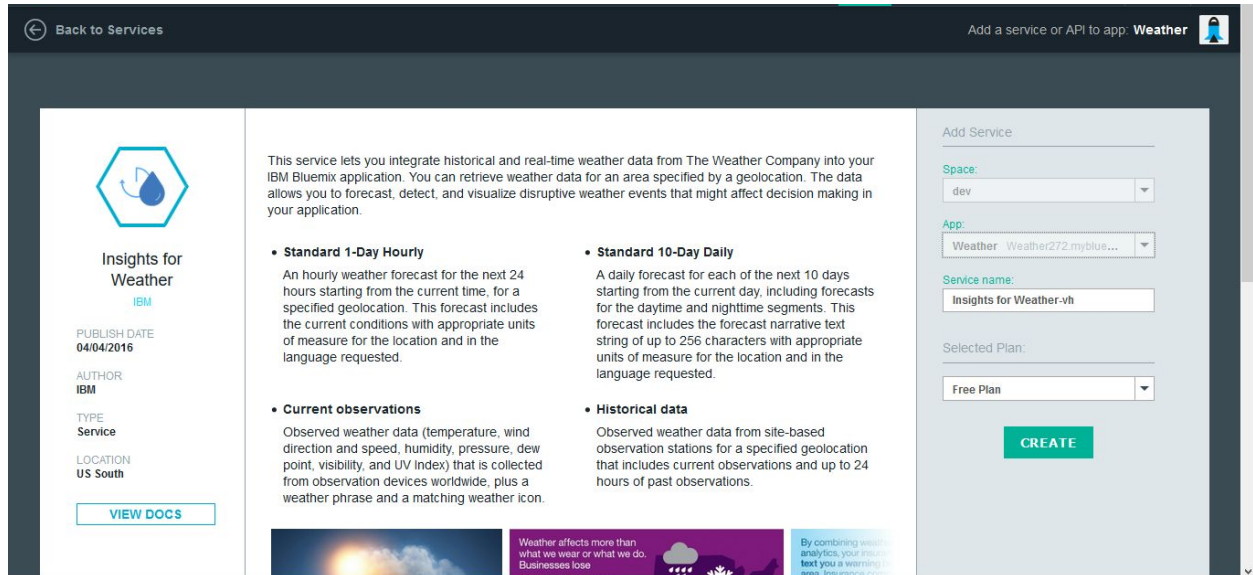
Step 3:

Add IBM Bluemix Services you want to use.

For this mini project we have added to use Data and Analytics service Insights for Weather.



After selecting services click on create button, it will create service in our instance.



Once instance is created we can see dashboard like below.

IBM Bluemix

Ready?

Try the new Bluemix

New!

Try OpenWhisk

DASHBOARD

SOLUTIONS

CATALOG

PRICING

DOCS

COMMUNITY

172

Back to Dashboard...

Weather

Routes: Weather272.mybluemix.net

SDK FOR NODE.JS™

INSTANCES: 1

MEMORY QUOTA: 512

AVAILABLE MEMORY: 1.500 GB

SAVE

RESET

(MB per Instance)

+

ADD A SERVICE OR API

+

BIND A SERVICE OR API

Insights for Weather

Insights for Weather...

Free

Show Credentials

Docs

"Weather" started

Your application was started.

ADD GIT

4/10/2016 2:49:12 PM

APP HEALTH

Your application is staging.

