

Weather App 1.0

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1. App Shots

1.1. Default Screen

Select City

indore

Show 10 entries

Search:

Date	Day Min Temp	Day Max Temp	Wind Speed	Description	Suggestion	Options
Fri Oct 30 1970 05:30:00 GMT+0530 (India Standard Time)	291.0096875	291.0096875	2.29	overcast clouds	It's too windy, watch out!	Details
Mon Nov 02 1970 05:30:00 GMT+0530 (India Standard Time)	292.90507812500005	292.90507812500005	2.7	clear sky	It's too windy, watch out!	Details
Sat Oct 31 1970 05:30:00 GMT+0530 (India Standard Time)	292.118828125	292.118828125	1.33	clear sky	Have a nice Day	Details
Sun Nov 01 1970 05:30:00 GMT+0530 (India Standard Time)	292.1271875	292.1271875	2.87	clear sky	It's too windy, watch out!	Details
Thu Oct 29 1970 05:30:00 GMT+0530 (India Standard Time)	291.51750000000004	292.165	2.19	few clouds	It's too windy, watch out!	Details
Tue Nov 03 1970 05:30:00 GMT+0530 (India Standard Time)	297.640625	297.640625	2.71	few clouds	Carry umbrella, It's too windy, watch out!	Details

1.2. Can select City

Select City

✓ indore

raipur

pune

london

Search:

Date	Day Min Temp	Day Max Temp	Wind Speed	Description	Suggestion	Options
Fri Oct 30 1970 05:30:00 GMT+0530 (India Standard Time)	291.0096875	291.0096875	2.29	overcast clouds	It's too windy, watch out!	Details
Mon Nov 02 1970 05:30:00 GMT+0530 (India Standard Time)	292.90507812500005	292.90507812500005	2.7	clear sky	It's too windy, watch out!	Details
Sat Oct 31 1970 05:30:00 GMT+0530 (India Standard Time)	292.118828125	292.118828125	1.33	clear sky	Have a nice Day	Details
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Tue Nov 03 1970 05:30:00 GMT+0530 (India Standard Time)	297.640625	297.640625	2.71	few clouds	Carry umbrella, It's too windy, watch out!	Details

