OVERVIEW:

This is my final project's write up of SEAINFO6150, I want to develop a car dealer website. The goal of car dealer website is creating a website that can display all different brands of car and different models of one brand. And customer can go into the website to find their target car by recommend car lists or search by brands and models, then customers can have an appointment with dealer in Order page. In order to make attractive pages, I took example by many official websites of famous brands, such as Tesla, BMW, Audi, Toyota and so on. I try my best to perfect my website.

TIMELINE:

WEEK 1(11.23 – 11.29):

- Thinking and perfecting my final project UI design

    a)   Checking and Judging that my ideas whether can achieved by myself.

    b)   Changing my UI design, such as Wire Frames, Sitemaps and User flow

- What had changed from my original UI design?

    a)   In wire frames, I redesign my home page, I delete search area, because I don't know how to achieve search function; and I also delete login and log out functions, because I think this is a font-end application, so authentication function is senseless. In contrast, I also add navbar elements, such as About us page, Contact us page.

    b)   In wire frames, I decide to optimize my product detail page and bill page. I think these two pages should be more detail, so I change two pages to four pages, these three pages are product detail page (display car detail information), Order page (check car's information and fill personal information), Confirmation page (tell customer that they successful make an appointment with dealer), Thank you page (thanks for customers coming).

    c)   Because wire frames have been changed, user flow and websites also changed.

WEEK 2(11.30 – 12.6):

- Decided final project design and all pages' user flow to make sure that have a clear website structure.

- Beginning to find data that we need, but I don't find such data. So, I decide to use Mock API to create my own json file.

- Learning React official library and some other libraries, like react-router, different hooks, lodash and etc.

- Begin to code my project, completed navbar, about us, Contact us page.
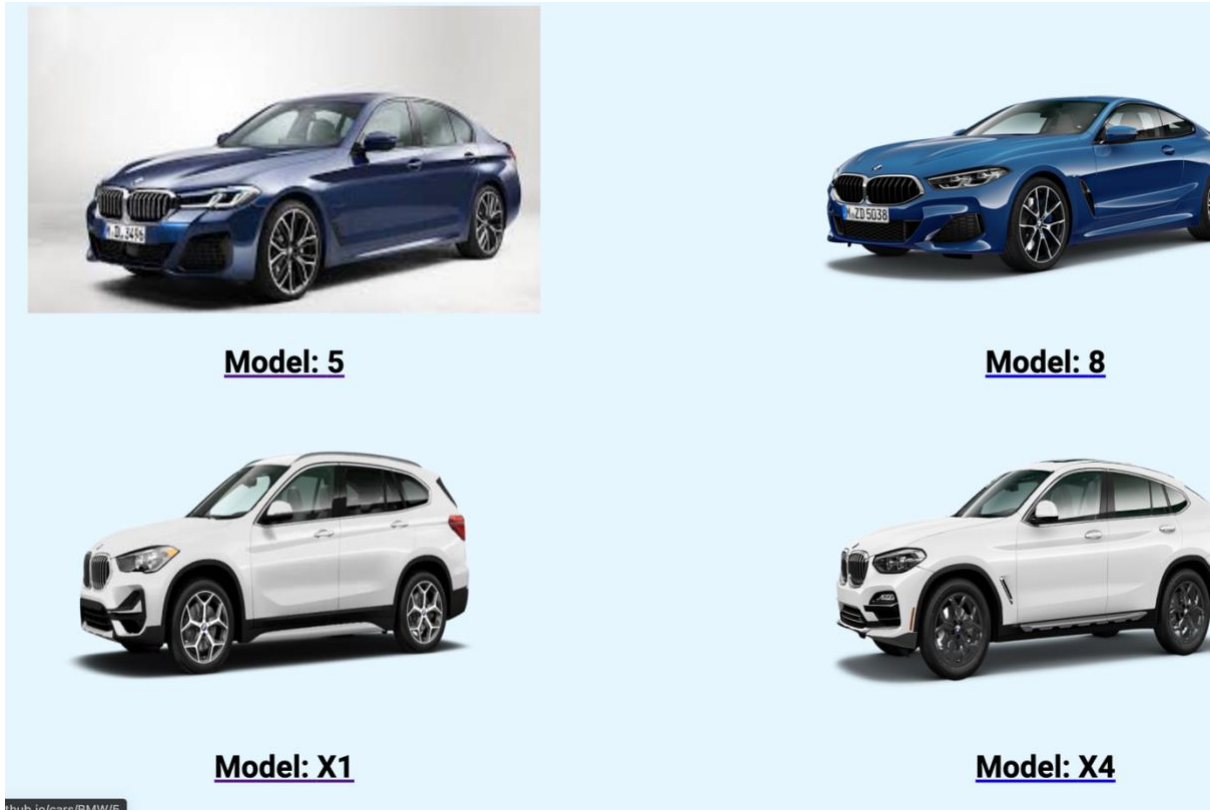
- Starting to write my final project write up.

