

Additional work for COMP1004-coursework – Khadija Amin -- Psyka6

The additional work in my coursework is as follows:

HTML:

Accessibility Score:

- The following is the screenshot of the 100% score from lighthouse. Initially the score was 93%. I made the following changes to improve my accessibility score:

1. Updated the for attribute of the '*Owner Name*' label to match the id of its associated input field.

File Name: add-vehicle.html

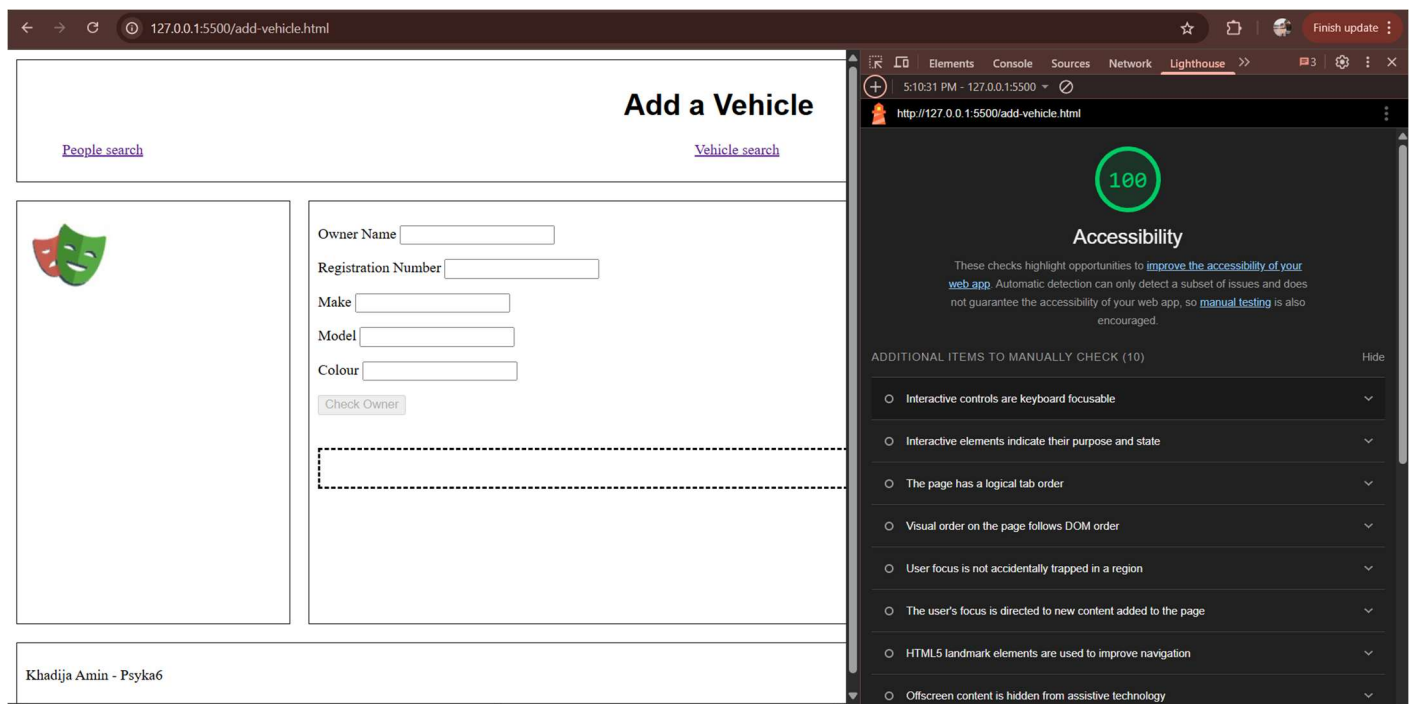
Line Number: 32

2. Updated the for attribute of the '*Registration Number*' label to match the id of its associated input field.

File Name: add-vehicle.html

Line Number: 36

- After these changes were made for *add-vehicle.html* my score improved to 100% (Screenshot below).