1.3. Search

Select City
indore

Show 10 entries

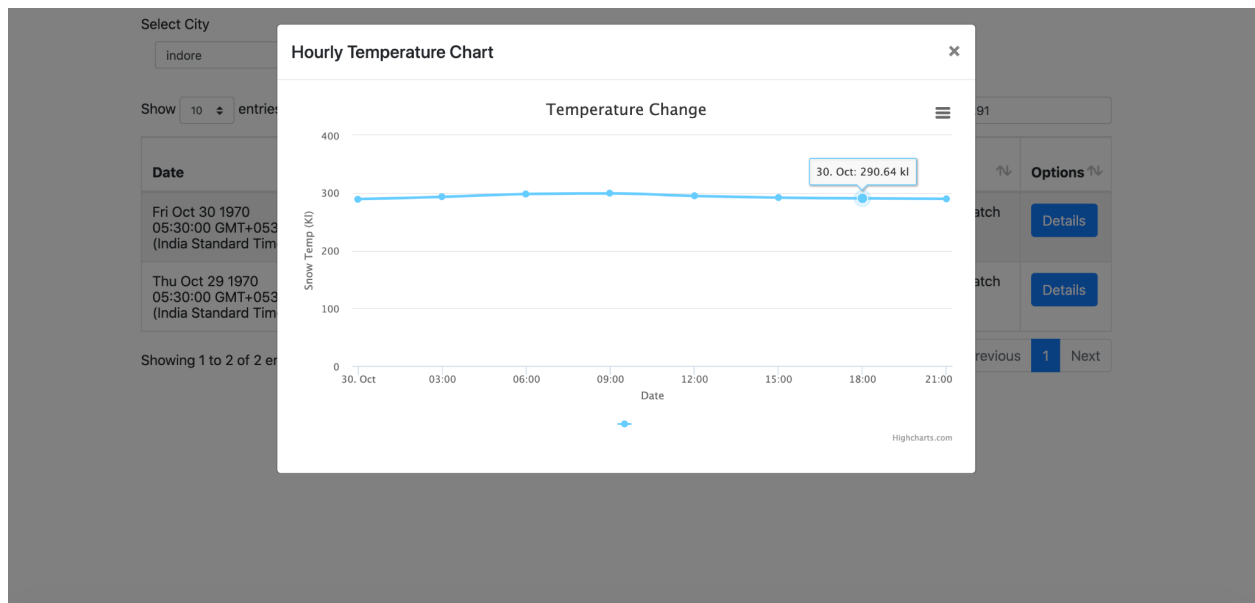
Search: 291

Date	Day Min Temp	Day Max Temp	Wind Speed	Description	Suggestion	Options
Fri Oct 30 1970 05:30:00 GMT+0530 (India Standard Time)	291.0096875	291.0096875	2.29	overcast clouds	It's too windy, watch out!	Details
Thu Oct 29 1970 05:30:00 GMT+0530 (India Standard Time)	291.51750000000004	292.165	2.19	few clouds	It's too windy, watch out!	Details

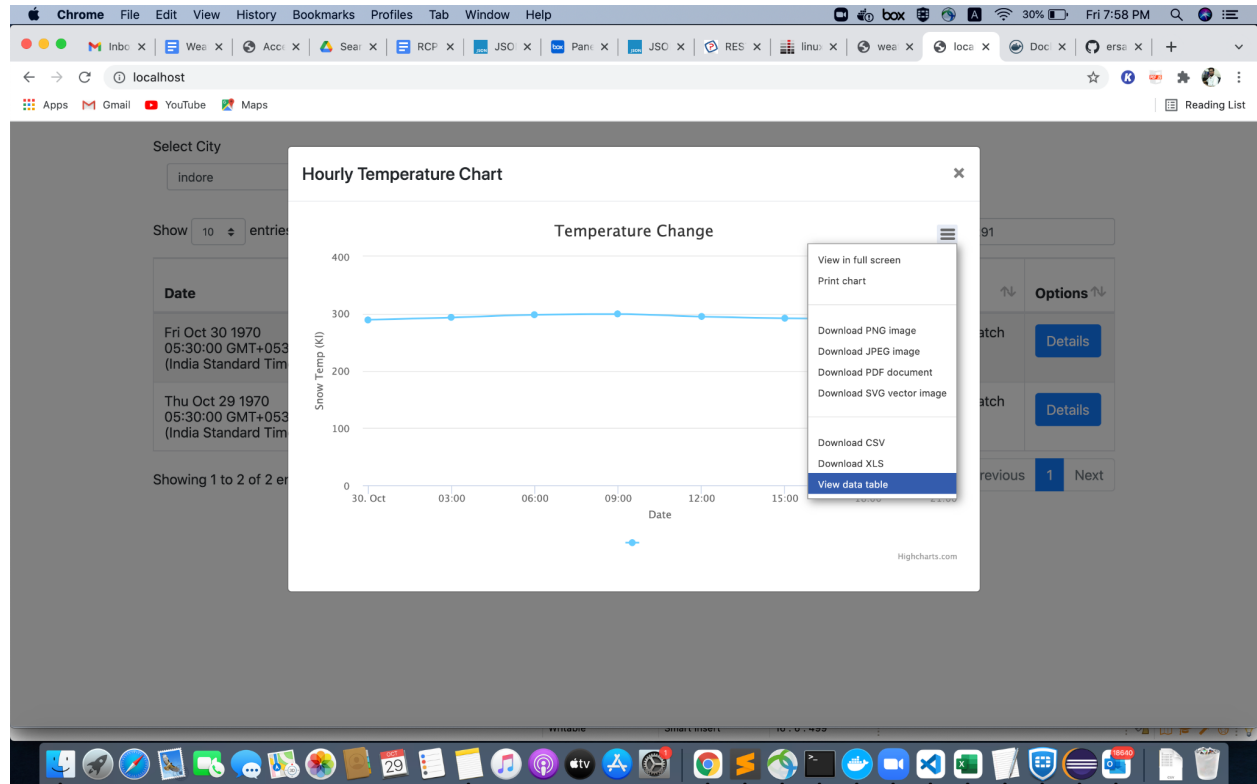
Showing 1 to 2 of 2 entries (filtered from 6 total entries)

