Discuss how the JavaScript function checkForm could/should be made more generic (i.e., so that the same functions could be used with a variety of different HTML pages without having to be modified). (10pts)

The function checkForm should be made more generic by changing the way that the criteria is checked. On every website there is going to be a different set up for where certain things are and how variables are assigned and in what order. Since checkForm needs the exact location of the thing that it is searching for on the website it makes it so that every website needs a custom checkForm function which isn’t very efficient. If it was made more generic it would be easier to use on different pages and making it versatile would be beneficial when making similar websites. The checkForm function could be made more generic by checking each element of the array and seeing if any of them match the desired outcome.

Describe other ways in which JavaScript functions might be used to improve the functionality of HandyRides pages. (10pts)

We could use Javascript functions to do more advanced functions that would benefit HandyRides and make it more user friendly and convenient. If this is achieved it would draw customers to the app because they want to spend as little time as possible searching for a ride. We can use functions to allow users to sort the list of rides they are given so they are ordered by their desired criteria such as location, time of departure, number of passengers vacant. We can also make it more visually appealing to find a ride by highlighting the rides that are accepting riders at that time. Once we figure out our cost model and how to assign prices based on the length of the ride and type of car (which leads to differences in comfort and the amount of gas consumed), we can help the user sort the available rides by cost so they can pick their most preferred ride.

Discuss the advantages and disadvantages of saving state information (e.g. information about previous usage) on the client versus saving it on the server. (5pts)

It is advantageous to save state information on the client because it is beneficial when the user wants to go back to a page to make changes without deleting all the information that they have inputted into the page that they are currently on. It saves the hassle of them re-inputting all of their information whenever they move between steps. Another advantage would be that you would not have to store and keep data for one time users like their preferred themes or location since each user will generate this data, which could be useful to know and conduct research on your regular users but not very useful on one time users. Also, if malicious actors are trying to crash your site and you store state information on your server, then that could be a lot of data processing at once for saving each user's state information onto the server rather than having the users each take care of their own state information.

It is advantageous to save state information on the server when we want to take a step back and analyze our website and make alterations based on all the users that have visited. It stores information that would enable us to discover overall trends and popular functions. The client allows for more personalized alterations where the server is more advantageous for changes made after analyzing general user preferences and to gain information on what the most beneficial updates to the website would be.