ACTIVITY LOG

4/10/16 2:47 PM neel.patel@sjsu.edu started Weather app

4/10/16 2:46 PM neel.patel@sjsu.edu updated Weather app • changed routes

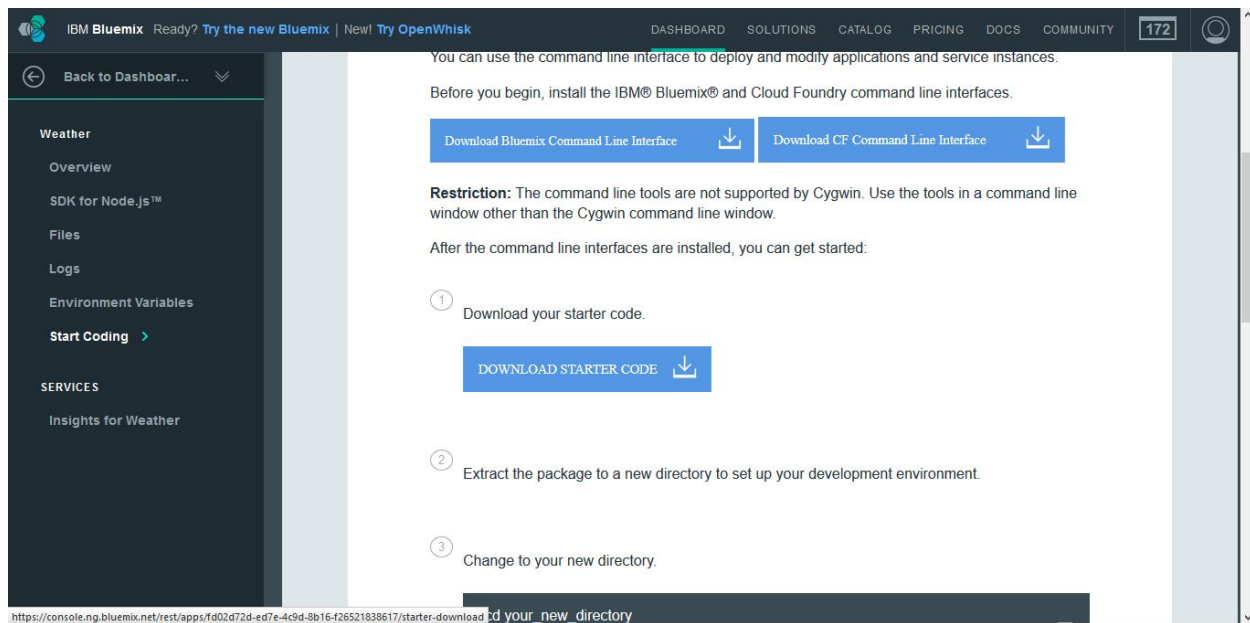
4/10/16 2:46 PM neel.patel@sjsu.edu created Weather app

Estimate the cost of this app

Step 4:

Now we can download starter code for our boiler plate from start coding menu and we can start coding.

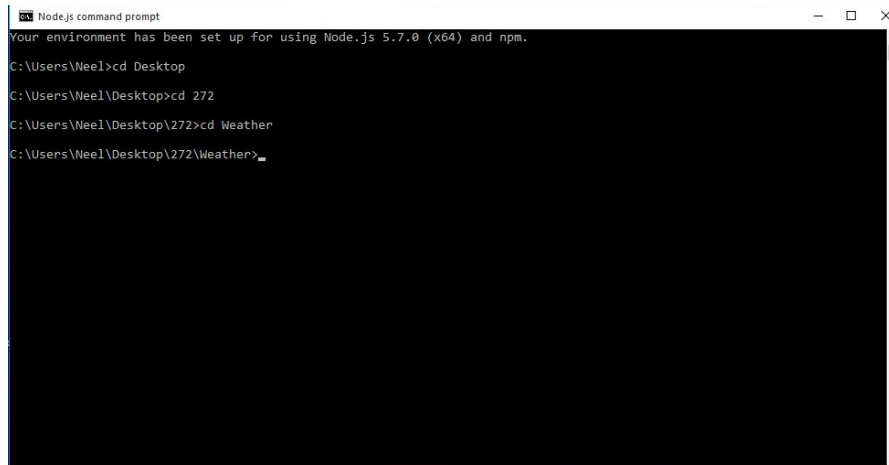
We can also download and install IBM Bluemix command line interface and cloud foundry command line interface from this menu. These command line interfaces will help us in deploying application to IBM Bluemix.



Step 5:

After making changes in the code according to our requirements, we can deploy our application through these steps:

Change directory to where our project resides.



```
Node.js command prompt
Your environment has been set up for using Node.js 5.7.0 (x64) and npm.
C:\Users\Weel>cd Desktop
C:\Users\Weel\Desktop>cd 272
C:\Users\Weel\Desktop\272>cd Weather
C:\Users\Weel\Desktop\272\Weather>
```

Step 6:

Connect and log in to IBM Bluemix from command line interface using :

\$ Bluemix api https://api.ng.bluemix.net

```
Node.js command prompt
Your environment has been set up for using Node.js 5.7.0 (x64) and npm.
C:\Users\Neel>cd Desktop
C:\Users\Neel\Desktop>cd 272
C:\Users\Neel\Desktop\272>cd Weather
C:\Users\Neel\Desktop\272\Weather>bluemix api https://api.ng.bluemix.net
Invoke 'cf api https://api.ng.bluemix.net'...
Setting api endpoint to https://api.ng.bluemix.net...
OK
API endpoint: https://api.ng.bluemix.net (API version: 2.40.0)
Not logged in. Use 'bluemix login' to log in.
```