WEEK 3(12.7 – 12.11):

- Continue coding my project, completed all pages, including landing page, Home pages, car detail pages (brand pages and model pages), order page, confirmation page and thank you page. including JSX files and CSS files

- Beginning to code test file to every component and successful test every component.

- Review Project requirements to make sure my application satisfied project requirements.

- completed my final project write up.

HIGHLIGHT OF PROJECT:

PRODUCT DETAIL PAGE:

I divided product detail pages into brands detail pages and model detail pages, because I want to my category pages can make customers easier to find suitable car as soon as possible. So my category page should have a very clear structure. And in these detail pages, I also use responsive layout and flex layout to make my page more friendly to our customers. image as follow:

Model: 5   Model: 8

Model: X1   Model: X4

FORM PAGE:

I make my homepage for every car, I follow my user flow and customer can easy to find order form, then we redirect to order detail page, customer can have multiple choose and fill their information. I consider that buy a car always need to go to car shop to see the car at first, then customer will pay for it. So in this form, I just use this form to make customer have an appointment with car dealer rather than pay for it. I think this is more like to our real world. Image as follow:

CHALLENGES:

The challenge I face are basically all about the from and how to make it valid and elegant at the same time. I am not familiar with form and has never dealt with form before. I will list some challenges I faced during the process.

CHALLENGES	HOW TO FIX
How to use CSS knowledge to render my landing page, I want to my landing page background images will automatically change with limited times again and again	I used keyframes and CSS animation properties to achieve make my landing page swap images like slides show.
How to use mock API to create json file and how to fetch these data from my React App. My mock website is http://demo1468395.mockable.io/brands	I used mockable.io to write my json file, and get the link, then I set fetch method to get these data. And I also noticed that CORS problems and use proxy to solve this question.
How to use different hooks, I already familiar with useState and useEffect, but I still not familiar with other hooks, like useContent, and useReducer.	Although I finally not used these hooks exclude useState and useEffect hooks. I have deep understanding about these hooks.
How to use these data from internet, because I get data by using mock API, but I need to deconstruct this json file to get my	I combined props, useState hook and URL to solve this problem. For example, I want to a specific brand's car, I use url to save current brand, and then use props to transmit to children, then use useState hook to save filtered data.
How to make my footer always at the bottom of the page	I want to my header always at top place, this is very easy. But I want to my footer always at the bottom of page is not easy. I finally using absolute position and margin to make my footer always at the bottom of my page.

CONCLUSION:

- As my first React Application, I learned how to create a React project and have a deep understand about React core concept: component-based ideas. Also, I knew how to use all different hooks and how to use props to transmit properties.

- From this course and project, I also learned a lot HTML and CSS knowledge, like flex layout and responsive layout.

- From this project, I really have a clearly thought about how to complete a project, including before coding and after coding. I know what I need to do in different period. It is a good practice of my future work career.