A screenshot of a cell phone

Description automatically generatedHTML layout for index page:

Before I do much more I have decided that a better way to lay my code out will be to use PHP includes for the separate sections of my webpage (nav, content, footer etc.) so that way it is easier to work on a single part of my site at a time and not only does it increase readability but since these elements are used across multiple pages updating the included file will update every instance of the segment.

|  |  |
| --- | --- |
| Before | After |
| A screenshot of a cell phone  Description automatically generated | A screenshot of a cell phone  Description automatically generatedA screenshot of a cell phone  Description automatically generated |

I am using a git repository for version control and evidence of iterative development.

I have generated a color scheme using Canva from the background image of my index page and is as follows.

A picture containing table, display, food, group

Description automatically generated

Troubleshooting:

|  |  |
| --- | --- |
| **Problem** | **Solution** |
| **Featured Properties overlay on index page**  I was unable to figure out a functional, efficient way to have the info panel as an overlay | A screenshot of a social media post  Description automatically generatedI will have the info panel permanently to the left of the house image. This way it is still functional according to the intended purpose and is actually clearer to a user what the section is doing without requiring a hover |
| **A close up of a sign  Description automatically generatedText is blending in to background image making it difficult to read** | Added a custom text-shadow to help it maintain readability without sacrificing the background. |
| **More Options Not Expanding**  More options button checkbox for more search details is not unhiding however the :checked pseudoclass is being detected successfully | The way I referenced the styling was :checked + element meaning the element must be directly after the checkbox. I had accidentally added an additional div which was interfering with this. I have reshuffled my html slightly and it is now functional. |
| **Animation Jumpy**  When cards on index page are hovered the transition is jumpy but the transition to restore is smooth. This possibly has something to do with a lot of text appearing at once | Removed height styling from .card:hover > p and decreased the transition time slightly and the entire transition has smoothed itself out. |
| **Card Transform Overlaying Nav**  When card zooms it overlays the nav bar | Increased z-index of nav in order to have it always on top**A screen shot of a social media post  Description automatically generated** |
| **Card Text Overflow**  I moved the Read More… link out of the p tag so that it could sit at the bottom of the card to improve aesthetics and ensure more consistency across cards. However the height of the p and a tags are snapping into place instead of transitioning smoothly | I have removed padding from the tags and added a fixed height for each tag with overflow 0. Previously the height for both was 0 so I was only seeing the overflow. |
| **Testimonial Slideshow**  Testimonials are overflowing vertically down the page instead of horizontally across which it needs to do in order to get a horizontal slide animation | I tried using display flex and direction row and changing justification (start, center, end) to make the testimonial cycle. However this only works for three testimonials, otherwise the justification will be off. To fix this I created another div in between the testimonials and the slideshow container which the testimonials can sit statically in and then that div can be positioned inside of the slideshow container using left justification and to have it slide it just needs to be justified -100% for each testimonial shown. This creates a much cleaner look. |
| **Testimonial Slideshow – snapping**  I am unable to make each testimonial ‘snap’ into view then after a period of time do a quick transition into the next one. | I am still unable to find a way to do this using pure CSS. The best solution I am able to come up with is to slow the animation speed down so that each testimonial sits long enough for it to be read before cycling forward to the next |
| **Connection to Database** | A close up of a sign  Description automatically generatedDatabase user was incorrectly named ‘Admin’ in the login credentials. Should instead have been ‘default’ which is a user I created to have credentials limited to only manipulating data and not users, structures, or any other critical aspects. |
| **Featured Properties Slideshow**    Content displays correctly however there is no way to navigate between the different ‘featured’ properties. I have also moved back to my original overlay design, but without a hover feature. | I will control this with php and have buttons that will cycle through the different properties stored in an array |
| **Querying database failure**  **A picture containing table  Description automatically generated** | Query was incorrectly written. I have fixed typos and written an echo statement to display the title of each result to check it definitely works. |
| **Incorporation of PHP as a slider**  Everytime PHP is updated it refreshes the page which is not ideal for a slider. Due to this I will need to use JS as a clean CSS solution will not be appropriate for what I need to do. I will leave the section of the page as an automatic slider for development as this is only a prototype website. If it gets passed into final development JS control will be added to the Featured Properties and Customer Testimonials section as the automated scrolling is not appropriate for slow readers or people interested in the property due to it being on a constant cycle. |  |
| **Date Reformatting Function**  Function to convert date format from PHPMyAdmin’s YYYY-MM-DD to DD/MM/YYYY is not splitting the inputted date | Split function is deprecated and explode should be used instead. Displays reformatted date successfully.A close up of a sign  Description automatically generated |
| **Additional Search Options**  The additional search options I currently have are not the most crucial things to have as options. The most important pieces of information to a user that can’t be typed into the search bar (so excluding address, suburb, agent etc.) would be price, bedrooms, and bathrooms as all users regardless of economic status require these three things when buying a house | Replaced Garage Spaces with Price and reordered the options left-right based on importance. |
