



MAJOR PROJECT

Web Application for Weather forecasting

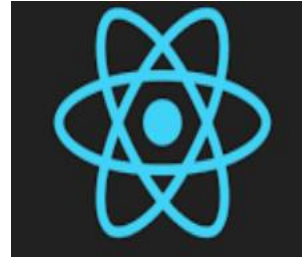
LANGUAGES USED FOR THIS APPLICATION



Html



CSS



React



JavaScript

Html code

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <link rel="icon" href="%PUBLIC_URL%/favicon.ico" />
    <meta name="viewport" content="width=device-width, initial-scale=1" />
    <meta name="theme-color" content="#000000" />

    <!-- Bootstrap core CSS -->
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-1BmE4kWBq78iYhFldvKuhfTAU6auU8tT94WrHftjD-
brCEXSU1oBoqyl2QvZ6jIW3" crossorigin="anonymous">
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js" in-
tegrity="sha384-ka7Sk0Gln4gmtz2MlQnikT1wXgYsOg+OMhuP+IlRH9sENBO0LRn5q+8nbTov4+1p" cros-
sorigin="anonymous"></script>

    <link rel="stylesheet" href="styles.css" />
    <meta
      name="description"
      content="Web site created using create-react-app"
    />
    <link rel="apple-touch-icon" href="%PUBLIC_URL%/logo192.png" />
    <!--
      manifest.json provides metadata used when your web app is installed on a
```

user's mobile device or desktop. See <https://developers.google.com/web/fundamentals/web-app-manifest/>

-->

```
<link rel="manifest" href="%PUBLIC_URL%/manifest.json" />
```

<!--

Notice the use of %PUBLIC_URL% in the tags above.

It will be replaced with the URL of the `public` folder during the build.

Only files inside the `public` folder can be referenced from the HTML.

Unlike `"/favicon.ico"` or `"favicon.ico"`, `"%PUBLIC_URL%/favicon.ico"` will work correctly both with client-side routing and a non-root public URL.

Learn how to configure a non-root public URL by running ``npm run build``.

-->

```
<title>React App</title>
```

```
</head>
```

```
<body>
```

```
<script src="https://cdn.jsdelivr.net/npm/chart.js@3.8.0/dist/chart.min.js" ></script>
```

```
<script src="../../src/index.js"></script>
```

```
<div id="root"></div>
```

<!--

This HTML file is a template.

If you open it directly in the browser, you will see an empty page.

You can add webfonts, meta tags, or analytics to this file.

The build step will place the bundled scripts into the `<body>` tag.

To begin the development, run ``npm start`` or ``yarn start``.

To create a production bundle, use ``npm run build`` or ``yarn build``.

-->

`</body>`

`</html>`

CSS Styling

```
body {  
  margin: 0;  
  font-family: -apple-system, BlinkMacSystemFont, 'Segoe UI', 'Roboto', 'Oxygen',  
    'Ubuntu', 'Cantarell', 'Fira Sans', 'Droid Sans', 'Helvetica Neue',  
    sans-serif;  
  -webkit-font-smoothing: antialiased;  
  -moz-osx-font-smoothing: grayscale;  
}
```

```
body{  
  width : 97vw ;  
  
}
```

```
code {  
  font-family: source-code-pro, Menlo, Monaco, Consolas, 'Courier New',  
    monospace;  
}
```

```
h1 span{  
  font-size: x-large;  
  font-weight: bold;  
  position: relative;  
  top: -6px
```

```
}

/* .Card{
  background-color: blue;
} */

/* canvas{

  width:1000px !important;
  height:600px !important;

} */

html,
button,
input,
select,
textarea {
  font-family: sans-serif; }

body {
  margin: 0; }

a {
  background: transparent; }
a:focus {
  outline: thin dotted; }
a:hover, a:active {
  outline: 0; }
```

