

# 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
Mon Oct 26 1970 00:00:00 GMT+0530 (India Standard Time)	295.05171874999996	295.05171874999996	0.91	scattered clouds	Carry umbrella
Sat Oct 24 1970 00:00:00 GMT+0530 (India Standard Time)	294.045	295.515	1.35	few clouds	Carry umbrella
Sun Oct 25 1970 00:00:00 GMT+0530 (India Standard Time)	296.05828125	296.05828125	0.7	broken clouds	Carry umbrella
Tue Oct 27 1970 00:00:00 GMT+0530 (India Standard Time)	293.57078125	293.57078125	3.17	clear sky	It's too windy, watch out!

Showing 1 to 4 of 4 entries

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## 1.2. Can select City

Select City

✓ indore

raipur

pune

london

Search:

Date	Day Min Temp	Day Max Temp	Wind Speed	Description	Suggestion
Mon Oct 26 1970 00:00:00 GMT+0530 (India Standard Time)	295.05171874999996	295.05171874999996	0.91	scattered clouds	Carry umbrella
Sat Oct 24 1970 00:00:00 GMT+0530 (India Standard Time)	294.045	295.515	1.35	few clouds	Carry umbrella
Sun Oct 25 1970 00:00:00 GMT+0530 (India Standard Time)	296.05828125	296.05828125	0.7	broken clouds	Carry umbrella
Tue Oct 27 1970 00:00:00 GMT+0530 (India Standard Time)	293.57078125	293.57078125	3.17	clear sky	It's too windy, watch out!

Showing 1 to 4 of 4 entries

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## 1.3. Search

Select City  
Indore

Show 10 entries

Search: carry

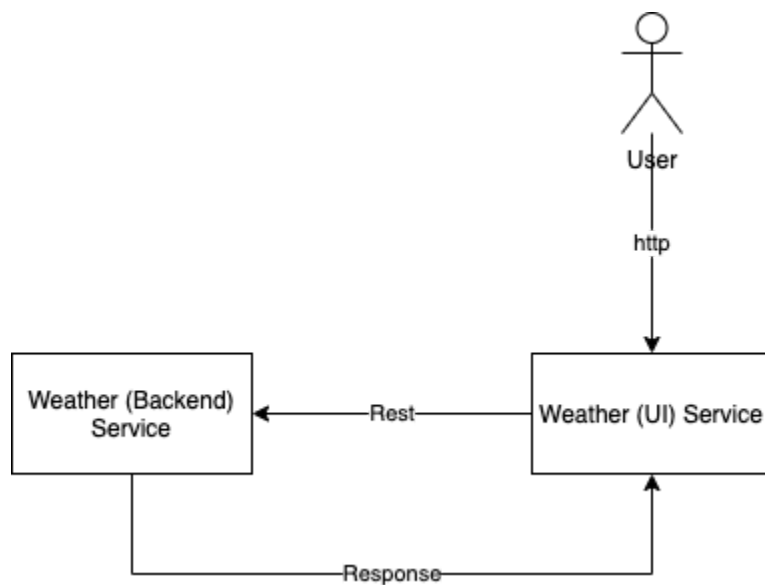
Date	Day Min Temp	Day Max Temp	Wind Speed	Description	Suggestion
Mon Oct 26 1970 00:00:00 GMT+0530 (India Standard Time)	295.05171874999996	295.05171874999996	0.91	scattered clouds	Carry umbrella
Sat Oct 24 1970 00:00:00 GMT+0530 (India Standard Time)	294.045	295.515	1.35	few clouds	Carry umbrella
Sun Oct 25 1970 00:00:00 GMT+0530 (India Standard Time)	296.05828125	296.05828125	0.7	broken clouds	Carry umbrella

Showing 1 to 3 of 3 entries (filtered from 4 total entries)