Previous 1 Next

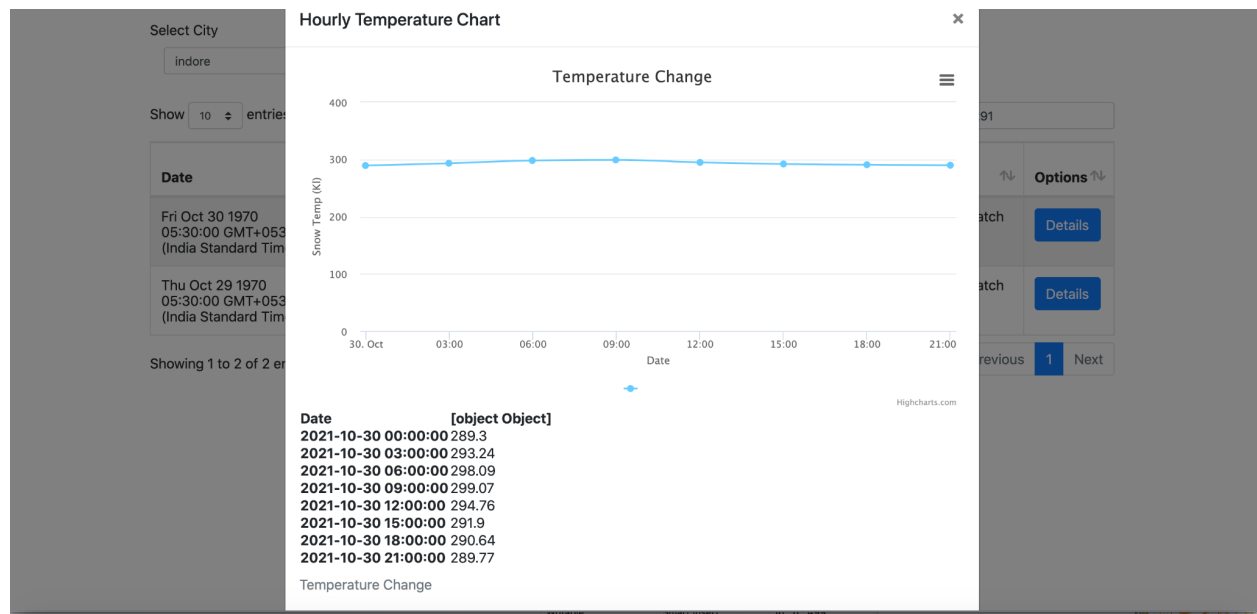
1.4. Chart



1.5. Chart Options

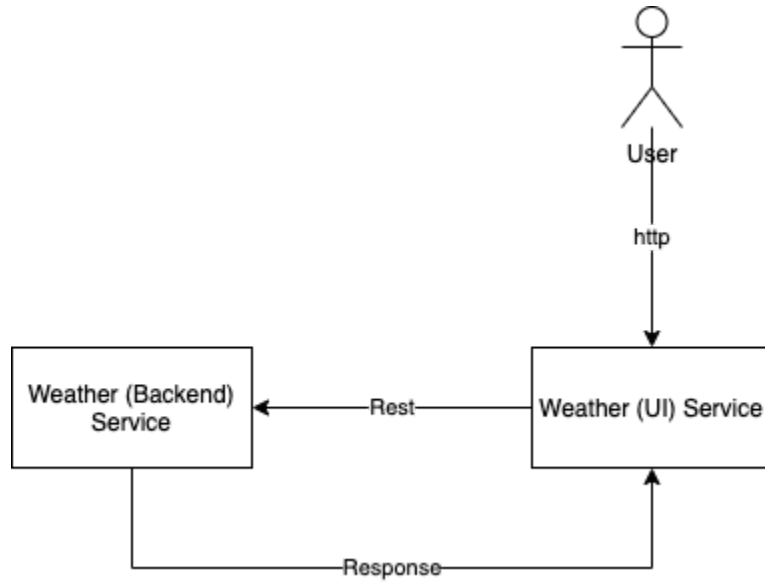


1.6. View Data



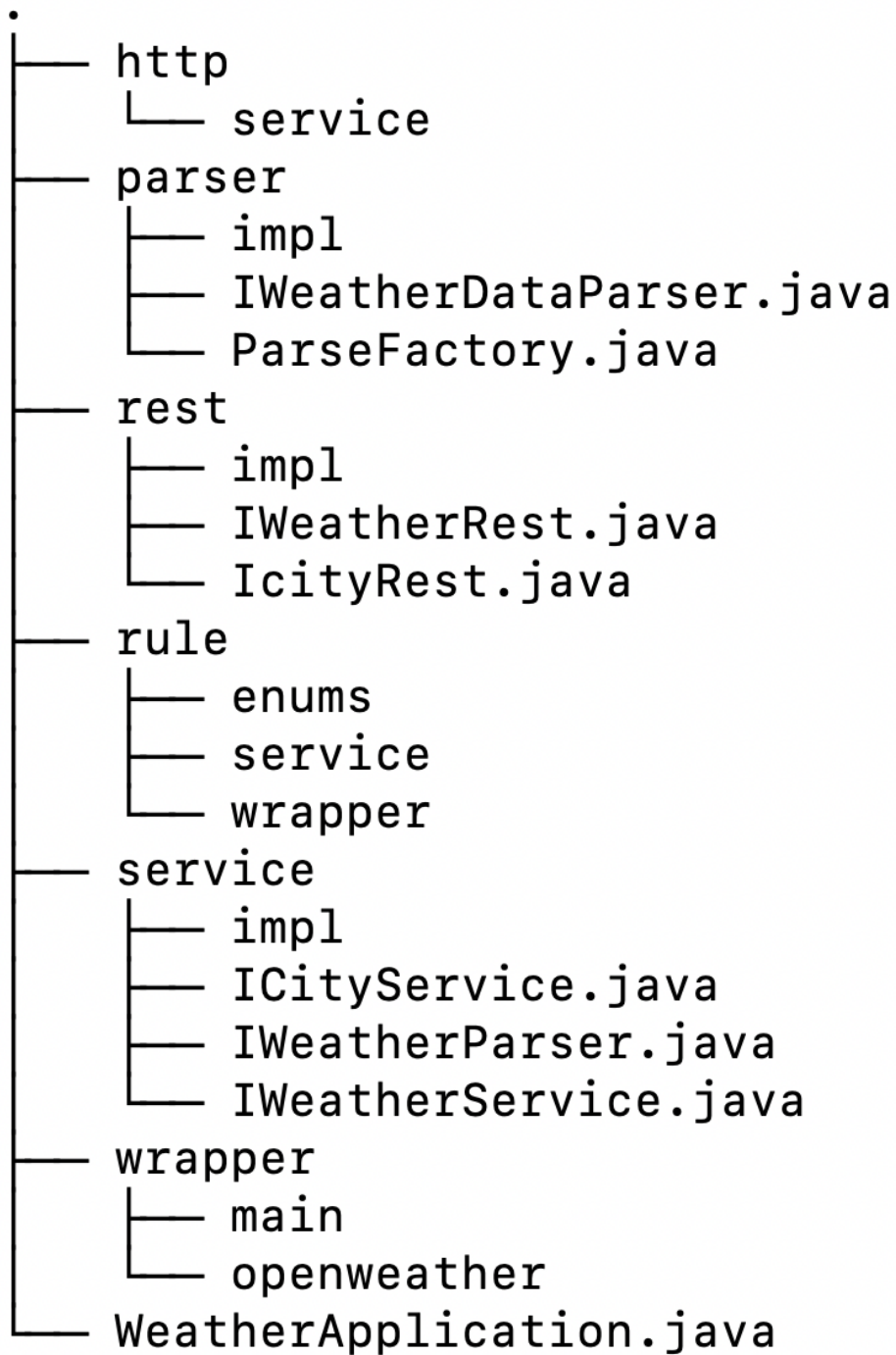
2. Diagrams

2.1. Microservice Architecture



3. Project Structure

3.1. Weather (Backend) Service

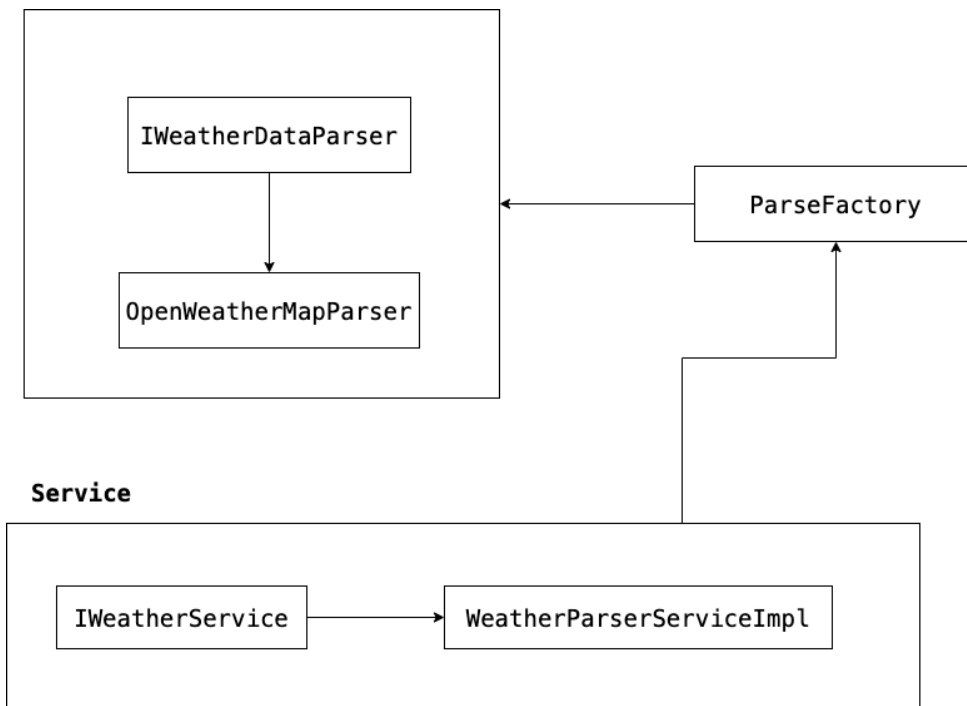


3.2. Weather UI Service

```
.
├── Dockerfile
├── index.html
├── js
│   ├── chart.js
│   └── constants.js
```

4. Design Patterns Used

4.1. Factory Design Pattern



5. Deployment

5.1. Weather Service

5.1.1. Code Base

5.1.1.1. Git Url

<https://github.com/ersanilbagzai/weather.git>

5.1.2. Clone code

