

Indian Institute of Technology Kharagpur

AES Web Development Workshop 2022

Assignment 1

Imagine you have started a Start-Up Company of yours a year back, for Online Shopping to compete with the likes of Flip-Kart, Amazon, eBay. Your company has gained enough popularity among the masses. It has a website that was built a year back, and CHANGE is often necessary as they say. You are also a Web Development enthusiast. So, instead of making someone else do the job for you, you decided to completely revamp the website design, make it more **efficient**, and **work properly on Desktop, Laptop, Mobile as well as Tablets**.

So, you start jotting down the things that you need to do in your diary.

Your website has the following **sections** on the home page: -

1. Intro Page
2. Items that will be launching soon
3. Surprise Section
4. Most Bought Items
5. Reviews from others
6. Add review from a new user
7. Footer

Now, you start thinking about how each of these sections will be designed. You start noting these following thoughts in your diary about how to design each and every element of the HOME PAGE: -

1. A TOP NAVIGATION BAR

Subtasks: -

- It will be **fixed** at its position and will be visible at the same position on the screen, even when the page is scrolled. [3]
- Make use of rounded edges (Much like the Google Search Bar). [1]

- The leftmost part will contain the **logo** of your company. [2]
- It must have **links to different sections** of the Home Page. When the links are clicked upon, it will go to that section of the webpage. As an added feature, make sure that when the links are clicked, it will not jump to that section. It would **smoothly scroll** down. [4]
- The last link of the navbar will be a link to **Google's official COVID advisory page**, which, when clicked upon, will open in a **NEW TAB**. This link will have some kind of effect that catches the eye of the user at first glance. [2]

2. THE INTRO SECTION

Subtasks: -

- Use a background image of your choice that covers **exactly the whole of the visible screen**, not more, not less. [3]
- Your company's name will be displayed at the center, along with the motto below it. Both these texts will have some animation effects when the page is reloaded. Keep the animations as simple as possible. [4]
- There will be a button below the above that will take you to the **"Surprises"** section with a smooth scroll effect. [3]

3. SECTION FOR LAUNCHING SOON PRODUCTS

Subtasks: -

- A small heading to denote the name of the section. [1]
- Don't add too many things in the section. Add 3 or 4 items. Keep the images stacked together, and when the pointer is placed over the image, add some special effect to the image. [5]
- A small description to describe all the images that you used collectively. [2]

4. THE SURPRISE SECTION (ITEMS OFFERED AT DISCOUNTS)

Subtasks: -

- A small heading to denote the name of the section. [1]

- Make use of cards in this section (Maximum of 4). The card contains the image of the item, the brand of the item, the name of the item, the discounted price, and the original price (~~strikethrough~~ this price). [4]
- When the mouse is brought over the specific card, its **lower portion either extends** below to reveal a KNOW MORE button or the **lower portion goes over the card contents** and reveals the KNOW MORE button. [5]
- When clicked on this button, a pop up will appear containing the terms and conditions of the offer and the image of the item on the side. It must also have a **CLOSE** pop up button. [5]

5. A SECTION CONTAINING THE MOST BOUGHT ITEMS.

Subtasks: -

- A small heading to denote the name of the section. [1]
- The top 10 most bought items on cards. On the card, it will have small images of those items in a **circular frame**. Below it will be the item name and the star ratings of the item. You can also add the total number of people who have bought those items below it. [5]

6. A SECTION CONTAINING HAPPY USER REVIEWS

Subtasks: -

- A small heading to denote the name of the section. [1]
- Not more than 3 reviews to be displayed. Again, use a card with the picture of the person on the left and what he feels about using your platform for shopping on the right. [4]
- While hovering over the image (**not on the entire card**), using some animation, display the name of the user. [4]

7. SECTION TO PROVIDE REVIEW

Subtasks: -

- A small heading to denote the name of the section. [1]
- Add an input form that will have input fields for First Name, Last name, text box for review, and a submit button. (This would not work now because it doesn't have any Backend coding, but you will learn about it in the future assignments. For now, add it as a dummy button). [5]
- Add images to the form, or its background to make the form look better. [3]

8. THE FOOTER SECTIONS

Subtasks: -

- Make the background color of this section such that it distinguishes itself from the rest of the sections. [1]
- Keep a few links such as Terms and Conditions, Privacy Policy, Contact Us on one side. [1]
- Keep copyright information on your website, company's logo, and name of the company on the other side. [1]

9. A BACK TO TOP BUTTON

Keep this button on the bottom corner of the screen (fixed), and it will smoothly take you to the top of the page on clicking. [3]

Now, all you have to do is to realize your thoughts that you wrote in your diary.

