

**Part 1:**

With the advance of technology, more and more people adapted online shopping behavior and product review became one of the most important factors people will refer to when making a purchasing decision. This website is designed to educate the general public about the idea that not all product reviews are reliable. By showing a set of data visualization and analysis, the website shows ways of identifying real versus fake online reviews and the difference of people's behavior in writing them. In specific, the website looks into these factors of identification: Ratings, Emotion Polarity, Review Length, Grammar Mistakes, and Common Word Usage. For each aspect, the fake reviews will be compared against the review ones with either data visualization or a summary of the analysis findings. This website aims to assist people to make better purchase decision with the consideration and knowledge about how to spot fake versus real product reviews.

**Part 2:**

- Most interactions at the home page are activated through scrolling. For example, on the home page, the story of the importance of identifying fake versus real reviews flows as the audience scrolls down the page. Some specific scrolling interactions are parallax scrolling and scrolling with changing the opacity. So users can scroll slowly on the home page and read through the narration.
- The second major interaction on this website is how the audience will interact and navigate the story. On both the top and bottom of the content pages, there are horizontal menus as well as blinking navigation. Depends on the users' goals, they can either use the more direct navigation at the top or the more interesting navigation at the bottom.
- Another major interaction is the interaction with data visualization. On some of the content pages, users will see data visualization of the data analysis. For all data visualizations, users will be able to hover through the graphs and see the corresponding tooltip to better help them understand the data.

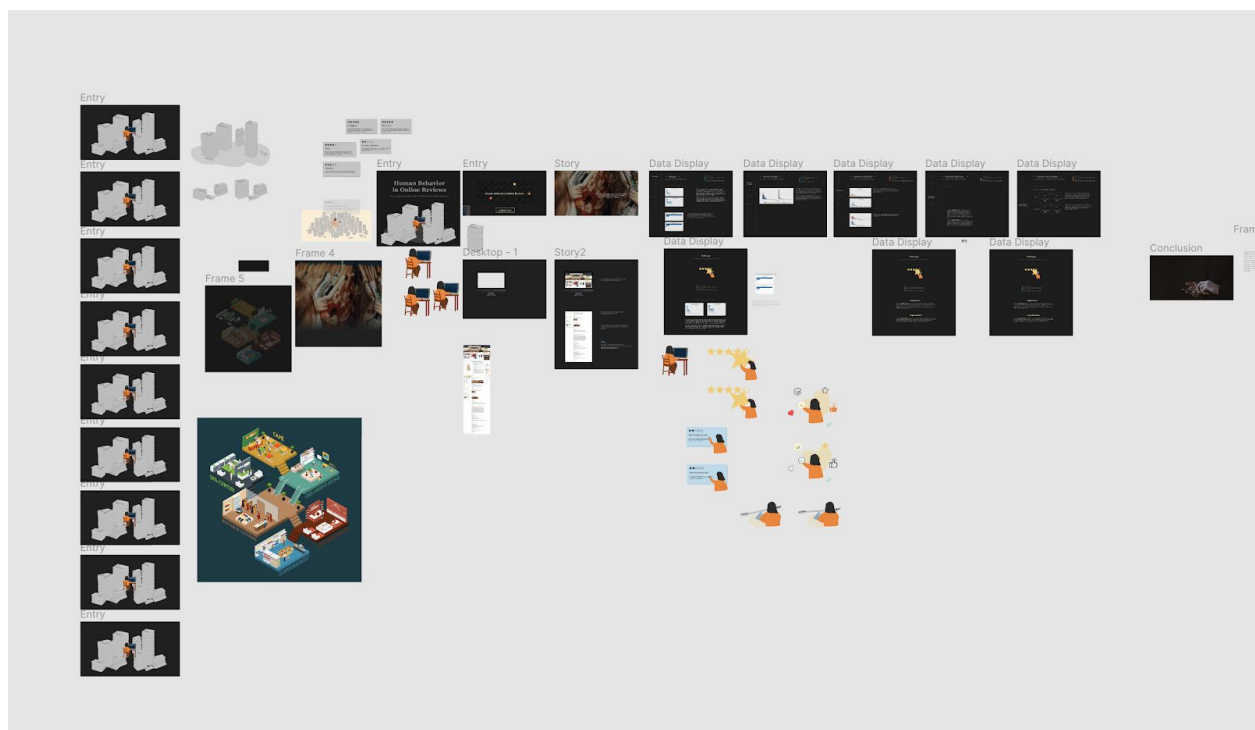
**Part 3:**

- P5.js & Matter.js: I chose to use these two libraries to implement a fun animation on the home page. I chose them because they are very easy to learn and start trying. For P5.js, there are many resources and tutorials online. I used these two libraries to create the falling down text animation on the home page, I used P5.js to run Matter.js. These two libraries definitely add more interesting elements to my website. It creates better user engagement.

- Vega-Lite: I chose to use it because I was interested in creating data visualization in my project. I learned that vega-lite can be embedded in JS, so it seems to be the perfect fit for adding some visualization. For the first three parts of my content, I used Vega-Lite to create interactive data visualization with CSV files.
- Parallax.js & Rellax.js: I chose to use these because I saw some of the online examples of data visualization had many cool scrolling effects. I believe this will help to create a more engaging narration. I used these on my homepage for the opening narration. As I saw on other people's data visualization, I believe the use of these libraries definitely makes my story flows better.
- Note of other tools: For this project, I also used Excel and R to clean some of my data in order to produce the correct CSV files for data visualization.

#### Part 4:

From HW7, I kept all my content and method of development. However, I changed some of my designs. For the home page, I changed the design to create a more unique and stronger style. For example, I spent a large amount of time to draw illustrations that tie back to the theme of online shopping and product reviews. For the content page, I changed the layout to have a cleaner and more consistent visual. On the top of each page, I have an illustration that corresponds to the home page. Below is a screenshot of my design iterations.



**Part 5:**

I believe the biggest challenge will be connecting all parts of my website to make the story makes sense to the audience and functional to interact. I had many difficulties in connecting my data visualization with all of my other HTML and JS files. And there was not a lot of online documentation on how to resolve the difficulties. For the storytelling, I also experienced many iterations of redesigning and editing the story flow.