```
h1 {  
  font-size: 2em;  
  margin: 0.67em 0; }
```

```
h2 {  
  font-size: 1.5em;  
  margin: 0.83em 0; }
```

```
h3 {  
  font-size: 1.17em;  
  margin: 1em 0; }
```

```
h4 {  
  font-size: 1em;  
  margin: 1.33em 0; }
```

```
h5 {  
  font-size: 0.83em;  
  margin: 1.67em 0; }
```

```
h6 {  
  font-size: 0.75em;  
  margin: 2.33em 0; }
```



```
abbr[title] {  
    border-bottom: 1px dotted; }  
  
b,  
strong {  
    font-weight: bold; }  
  
dfn {  
    font-style: italic; }  
  
mark {  
    background: #ff0;  
    color: #000; }  
  
code,  
kbd,  
pre,  
samp {  
    font-family: monospace, serif;  
    font-size: 1em; }  
  
pre {  
    white-space: pre;  
    white-space: pre-wrap;
```

```
word-wrap: break-word; }
```

```
q {  
  quotes: "\201C" "\201D" "\2018" "\2019"; }
```

```
q:before,  
q:after {  
  content: '';  
  content: none; }
```

```
small {  
  font-size: 80%; }
```

```
sub,  
sup {  
  font-size: 75%;  
  line-height: 0;  
  position: relative;  
  vertical-align: baseline; }
```

```
sup {  
  top: -0.5em; }
```

```
sub {
```

```
    bottom: -0.25em; }

img {
    border: 0; }

svg:not(:root) {
    overflow: hidden; }

figure {
    margin: 0; }

fieldset {
    border: 1px solid #c0c0c0;
    margin: 0 2px;
    padding: 0.35em 0.625em 0.75em; }

legend {
    border: 0;
    padding: 0;
    white-space: normal; }

button,
input,
select,
```

```
textarea {  
  font-family: inherit;  
  font-size: 100%;  
  margin: 0;  
  vertical-align: baseline; }
```

```
button,  
input {  
  line-height: normal; }
```

```
button,  
select {  
  text-transform: none; }
```

```
button,  
html input[type="button"],  
input[type="reset"],  
input[type="submit"] {  
  -webkit-appearance: button;  
  cursor: pointer; }
```

```
button[disabled],  
input[disabled] {  
  cursor: default; }
```

```
input[type="checkbox"],
input[type="radio"] {
  box-sizing: border-box;
  padding: 0; }

input[type="search"] {
  -webkit-appearance: textfield;
  box-sizing: content-box; }

input[type="search"]::-webkit-search-cancel-button,
input[type="search"]::-webkit-search-decoration {
  -webkit-appearance: none; }

button::-moz-focus-inner, input::-moz-focus-inner {
  border: 0;
  padding: 0; }

textarea {
  overflow: auto;
  vertical-align: top; }

table {
  border-collapse: collapse;
```

```
border-spacing: 0; }

*, *:before, *:after {
  box-sizing: border-box; }

/*
 * Global Styles
 */
html {
  font-size: 14px; }

body {
  color: #bfc1c8;
  font-family: "Roboto", "Open Sans", sans-serif;
  font-size: 14px;
  font-weight: 300;
  line-height: 1.5;
  background: #1e202b; }

h1, h2, h3, h4, h5, h6 {
  font-weight: 700;
  margin: 0 0 20px;
  line-height: normal; }
```

```
hr {  
  border: none;  
  border-bottom: 1px solid #777; }  
  
ul, ol {  
  margin: 0;  
  padding-left: 0; }  
  
a {  
  text-decoration: none;  
  color: #009ad8; }  
  
address {  
  font-style: normal; }  
  
p {  
  margin-top: 0; }  
  
form input, form textarea, form select {  
  outline: none;  
  border: none;  
  padding: 10px;  
  border-radius: 30px; }  
form select {
```

```
-webkit-appearance: none;
-moz-appearance: none;
appearance: none; }
form textarea {
  resize: vertical; }

/*
 * Reusable Components Style
 */
.button, form input[type="submit"], form button, form input[type="reset"] {
  border: none;
  background: #009ad8;
  padding: 10px 20px;
  border-radius: 30px;
  color: white; }

.map {
  height: 220px; }

.container {
  margin-right: auto;
  margin-left: auto;
  padding-left: 15px;
  padding-right: 15px;
```



```
*zoom: 1; }
.container:after {
  content: " ";
  clear: both;
  display: block;
  overflow: hidden;
  height: 0; }
@media (min-width: 768px) {
  .container {
    width: 750px; } }
@media (min-width: 992px) {
  .container {
    width: 970px; } }
@media (min-width: 1200px) {
  .container {
    width: 1170px; } }