It's a total of 100 Marks for the Main section. There is also a bonus section. Refer to the next page.

1. Try to complete as many subtasks as possible [Marks are denoted in brackets beside the subtask]. [Total 75 Marks]

2. Make the **webpage responsive** (i.e., the same webpage will work for all devices, with different device screen sizes. [25 Marks]
 - The top navigation bar should reduce in size when the screen width is reduced.
 - The Intro page image will resize itself when changing the width of the browser.
 - For the sections that contain cards, make sure that the cards don't overlap. If it starts to overlap at a **particular screen width**, use MEDIA QUERIES to make the cards to go in a new line instead of overlapping. You can use CSS frameworks for this.
 - If you have a single big card or any other element that gets out of the screen while resizing the browser width, use **MEDIA QUERY** to change the width of that element to a much smaller value that makes the content visible, after that specific width onwards.

BONUS SECTION

Subtasks: -

1. For laptop and Tablet screens, change the top navigation bar into a **Ham-Burger menu** when pressed will **slide out from the edge of the screen**. For example, if you keep the menu at the top right corner, it should extend out from the right edge of the screen.
[5]
2. While opening the website, it would ask you to choose whether you want to view the things in **Dark Mode** or **Light Mode**. Selecting this option will take you to the HOME PAGE, with the chosen Color Scheme. [5]
3. Use an **SVG animation** for the Intro Section. [15]
Refer to the link for this ->
<https://www.youtube.com/watch?v=gWai7fYp9PY>

SOME WORDS OF ADVICE

- **Try to add amination or hover over effects to all links and buttons.**
Keep it simple and innovative, not too flashy. Surely add hover effects to the links in Navigation Bar.
- **The default styling of underlining on hovering over links should be removed.**

- You can use Google material icons for the icons. Google them to get the icons and script import them.
- To make the website responsive, you can use any CSS framework. The two most popular ones are BOOTSTRAP and MATERIALIZE. You can Google them to know about them. These are easy to use because the code snippet is available side by side with the demo of the feature.
- Divide the media queries into these specific screen widths and write the CSS code for each of them if that section is not responsive: - (Small mobile -> below 390px, Normal Mobile -> below 500px, Small Tablet -> below 700px, Larger Tablet -> below 900px, Small Laptop -> below 1080px, Large Laptop -> below 1376px, Desktop -> above 1376px).
- For seeing the responsiveness of the page, instead of manually changing the size of the browser, use Dev Tools (opens upon pressing F12, or for some Fn + F12).
- Choose a color scheme that doesn't make the page look like a Recreation page with all colors of the rainbow added to the page. Don't make it dull as well by choosing only black and white as the colors.
- You can refer to the internet to implement the features not covered in the study material. StackOverflow is a good option. You can also refer to it for errors that you face, as well as approach us. We would be happy to help. But look for help only when you have tried it several times and not been able to get that thing done.
- Don't use width, font size, and line spacing, margin-left or right, or any other measurement in the horizontal axis in pixels. Use em or Percentages (the best choice).
- For other things such as height, margin-top, bottom, etc., you can use pixels. (You will find the reason out for yourself while trying to make the page responsive).
- Try to enclose everything inside a div, as it allows you to make specific changes to that particular segment easily, without having to worry about changes occurring at other places.
- Although what features need to be implemented on the webpage is clearly mentioned, you still have a lot of room for creativity. You can play with the image positions, card designs, hover effects, animations, colors, etc. We expect you to channel your inner creativity into doing this assignment.
- Try to keep your code reusable, so that the same type of elements in your page can be defined at the same time, rather than defining the design every time individually.
- Keep your code easy to read.
- While doing the assignment, keep it on your hard disk, and use a local server (available as extensions in the Text Editors, which automatically refresh the webpage for you when the code is saved). When everything is done, host it on GitHub. A GitHub tutorial will be provided soon for all so that you become familiar with using it.
- Don't copy your code from someone.

- Don't blatantly copy the codes from the study material. Use your own innovation. You can refer to the internet for ideas. Try to understand it, then implement them in your code.