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## 2. Diagrams

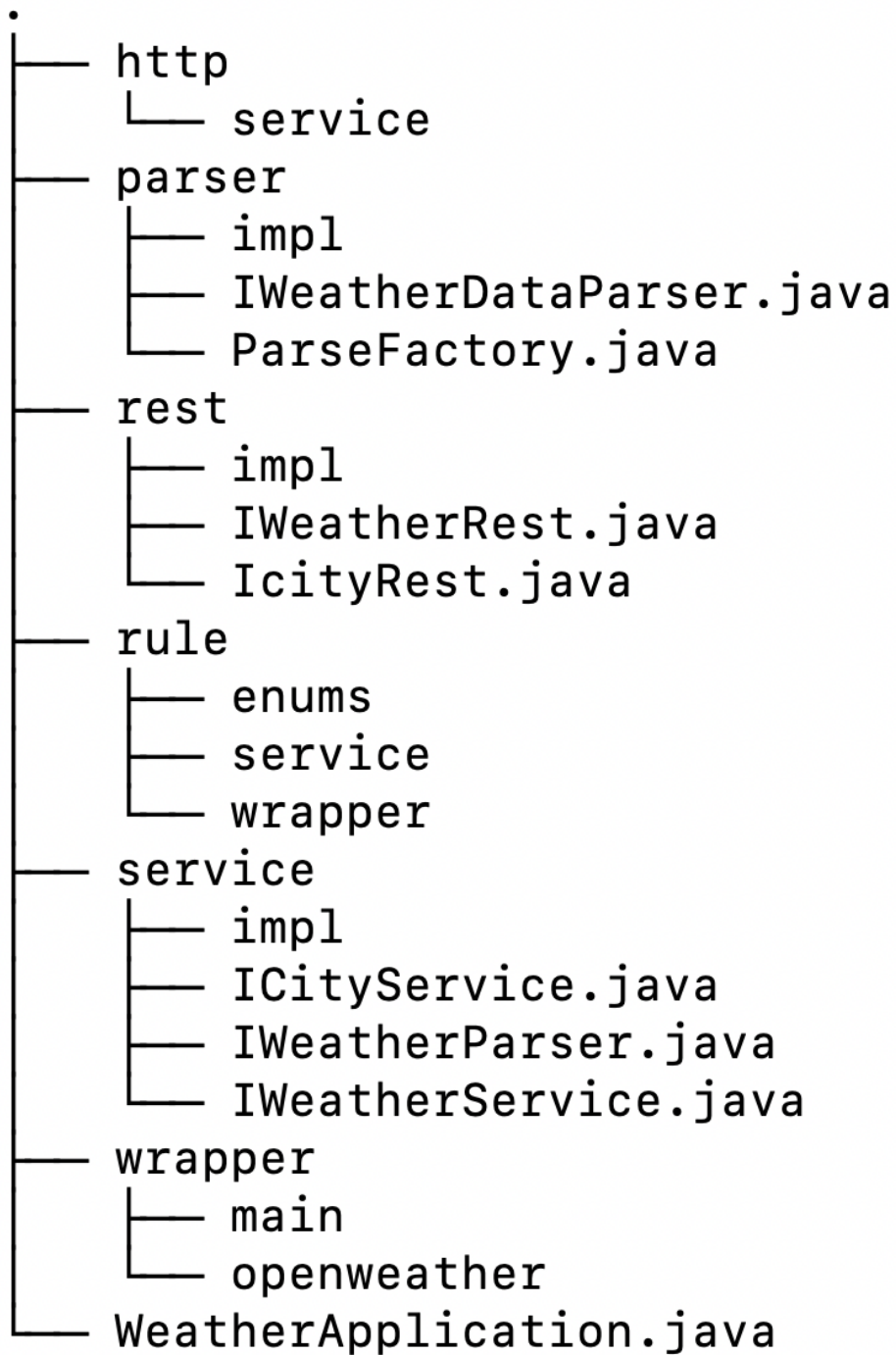
### 2.1. Microservice Architecture





## 3. Project Structure

### 3.1. Weather (Backend) Service

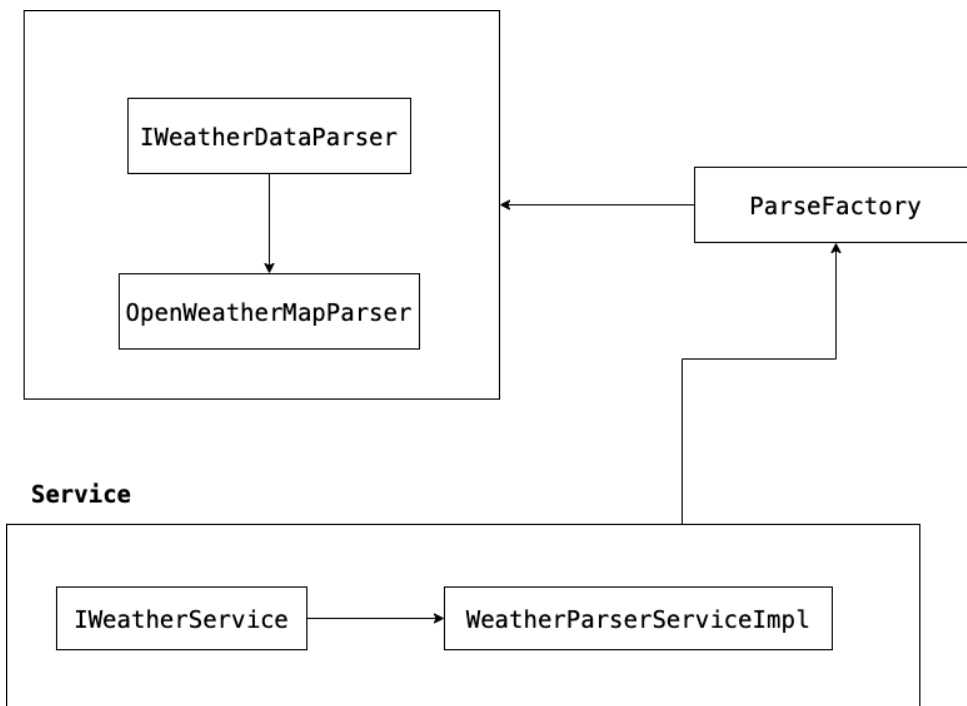


### 3.2. Weather UI Service

•  
└─ Dockerfile  
└─ index.html

## 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:1.0
```

### 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
```

### 5.2.4. Command

#### 5.2.4.1. Build docker image

```
docker build . --tag=sanilbagzai/weather-ui:1.0
```

## 6. Deployment Script

### 6.1. Deploy using docker

```
cd weather  
mvn clean install  
docker run -dit -p 8080:8080 --name=weather sanilbagzai/weather:1.0  
  
cd ../weather-ui  
docker run -dit -p 80:80 --link weather:weather sanilbagzai/weather-ui:1.0
```

Run the deployment script using  
sh deployUsingDocker.sh

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