.container-fluid {
  margin-right: auto;
  margin-left: auto;
  padding-left: 15px;
  padding-right: 15px;
  *zoom: 1; }
.container-fluid:after {
```

```
content: " ";
clear: both;
display: block;
overflow: hidden;
height: 0; }
```

```
.row {
margin-left: -15px;
margin-right: -15px;
*zoom: 1; }
.row:after {
content: " ";
clear: both;
display: block;
overflow: hidden;
height: 0; }
```

```
.col-xs-1, .col-sm-1, .col-md-1, .col-lg-1, .col-xs-2, .col-sm-2, .col-md-2, .col-lg-2, .col-xs-3,
.col-sm-3, .col-md-3, .col-lg-3, .col-xs-4, .col-sm-4, .col-md-4, .col-lg-4, .col-xs-5, .col-sm-5,
.col-md-5, .col-lg-5, .col-xs-6, .col-sm-6, .col-md-6, .col-lg-6, .col-xs-7, .col-sm-7, .col-md-7,
.col-lg-7, .col-xs-8, .col-sm-8, .col-md-8, .col-lg-8, .col-xs-9, .col-sm-9, .col-md-9, .col-lg-
9, .col-xs-10, .col-sm-10, .col-md-10, .col-lg-10, .col-xs-11, .col-sm-11, .col-md-11, .col-lg-11,
.col-xs-12, .col-sm-12, .col-md-12, .col-lg-12 {
position: relative;
```

```
min-height: 1px;  
padding-left: 15px;  
padding-right: 15px; }
```

```
.col-xs-1, .col-xs-2, .col-xs-3, .col-xs-4, .col-xs-5, .col-xs-6, .col-xs-7, .col-xs-8, .col-xs-9,  
.col-xs-10, .col-xs-11, .col-xs-12 {  
  float: left; }
```