| **Populating Additional Select Fields**  The select fields are being successfully populated with any-10 but for price the scale needs to be 10^5A screenshot of a cell phone  Description automatically generatedA close up of a sign  Description automatically generated | To allow for difference in price I can grab the variable containing the name of the option from the loop echoing the select fields and use that to detect if it is the price field. I can then use this to alter the increment of the for loop from 1 to 100,000 and to change the formatting of the number to money.A screen shot of a smart phone  Description automatically generatedA screen shot of a computer  Description automatically generated |
| **Getting Active Page**  The php $\_SERVER[‘PHP\_SELF’] method to get active page gets the entire address where all I need is the name of the page | Wrote a get\_active\_page function to take the address and return the useful information. Works as expected |
| **Agent Cards**  For my agents page I am going to have preview cards that link to each agent’s personal page. I will copy my info cards to do this but the justification styling is undersirable | Justification was fixed to space-around and it fits the page much nicer. The original info-cards also looks almost identical to their original state.  A picture containing shirt  Description automatically generated |
| **Listings Cards**  The listing title is taking up too much space on the card and you cannot see the propertyA sign in front of a building  Description automatically generated | Decreased size of text just for listings and added a text overflow ellipsis so when it is big the overflowing text will be replaced with … then the full title when be visible on hover.  A sign in front of a building  Description automatically generatedA close up of a sign  Description automatically generated |
| **Listings Content**  Displayed listings are not wrapping overflow. Should be 3 in a ‘row’ then wraps down the columnA group of people in front of a building  Description automatically generated | Added a div inside of listings-content with auto height so that the cards can wrap without interrupting the overflow rules of listings |
| **Listings Card Justification**  Justification in container has weird spacing making incomplete rows space elements apart  A screen shot of a store  Description automatically generated | Removed justification from the parent div and added margin to the cards as a percentage of parent width so that they automatically space themselves relative to parent  A sign on the side of a building  Description automatically generated |
| **Get property information onto Listings Card**  The function I am using to query the listings cannot easily integrate a INNER JOIN as it is designed for more universal application.A screenshot of a cell phone  Description automatically generated | However I can replicate the logic of an inner join by querying the associated Property (tbl\_listings.Property field) from tbl\_properties and append that information to the $listing associated array. This performs the same action as an INNER JOIN while allowing me to utilize my functions |
| **Listings Card Spacing**  Having text for Bedrooms, Bathrooms etc. takes up a large amount of space on the card making it look very cramped but it is necessary to have on it as it provides important property information | I have fixed this by replacing the text with small icons representing each features. This makes the design much more simple, readable, and minimalistic, while still effectivelt communicating the same information. I have also applied this to the featured properties section for consistency. |
| **Price is not formatted**  For queried listing cards the price does not display formatted | Added a number\_format to the price |
| **Listings Sort Form**  Sort form is causing an error when run without all set fieldsA screenshot of a cell phone  Description automatically generated | The default options are disabled so the form is unable to successfully submit the ‘blank’ or default values. Disabled has been removed and now sorts as expected. Some of the sort fields I added as options are not shown in the Listings display so they will also be removed.  A sign on the side of a building  Description automatically generated |
| **Get Property onto Listings Card (Revised)**  When attempting to sort my form due to the INNER JOIN being at php level and not at SQL level it is unable to sort the results by any value not in tbl\_listings.  A picture containing bird  Description automatically generated | One solution to this would be to have PHP sort the arrays however a cleaner way to do this is to ignore the get\_from\_table function and just run a query with an inner join. This makes it a lot simpler to apply filters and sort the query results. Works as expected. |
| **Confirm Form Resubmission**  The form resubmission security protocol prompts on every reload after a sort has been applied to the data. This is unecessary and annoying as the sort criteria is not effecting the content of the database and resubmission often occurs with different sort criteria | Form method has been changed from post to get as the get method more accurately fits the use of the sort form. The post method should be used for forms which shouldn’t be submitted multiple times while on the same page or for forms that impact upon database content and security. The sort form does not fit into any of these categories therefore it can have the get method. |
| **Sort Filtered Results**  The sort query queries all active listings and sorts them, it doesn’t have any conditions to apply the existing search criteria to the search so that it sorts the filtered data and not just all listings, resetting a search. | I am unable to achieve this through use of php although it may be possible through the implementation of Javascript. As I am unable to do this for this site the Sort Form will now become a ‘Show All Listings’ form that has a sort option. A user will be able to sort all listings, or search for specific listings but they will be unable to perform both with the current state of the website. This is acceptable with the small amount of listings currentlyt active but as it scales this will cause problems and javascript will be necessary. |
| **Agent and Listing Profile**  I plan to have a single page to display a listing and to show an agent profile. However I cannot send the Listing or Agent ID to the page in order to tell the page what information to display using the anchor tags currently on the cards. | I have replaced the anchor tags with form submit buttons. These forms have invisible fields containing the ID for the Agent/Listing on the card and then the action redirects to the profile page, sending the ID with it so that the page can process it and display the relevant data. |