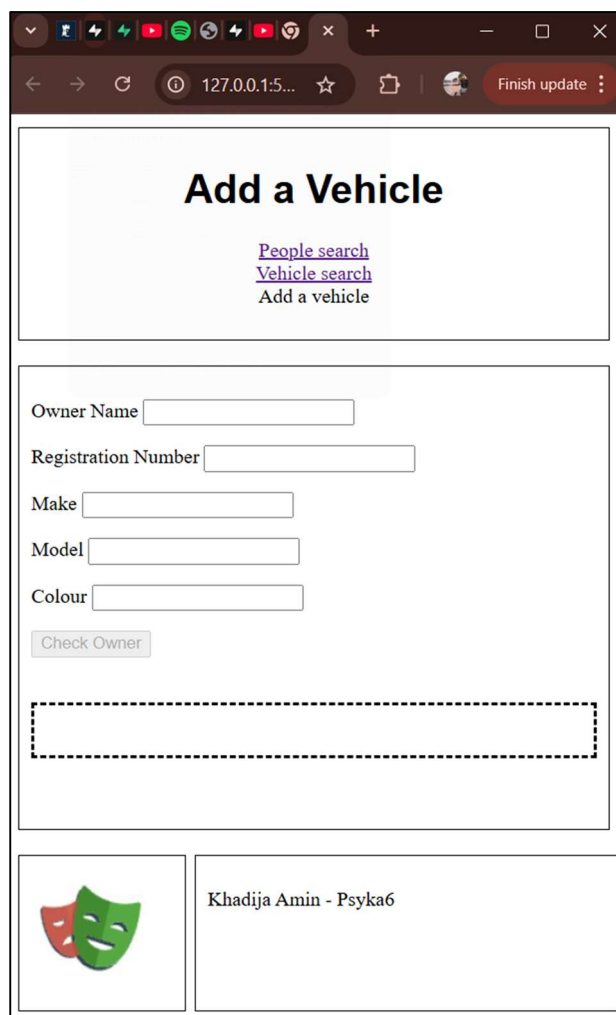


- My score for both the other pages was 100% at first check. Some additional items I have manually checked for *add-vehicle.html* as listed on the lighthouse additional check are as follows:

- ✓ Interactive controls are keyboard focusable
- ✓ Interactive elements indicate their purpose and state
 - a. Visual Test
 - ✓ Can you Tab to each interactive element?
 - ✓ When you get to an interactive element, is there a visual clue that users can interact with it?
 - ✓ Does each interactive element change in appearance when you select it?
- ✓ The page has a logical tab order
- ✓ Visual order on the page follows DOM order
- ✓ User focus is not accidentally trapped in a region
- ✓ HTML5 landmark elements are used to improve navigation
- ✓ Custom controls have associated labels

CSS:

1. A screenshot of the webpage when the width is less than 500px



Description: I added a media query as stated in the coursework guidelines that only comes to play when the width of the screen is less than 500px. It adjusts the grid structure so that elements stack more neatly, sets the width of sections like the header, main, aside, and footer to 95%, and applies

consistent margins and padding. Additionally, it changes the direction of flex containers to column, making the layout more suitable and readable on smaller devices like smartphones. It also follows the guidelines set for the ratio between the footer and the side bar.

Code:

```
@media screen and (max-width: 500px) {  
  body.container {  
    grid-template-columns: 1fr 4fr;  
    grid-template-areas:  
      "header header"  
      "main main"  
      "aside footer";  
    gap: 0;  
    margin: 0;  
    padding: 0;  
  }  
  
  header {  
    width: 95%;  
    margin: 10px 10px;  
  }  
  
  main {  
    width: 95%;  
    margin: 10px 10px;  
  }  
  
  aside {  
    width: 95%;  
    margin: 10px 10px 10px 10px;  
    padding: 10px;  
  }  
  
  footer {  
    width: 95%;  
    margin: 10px 10px 10px 10px;  
    padding: 10px;  
  }  
  
  .flex-container {  
    flex-direction: column;  
    align-items: center;  
    padding: 0;  
  }  
}
```

File Name: style.css

Line Number: 133-173

JavaScript and Database:

- Below are the playwright tests I have written to test *add-vehicle.html*.

1.Owner Already Exists: This test confirms the following conditions:

- ✓ Ensures *Check owner* is disabled at the start of the test when no information is entered
- ✓ Enters an owner name but no information for the vehicle – expects an *Error* message
- ✓ Enters information of an owner that already exists in the database (An owner that can be selected) – expects a *Select owner* button
- ✓ Checks case sensitivity by using a partial name – e.g “*rach smi*”
- ✓ Expects a “*Vehicle added successfully*” message.
- ✓ Uses Vehicle Search to ensure the vehicle has been added

File Name: psyka6-coursework-playwright-tests.spec.js

Line Number: 13-46

2.Owner does not Exist: This test checks the following conditions:

- ✓ Enters the information of an owner that does not exist – expects a New owner button
- ✓ Submits the form without any information entered – expects an *Error*
- ✓ Submits the form with empty spaces – expects an *Error* message
- ✓ Enters information of an owner that already exists (identical owner already exists) – expects an *Error* message
- ✓ Fills in all fields but one – expects an *Error* message
- ✓ Finally, enters all valid information – expects an *Add owner* button.
- ✓ Expects an *Owner added successfully* message
- ✓ Expects an *Add vehicle* button
- ✓ Expects a *Vehicle added successfully* message

File Name: psyka6-coursework-playwright-tests.spec.js

Line Number: 50-112

Note: There are only 2 tests but as you can see I have covered all the test conditions with just the 2 tests. Both these tests together, include all exceptions that need to be covered and at the end test everything with valid values.

Note regarding one failed test: My code is failing one of the tests in the sample test file: “*header should have padding 10px, margin 10px, and border 1px solid black*”. I receive the following error message:

```
Expected string: "1px solid rgb(0, 0, 0)"
Received string: "0.8px solid rgb(0, 0, 0)"
```

I have tried multiple things to fix this error message, but I am unsure why it is returning 0.8px. On **line 11** in my **style.css** file I have set the border to 1px. This error may be due to my browser which is why I have mentioned this as an issue regarding playwright and not related to my code. I have also included an image below of my code for the header (but I have also attached my *style.css* file as per the requirement if you need to confirm.)

```
header {  
  grid-area:header;  
  width: 100%;  
  box-sizing: border-box;  
  
  border: 1px solid black;  
  margin: 10px;  
  padding: 10px;  
  
  text-align: center;  
  backface-visibility: hidden;  
  transform: translateZ(0);  
  image-rendering: pixelated;  
}
```