```
.col-xs-1 {  
  width: 8.3333333333%; }
```

```
.col-xs-2 {  
  width: 16.6666666667%; }
```

```
.col-xs-3 {  
  width: 25%; }
```

```
.col-xs-4 {  
  width: 33.3333333333%; }
```

```
.col-xs-5 {  
  width: 41.6666666667%; }
```

```
.col-xs-6 {
```

```
width: 50%; }

.col-xs-7 {
  width: 58.3333333333%; }

.col-xs-8 {
  width: 66.6666666667%; }

.col-xs-9 {
  width: 75%; }

.col-xs-10 {
  width: 83.3333333333%; }

.col-xs-11 {
  width: 91.6666666667%; }

.col-xs-12 {
  width: 100%; }

.col-xs-pull-0 {
  right: auto; }

.col-xs-pull-1 {
```

```
right: 8.3333333333%; }

.col-xs-pull-2 {
  right: 16.6666666667%; }

.col-xs-pull-3 {
  right: 25%; }

.col-xs-pull-4 {
  right: 33.3333333333%; }

.col-xs-pull-5 {
  right: 41.6666666667%; }

.col-xs-pull-6 {
  right: 50%; }

.col-xs-pull-7 {
  right: 58.3333333333%; }

.col-xs-pull-8 {
  right: 66.6666666667%; }

.col-xs-pull-9 {
```

```
right: 75%; }

.col-xs-pull-10 {
  right: 83.3333333333%; }

.col-xs-pull-11 {
  right: 91.6666666667%; }

.col-xs-pull-12 {
  right: 100%; }

.col-xs-push-0 {
  left: auto; }

.col-xs-push-1 {
  left: 8.3333333333%; }

.col-xs-push-2 {
  left: 16.6666666667%; }

.col-xs-push-3 {
  left: 25%; }

.col-xs-push-4 {
```

```
left: 33.3333333333%; }

.col-xs-push-5 {
  left: 41.6666666667%; }

.col-xs-push-6 {
  left: 50%; }

.col-xs-push-7 {
  left: 58.3333333333%; }

.col-xs-push-8 {
  left: 66.6666666667%; }

.col-xs-push-9 {
  left: 75%; }

.col-xs-push-10 {
  left: 83.3333333333%; }

.col-xs-push-11 {
  left: 91.6666666667%; }

.col-xs-push-12 {
```

```
left: 100%; }

.col-xs-offset-0 {
  margin-left: 0%; }

.col-xs-offset-1 {
  margin-left: 8.3333333333%; }

.col-xs-offset-2 {
  margin-left: 16.6666666667%; }

.col-xs-offset-3 {
  margin-left: 25%; }

.col-xs-offset-4 {
  margin-left: 33.3333333333%; }

.col-xs-offset-5 {
  margin-left: 41.6666666667%; }

.col-xs-offset-6 {
  margin-left: 50%; }

.col-xs-offset-7 {
```



```
margin-left: 58.3333333333%; }

.col-xs-offset-8 {
margin-left: 66.6666666667%; }

.col-xs-offset-9 {
margin-left: 75%; }

.col-xs-offset-10 {
margin-left: 83.3333333333%; }

.col-xs-offset-11 {
margin-left: 91.6666666667%; }

.col-xs-offset-12 {
margin-left: 100%; }

@media (min-width: 768px) {
.col-sm-1, .col-sm-2, .col-sm-3, .col-sm-4, .col-sm-5, .col-sm-6, .col-sm-7, .col-sm-8, .col-sm-9, .col-sm-10, .col-sm-11, .col-sm-12 {
float: left; }

.col-sm-1 {
width: 8.3333333333%; }
```

```
.col-sm-2 {  
  width: 16.6666666667%; }
```

```
.col-sm-3 {  
  width: 25%; }
```

```
.col-sm-4 {  
  width: 33.3333333333%; }
```

```
.col-sm-5 {  
  width: 41.6666666667%; }
```

```
.col-sm-6 {  
  width: 50%; }
```

```
.col-sm-7 {  
  width: 58.3333333333%; }
```

```
.col-sm-8 {  
  width: 66.6666666667%; }
```

```
.col-sm-9 {  
  width: 75%; }
```

```
.col-sm-10 {  
  width: 83.3333333333%; }  
  
.col-sm-11 {  
  width: 91.6666666667%; }  
  
.col-sm-12 {  
  width: 100%; }  
  
.col-sm-pull-0 {  
  right: auto; }  
  
.col-sm-pull-1 {  
  right: 8.3333333333%; }  
  
.col-sm-pull-2 {  
  right: 16.6666666667%; }  
  
.col-sm-pull-3 {  
  right: 25%; }  
  
.col-sm-pull-4 {  
  right: 33.3333333333%; }
```

```
.col-sm-pull-5 {  
  right: 41.6666666667%; }
```

```
.col-sm-pull-6 {  
  right: 50%; }
```

```
.col-sm-pull-7 {  
  right: 58.3333333333%; }
```

```
.col-sm-pull-8 {  
  right: 66.6666666667%; }
```

```
.col-sm-pull-9 {  
  right: 75%; }
```

```
.col-sm-pull-10 {  
  right: 83.3333333333%; }
```

```
.col-sm-pull-11 {  
  right: 91.6666666667%; }
```

```
.col-sm-pull-12 {  
  right: 100%; }
```

```
.col-sm-push-0 {  
  left: auto; }  
  
.col-sm-push-1 {  
  left: 8.3333333333%; }  
  
.col-sm-push-2 {  
  left: 16.6666666667%; }  
  
.col-sm-push-3 {  
  left: 25%; }  
  
.col-sm-push-4 {  
  left: 33.3333333333%; }  
  
.col-sm-push-5 {  
  left: 41.6666666667%; }  
  
.col-sm-push-6 {  
  left: 50%; }  
  
.col-sm-push-7 {  
  left: 58.3333333333%; }
```

```
.site-header .branding .site-description {  
  font-size: 10px;  
  font-size: 0.7142857143em;  
  display: block;  
  color: #bfc1c8; }  
  
.main-navigation {  
  float: right; }  
.main-navigation .menu-toggle, .main-navigation .menu {  
  vertical-align: middle; }  
.main-navigation .menu-toggle {  
  background: none;  
  border: 2px solid transparent;  
  color: white;  
  padding: 20px;  
  border-radius: 40px;  
  -webkit-transition: .3s ease;  
  transition: .3s ease;  
  display: none;  
  outline: none; }  
@media screen and (max-width: 990px) {  
  .main-navigation .menu-toggle {  
    display: inline-block; } }
```

