1.

Create your user interface with input fields in HTML/CSS.

Make sure you have **created a search button**.

Create **an empty div underneath your input fields** that's used for displaying results. **Give the div an Id**.

2.

In your JavaScript file, **create a JavaScript Object** to store your data.

See our course module "Principles of Programming": Sub-Topic 2.2.10: Overview of Object Programming

Within this object, **you can add a property with an array**, so you can have multiple data sets.

An example if we wanted to create a data object with people:

```
var data = {
    person1: ["Jane", "22 years old", "Student"],
    person2: ["John", "30 years old", "Builder"]
}
```

3.

Create any functions needed for calculations depending on your chosen scenario. Eg cost calculations

4.

Add a click event listener to your **search button** so that when clicked it runs a function that does the following:

5.

Using if statement - check if input value equals "hotel" (or whatever you want to check for based on your scenario)

If it is, we are going to loop through this data in the next step.

You can get the input value by using .value

Example:

```
document.getElementById("myInputField").value === "hotel"
```

Remember, you need to put this within your if statement condition. The syntax is:

```
if (condition) {
     // block of code
}
```

6.

Now, **within your if statement block - use a "for of" loop to iterate though your data** (the data you created in step two).

Watch the tutorial to see how to do this.

Tutorial – for of loop:

https://youtu.be/tVq4L8tnWuA

Within the for of loop, **we need another if statement to filter the results**. This is up to you to figure out.

(Remember, we don't want to show all the results. For example if the user selected Auckland as a travel destination, we don't want to show the hotels located in Wellington, we only want the Auckland ones. Rooms also have min and max limits for the number of guests, so we need to show only those suitable rooms, based on the user's input.).

Also re-read step 5 and 6 again to make sure you have the correct structure. All this nesting of statements within each other can get confusing!

7.

Within that if statement, use **document.createElement to dynamically create as many HTML elements** as needed for your data (title, cost, description, etc).

Remember to **create one div that acts as the container** to hold all these elements

Example:

```
let myDiv = document.createElement("div")
let title = document.createElement("p")
```

8.

Then **use .innerText** to set the text

Example:

```
title.innerText = value[0]
```

value is our variable from our for of loop (name the variable whatever you want, just make sure it matches what you named it in your loop)

and zero is our index, to get only the first element

See our course module Principles of Programming: 2.2.9 Arrays Sub-Topic to learn about indexing

Remember you can create as many HTML elements as needed, so you can create another one for cost, etc – whatever other data you have, and change the index number.

9.

Then **use .appendChild** to append them to your div you created in step seven

Example.

```
myDiv.appendChild(title)
```

Tutorials – dynamically creating HTML elements:

https://youtu.be/VW8kNAous88

https://youtu.be/umHdBuTw98c

10.

Now you need to **append this div to your empty div** from step one, which displays the results.

Example:

```
document.getElementById("myResults").appendChild(myDiv)
```

Repeat steps 5-10 for all the accommodation or transport types.

Eg. hotel, hostel, motel, house

Once you have all this working:

11.

Add some code to remove/clear results, as you don't want the old results showing when a user attempts to do a new search.

12.

Add in form validation so that if there is invalid data or empty form fields, error messages are displayed to the user.

Check course module for this (2.6 Events: Forms Sub-Topic)