```
git clone https://github.com/ersanilbagzai/weather.git
```

5.1.3. Dockerfile

```
FROM openjdk:8-jre-alpine3.9
RUN mkdir -p /opt/weather/
COPY target/weather-0.0.1-SNAPSHOT.jar /opt/weather/

CMD ["java", "-jar", "/opt/weather/weather-0.0.1-SNAPSHOT.jar"]
```

5.1.4. Command

5.1.4.1. Build docker image

```
docker build . --tag=sanilbagzai/weather:2.0
```

5.2. Weather-ui Service

5.2.1. Code Base

5.2.1.1. Git Url

<https://github.com/ersanilbagzai/weather.git>

5.2.2. Clone code

```
git clone https://github.com/ersanilbagzai/weather.git
```

5.2.3. Dockerfile

```
FROM nginx

COPY index.html /usr/share/nginx/html

RUN mkdir -p /usr/share/nginx/html/js

COPY js /usr/share/nginx/html/js/
```

5.2.4. Command

5.2.4.1. Build docker image

```
docker build . --tag=sanilbagzai/weather-ui:2.0
```

6. Deployment Script

6.1. Deploy using docker

```
docker run -dit -p 9006:9006 --name=weather sanilbagzai/weather:2.0
docker run -dit -p 80:80 --link weather:weather sanilbagzai/weather-ui:2.0
```

Run the deployment script using
sh deployUsingDocker.sh

After running the script go to browser and access the app using following url
<http://localhost>

7. Swagger Document

Available at the following link

<https://github.com/ersanilbagzai/weather/blob/main/weather/docs/index.html>