```
.main-navigation .menu-toggle:hover, .main-navigation .menu-toggle:active {  
  border-color: #009ad8;  
  color: #009ad8; }  
.main-navigation .menu {  
  list-style: none;  
  display: inline-block;  
  *zoom: 1; }  
.main-navigation .menu:after {  
  content: " ";  
  clear: both;  
  display: block;  
  overflow: hidden;  
  height: 0; }  
@media screen and (max-width: 990px) {  
  .main-navigation .menu {  
    display: none; } }  
.main-navigation .menu .menu-item {  
  float: left;  
  margin-left: 10px; }  
.main-navigation .menu .menu-item a {  
  padding: 5px 25px;  
  border: 2px solid transparent;  
  border-radius: 30px;  
  color: white;
```

```
        -webkit-transition: .3s ease;
        transition: .3s ease;
        font-weight: 400; }
    .main-navigation .menu .menu-item.current-menu-item a, .main-navigation .menu .menu-
item:hover a {
        border-color: #009ad8;
        color: #009ad8; }

.mobile-navigation {
    padding: 30px 0 0;
    clear: both;
    display: none; }
@media screen and (min-width: 991px) {
    .mobile-navigation {
        display: none !important; } }
.mobile-navigation .menu {
    background: #262936;
    list-style: none;
    text-align: center;
    border-radius: 10px;
    overflow: hidden; }
    .mobile-navigation .menu a {
        padding: 20px;
        display: block;
```



```
    color: white; }
.mobile-navigation .menu .menu-item {
  border-bottom: 1px solid rgba(255, 255, 255, 0.1); }
.mobile-navigation .menu .menu-item:last-child {
  border-bottom: none; }
.mobile-navigation .menu .menu-item.current-menu-item a {
  color: #009ad8; }

.hero {
  background-size: cover;
  padding: 70px 0;
  min-height: 350px; }

.find-location {
  position: relative;
  margin-bottom: 70px; }
.find-location input[type="text"] {
  width: 100%;
  padding: 20px 50px 20px 20px;
  background: #1e202b;
  color: white; }
.find-location input[type="submit"] {
  position: absolute;
  top: 5px;
```

```
    right: 5px;
    bottom: 5px;
    padding: 0 40px; }

.forecast-container {
    width: 100%;
    background: #323544;
    display: table;
    table-layout: fixed;
    width: 100%;
    overflow: hidden;
    border-radius: 10px;
    margin-top: -150px;
    margin-bottom: 50px; }
    .forecast-container .forecast {
        display: table-cell;
        vertical-align: top; }
    .forecast-container .forecast:nth-child(even) {
        background-color: #262936; }
    @media screen and (max-width: 990px) {
        .forecast-container .forecast {
            display: block;
            width: 16.6667%;
            float: left; } }
```

```
.forecast-container .forecast.today {  
  width: 420px; }  
.forecast-container .forecast.today .forecast-header {  
  *zoom: 1; }  
.forecast-container .forecast.today .forecast-header:after {  
  content: " ";  
  clear: both;  
  display: block;  
  overflow: hidden;  
  height: 0; }  
.forecast-container .forecast.today .forecast-header .day {  
  float: left; }  
.forecast-container .forecast.today .forecast-header .date {  
  float: right; }  
.forecast-container .forecast.today .forecast-content {  
  text-align: left;  
  padding-top: 30px;  
  padding-bottom: 30px; }  
.forecast-container .forecast.today .location {  
  font-size: 18px;  
  font-size: 1.2857142857em;  
  font-weight: 400; }  
.forecast-container .forecast.today .degree .num, .forecast-container .forecast.today .degree  
.forecast-icon {
```

```
display: inline-block;
vertical-align: middle; }
.forecast-container .forecast.today .degree .num {
font-size: 90px;
font-size: 6.4285714286rem;
margin-right: 30px; }
.forecast-container .forecast.today span {
margin-right: 20px; }
.forecast-container .forecast.today span img {
margin-right: 5px;
vertical-align: middle; }
@media screen and (max-width: 990px) {
.forecast-container .forecast.today {
display: block;
width: 100%; } }
.forecast-container .forecast .forecast-header {
background: rgba(0, 0, 0, 0.1);
padding: 10px;
text-align: center;
font-weight: 400; }
.forecast-container .forecast .forecast-icon {
height: 50px; }
.forecast-container .forecast .forecast-content {
padding: 50px 20px 10px;
```

