Building Advanced Lightning Web Components

Instructions

TRAILHEAD ACADEMY

Set Up the Bear-Tracking App

Tasks:

1. Set Up Your Trailhead Playground.
2. Set Up the Ursus Park App.

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1. Open a command prompt.
2. Clone the bear LWC App repository:

```
git clone https://github.com/sfdc-cdev/Bear.git
```

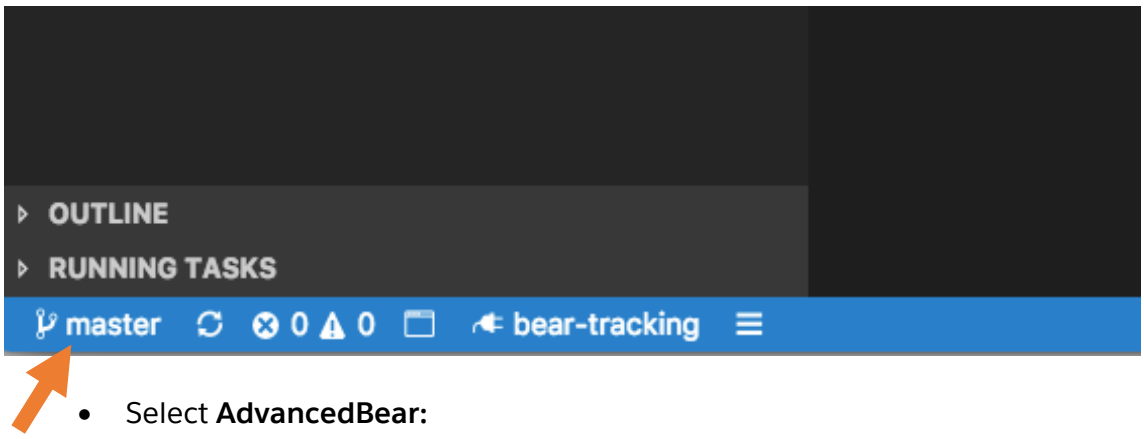
3. Navigate to the new **Bear** directory:

```
cd Bear
```

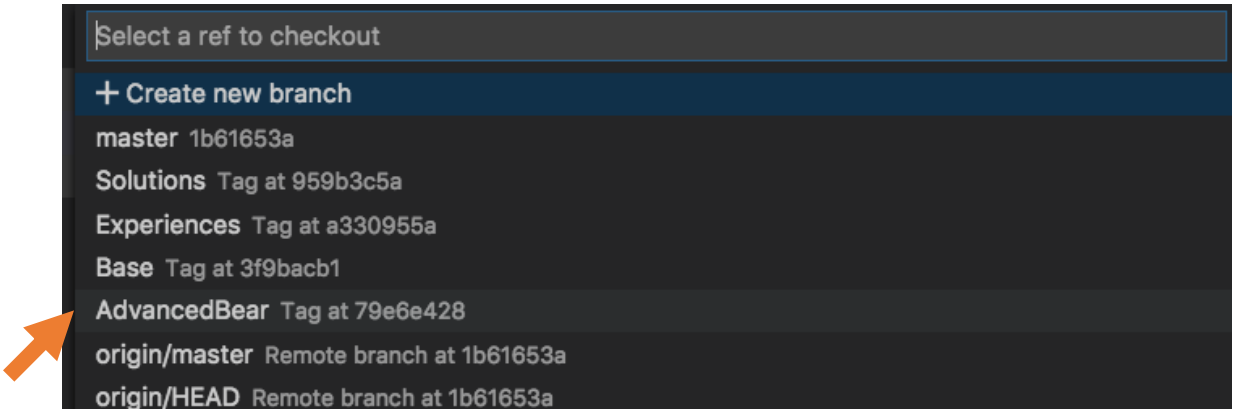
4. Open VS Code:

```
code .
```

5. Checkout the branch named **AdvancedBear**:
   - Click on **master**:



   - Select **AdvancedBear:**



6. Authorize your Trailhead Playground with the Salesforce CLI, save it with a bear-tracking alias and set the current user as the default user:

```
sfdx force:auth:web:login -s -a bear-tracking
```

7. When a browser window with the Salesforce login page opens, enter your Trailhead Playground credentials.

Note: If you haven't got a Playground or if you don't know your username and password, follow the instructions in section **Set up Your Trailhead Playground** here: https://sfdc.co/LWC_HelloWorld

8. Deploy the app code to the org.

```
sfdx force:source:deploy -p force-app/main/default
```

9. Assign the Ursus Park User permission set to the current user.

```
sfdx force:user:permset:assign -n Ursus_Park_User
```

10. Import the sample data.

```
sfdx force:data:tree:import -p data/plan.json
```

11. Open the org in a browser.

```
sfdx force:org:open
```

Step 6: Use a Third-party JavaScript Library

Tasks:

1. Upload the Leaflet.js Library as a Static Recourse.
2. Create the Interactive Map Component.
3. Replace the bearLocation Component with the

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1. Create a Static Resource.
   A. In Lightning Experience, go to **Setup**.
   B. Go to **Custom Code | Static Resources**.
   C. Click the **New** Button.
   D. Enter the following information:

      - **Name**: leaflet
      - **File:** ./EXFiles/Step_6/leaflet.zip

      Note: Leaflet.js was taken from https://leafletjs.com/

   E. Click the **Save** button.

2. Define the Interactive Map Component.
   A. Right-click again on the **lwc** folder (**force-app** | **main** | **default | lwc**).
   B. Select the following option:

      ```
      SFDX: Create Lightning Web Component
      ```

   C. Enter the filename:

      - **Filename:** interactiveMap

   D. Open interactiveMap.html. Between the `<template>` tags, insert the following markup:

      ```
      <div class="mapid" lwc:dom="manual"></div>
      ```

E. In the XML file **interactiveMap.js-meta.xml**, copy and paste the following code to make the interactiveMap component available to Lightning App Builder. Make sure to overwrite the existing value for isExposed.

```
<?xml version="1.0" encoding="UTF-8"?>
<LightningComponentBundle
   xmlns="http://soap.sforce.com/2006/04/metadata"
   fqn="interactiveMap">
    <apiVersion>47.0</apiVersion>
    <isExposed>true</isExposed>
    <targets>
        <target>lightning__RecordPage</target>
    </targets>
    <targetConfigs>
        <targetConfig targets="lightning__RecordPage">
            <objects>
                <object>Bear__c</object>
            </objects>
        </targetConfig>
    </targetConfigs>
</LightningComponentBundle>
```

F. Right-click on the interactiveMap folder and create a new file named **interactiveMap.css** .

G. Define the "mapid" and set the height and stack order of the element. Your code should appear similar to the following:

```
.mapid{
    height: 280px;
    z-index: 10;
}
```

H. Copy and paste the contents of ./EXFiles/Step_6/interactiveMap.txt into the interactiveMap.js file.

I. Right-click the default folder and click **SFDX: Deploy Source to Org**.

3. On the Bear record page, replace the bearLocation component with the interactiveMap component. Note that the map marker now is now interactive and the bear record coordinates can be updated from the map.