\$ bluemix login -u neel.patel@sjsu.edu -o neel.patel@sjsu.edu -s dev

//here neel.patel@sjsu.edu is username

```
C:\Users\Neel\Desktop\272\Weather>bluemix login -u neel.patel@sjsu.edu -o neel.patel@sjsu.edu -s dev
Invoke 'cf login -u neel.patel@sjsu.edu -o neel.patel@sjsu.edu -s dev'...
API endpoint: https://api.ng.bluemix.net
Password>
Authenticating...
OK
Targeted org neel.patel@sjsu.edu
Targeted space dev
API endpoint: https://api.ng.bluemix.net (API version: 2.40.0)
User: neel.patel@sjsu.edu
Org: neel.patel@sjsu.edu
Space: dev
```

Step 7:

After that deploy your application to IBM Bluemix using this command:

```
$ cf push weather
```

//Where weather is our application's name.

```
Node.js command prompt
C:\Users\Neel\Desktop\272\Weather>cf push Weather
Using manifest file C:\Users\Neel\Desktop\272\Weather\manifest.yml

Updating app Weather in org neel.patel@sjsu.edu / space dev as neel.patel@sjsu.edu...
OK

Using route Weather272.mybluemix.net
Uploading Weather...
Uploading app files from: C:\Users\Neel\Desktop\272\Weather
Uploading 1.1M, 173 files
Done uploading
OK

Binding service Insights for Weather-vh to app Weather in org neel.patel@sjsu.edu / space dev as neel.patel@sjsu.edu...
OK

Stopping app Weather in org neel.patel@sjsu.edu / space dev as neel.patel@sjsu.edu...
OK

Starting app Weather in org neel.patel@sjsu.edu / space dev as neel.patel@sjsu.edu...
-----> Downloaded app package (660K)
-----> Downloaded app buildpack cache (6.6M)

-----> IBM SDK for Node.js Buildpack v3.2-20160315-1257
Based on Cloud Foundry Node.js Buildpack v1.5.4
-----> Creating runtime environment
NPM_CONFIG_LOGLEVEL=error
NPM_CONFIG_PRODUCTION=true
NODE_ENV=production
NODE_MODULES_CACHE=true
-----> Installing binaries
engines.node (package.json): 4.2.x
engines.npm (package.json): unspecified (use default)
Resolving node version 4.2.x via "node-version-resolver"
Installing IBM SDK for Node.js (4.2.6) from cache
Using default npm version: 2.14.12
-----> Restoring cache
Skipping cache restore (new runtime signature)
-----> Checking and configuring service extensions before installing dependencies
-----> Building dependencies
Pruning any extraneous modules
Installing node modules (package.json)
express@4.13.4 node_modules/express
├── escape-html@1.0.3
├── array-flatten@1.1.1
├── utils-merge@1.0.0
└── cookie-signature@1.0.6

-----> node_modules
- bower_components (not cached - skipping)
-----> Checking and configuring service extensions before installing dependencies
-----> Building dependencies
Pruning any extraneous modules
Installing node modules (package.json)
-----> Checking and configuring service extensions after installing dependencies
-----> Installing App Management
-----> Caching build
Clearing previous node cache
Saving 2 cacheDirectories (default):
- node_modules
- bower_components (nothing to cache)
-----> Build succeeded!
├── cfenv@1.0.3
├── express@4.13.4
└── request@2.70.0

-----> Uploading droplet (18M)

0 of 1 instances running, 1 starting
1 of 1 instances running

App started

OK

App Weather was started using this command `node app.js`

Showing health and status for app Weather in org neel.patel@sjsu.edu / space dev as neel.patel@sjsu.edu...
OK

requested state: started
instances: 1/1
usage: 512M x 1 instances
urls: Weather272.mybluemix.net
last uploaded: Sun Apr 10 22:36:34 UTC 2016
stack: unknown
buildpack: SDK for Node.js(TM) (ibm-node.js-4.2.6, buildpack-v3.2-20160315-1257)

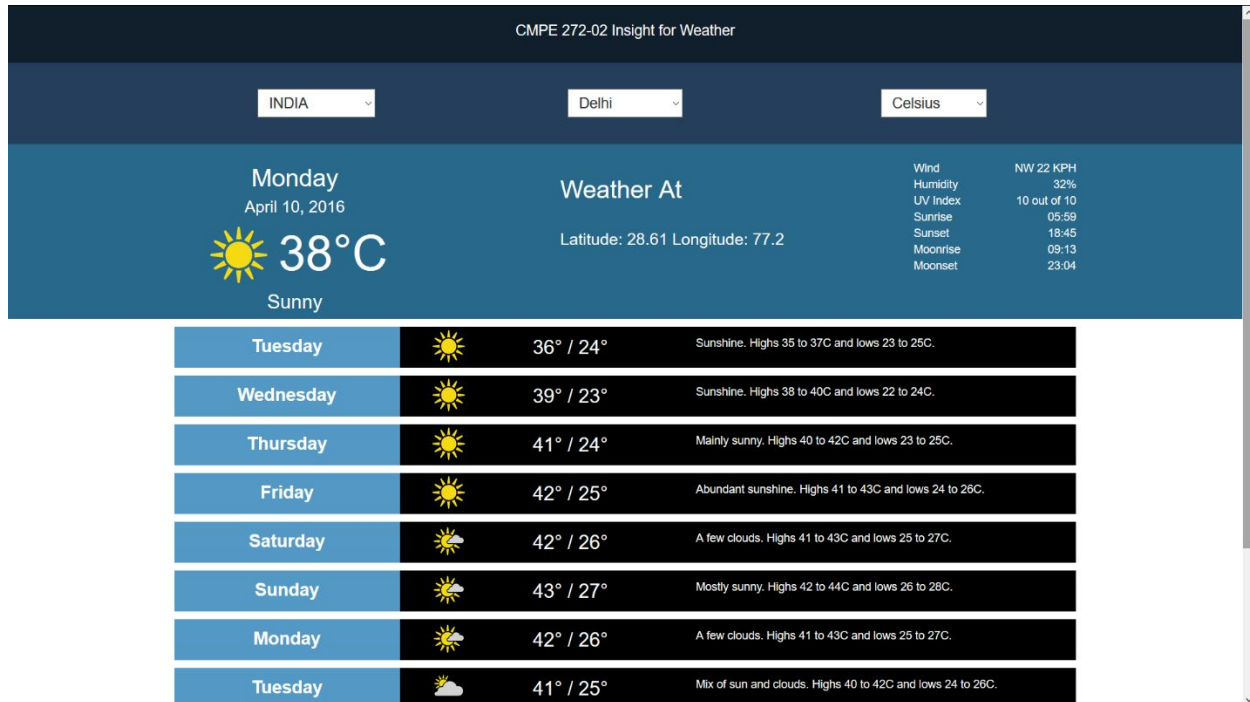
#0 state since cpu memory disk details
running 2016-04-10 03:38:03 PM 0.0% 48.6M of 512M 66M of 1G details

C:\Users\Neel\Desktop\272\Weather>
```