```
text-align: center; }  
.forecast-container .forecast .forecast-content .forecast-icon {  
  margin-bottom: 20px; }  
.forecast-container .forecast .forecast-content .degree {  
  font-size: 24px;  
  font-size: 1.7142857143em;  
  color: white;  
  font-weight: 700; }  
.forecast-container .forecast .forecast-content small {  
  font-size: 16px;  
  font-size: 1.1428571429em; }
```

React

```
{
  "short_name": "React App",
  "name": "Create React App Sample",
  "icons": [
    {
      "src": "favicon.ico",
      "sizes": "64x64 32x32 24x24 16x16",
      "type": "image/x-icon"
    },
    {
      "src": "logo192.png",
      "type": "image/png",
      "sizes": "192x192"
    },
    {
      "src": "logo512.png",
      "type": "image/png",
      "sizes": "512x512"
    }
  ],
  "start_url": ".",
  "display": "standalone",
  "theme_color": "#000000",
  "background_color": "#ffffff"
}
```

JavaScript

```
// SELECT ELEMENTS
const iconElement = document.querySelector(".weather-icon");
const tempElement = document.querySelector(".temperature-value p");
const descElement = document.querySelector(".temperature-description p");
const locationElement = document.querySelector(".location p");
const notificationElement = document.querySelector(".notification");

// App data
const weather = {};

weather.temperature = {
    unit : "celsius"
}

// APP CONSTS AND VARS
const KELVIN = 273;
// API KEY
const key = "82005d27a116c2880c8f0fcb866998a0";

// CHECK IF BROWSER SUPPORTS GEOLOCATION
if('geolocation' in navigator){
    navigator.geolocation.getCurrentPosition(setPosition, showError);
}else{
    notificationElement.style.display = "block";
}
```

```
notificationElement.innerHTML = "<p>Browser doesn't Support Geolocation</p>";
}

// SET USER'S POSITION
function setPosition(position){
    let latitude = position.coords.latitude;
    let longitude = position.coords.longitude;

    getWeather(latitude, longitude);
}

// SHOW ERROR WHEN THERE IS AN ISSUE WITH GEOLOCATION SERVICE
function showError(error){
    notificationElement.style.display = "block";
    notificationElement.innerHTML = `<p> ${error.message} </p>`;
}

// GET WEATHER FROM API PROVIDER
function getWeather(latitude, longitude){
    let api = `http://api.openweathermap.org/data/2.5/weather?lat=${latitude}&lon=${longitude}&appid=${key}`;

    fetch(api)
        .then(function(response) {
```



```

        let data = response.json();
        return data;
    })
    .then(function(data) {
        weather.temperature.value = Math.floor(data.main.temp - KELVIN);
        weather.description = data.weather[0].description;
        weather.iconId = data.weather[0].icon;
        weather.city = data.name;
        weather.country = data.sys.country;
    })
    .then(function() {
        displayWeather();
    });
}

// DISPLAY WEATHER TO UI
function displayWeather(){
    iconElement.innerHTML = `>`;
    tempElement.innerHTML = `${weather.temperature.value}°<span>C</span>`;
    descElement.innerHTML = weather.description;
    locationElement.innerHTML = `${weather.city}, ${weather.country}`;
}

// C to F conversion

```

```
function celsiusToFahrenheit(temperature){
    return (temperature * 9/5) + 32;
}

// WHEN THE USER CLICKS ON THE TEMPERATURE ELEMENET
tempElement.addEventListener("click", function(){
    if(weather.temperature.value === undefined) return;

    if(weather.temperature.unit == "celsius"){
        let fahrenheit = celsiusToFahrenheit(weather.temperature.value);
        fahrenheit = Math.floor(fahrenheit);

        tempElement.innerHTML = `${fahrenheit}°<span>F</span>`;
        weather.temperature.unit = "fahrenheit";
    }else{
        tempElement.innerHTML = `${weather.temperature.value}°<span>C</span>`;
        weather.temperature.unit = "celsius"
    }
});
```