Step 7 :

Now after successful deployment we can access the application at <https://weather272.mybluemix.net/>

Screenshots of running application on IBM Bluemix cloud are shown below.



USA

New York

Fahrenheit

Sunday

April 10, 2016



30°F

Snow to Wintry Mix

Weather At

Latitude: 42.34 Longitude: -75.18

Wind	S 17 MPH
Humidity	68%
UV Index	0 out of 10
Sunrise	06:27
Sunset	19:37
Moonrise	08:56
Moonset	23:36

Monday		49° / 44°	Cloudy with rain. Highs in the upper 40s and lows in the mid 40s.
Tuesday		45° / 29°	Cloudy with morning rain. Highs in the mid 40s and lows in the upper 20s.
Wednesday		53° / 30°	Sunshine. Highs in the low 50s and lows in the low 30s.
Thursday		58° / 33°	Sunshine. Highs in the upper 50s and lows in the low 30s.
Friday		60° / 38°	Sunny. Highs in the low 60s and lows in the upper 30s.
Saturday		65° / 43°	Mix of sun and clouds. Highs in the mid 60s and lows in the low 40s.
Sunday		71° / 45°	A few clouds. Highs in the low 70s and lows in the mid 40s.
Monday		72° / 43°	Afternoon showers. Highs in the low 70s and lows in the low 40s.