| **Listing Cards**  While having the hover micro animation to reveal property information is stylistically appealing it is not practical because in order to look at each listing it requires each property to be hovered. In addition without hover you cannot read the full property titleA sign on the side of a building  Description automatically generated | My solution to this problem is to create a ‘static-card’ class which assigns all of the ‘expanded’ styling to the card by default. The only hover effect that will remain is the slight expanding of the card as it doesn’t impact usability and makes the page more interestingA close up of a sign  Description automatically generated |
| **Agent and Listing Profile (Revised)**  Achor tags would not work to link to agent and listing profiles as I could not pass form information through it. Therefore I replaced the tags with forms with invisible fields. However, I have since learned that all page loads actually perform the equivalent of the GET method for a form so using an anchor tag I am able to pass information to the target page, eliminating the necessity for a form with a hidden field since that form is using a GET method anyway. Reverting back to an anchor tag means my cards are less convoluted in terms of content (the form) and it saves a lot of extra unecessary styling to make the button look consistent with other cards using anchor tags. |  |
| **Add Listings Form**  I cannot use PHP to validate 100% of my inputs because I cannot efficiently notify the user (JS popups) if their data is invalid. I need to find a way to notify a user the inputted data is incorrect instead of the form just clearing itself after every failed attempt | I will use the built in HTML form title and pattern attributes. The pattern allows me to apply a Regular Expression to the input which requires the data to be inputted in a specific way of the form will not be submitted. The title is what shows on hover of the input and also as a prompt if the input does not meet the regex criteria.A screenshot of a cell phone  Description automatically generated |
| **Adding Images**  PHP is throwing an error ‘insufficient permissions | The ‘default’ user does not have permission to write files. Only root user can do that. I have switched the user back to root from default and it works as expected. |
| **Add Listings Form – Insertions**  Due to how my database is setup I have to add a property, then add the associated listing, then add the property image. However if a listing or image fails then the property/listing is still in the table with incomplete data. | I have fixed this by adding a remove query so that when an error is thrown it also removes all of the data associated with the form submission from my database. When listing fails it removes the property just added and when image fails it removes both listing and property. |
| **Image Aspect Ratio**  As all of my property images need to fit a certain space on my page I need to require the image to be a certain aspect ratio otherwise it will me stretched or mishapen when it is displayed on my website which isn’t desirable | I have added a check to my image validation function that calculates the image’s aspect ratio and compares it to the desired aspect ratio I defined (2:1 for property images) to ensure that the images will all scale correctly. |
| **Regex For Number Fields**  Regex validation cannot be applied to number fields | The number fields have been turned into text fields and the regex that validates integer size/length also validates that it must be an integer. |
| **Edit Listing Page**  The fields to edit the information can be typed in and a user can attempt to update a blank ID field that does not exist. | To address this the entire form is disabled from the start until they select a listing from the separate select form and then all of the information autopopulates the disabled field and it becomes available for editing. This means that they can only make edits to existing records instead of NULL records. |
| **Image Requirements**  When uploading an image it is impossible for a user to know the criteria for the image until they get an error message that it was unable to upload. | To fix this I have added a descriptor label that outlines the important criteria for the image. File Type and Aspect Ratio. This was copied over to the Add Listing form as well. |
| **Existing Properties**  The way I have designed my database is that once a property is added it is kept permanently to make it easier to create future listings for it within the company. However I am unable to use this due to duplicate value errors when adding a new listing | To address this I have added a sidebar to my add listing form that displays all properties currently not assigned to a listing and when that is selected it auto populates the property fields on the form. It also assigns a hidden field a value. The code then adapts based off this. If this value is set it will update the existing property, otherwise it will add a new one. The listing is added normally and then the image is only done for an existing property if it has been uploaded, otherwise it is ignored as it already exists. |
| **Page Security**  Despite the pages only becoming available to the nav after a login the admin forms are still accessible through manually typing the address into the address bar. This makes the login essentially useless | I have added security at the top of all secure pages requiring admin permissions, else it redirects the user back to home. |
| **Page Load and File Sizes**  Due to large image sizes the page load is quite slow and the total size of my projects is 144mb which could be significantly decreased. | I have made my images smaller and converted majority of them to jpg format. This has halved my project size and pages load significantly faster now. |
| **Pixelated Backgrounds**  Due to the downsizing of my images the backgrounds are being stretched and upsized to fill space leading them to be very pixelated and out of focus | To fix this I have increased the size of the images, only downsizing them to 2000x1000 instead of 600x300 and this has fixed the problem and only increased the file size by a small amount. |
| **Hover on Mobile Devices**  For my mobile design my cards are not expanding on ‘hover’ or when tapped | By using the pseudo-classes :active and :focus in conjunction with hover I am able to achieve a simulated hover effect on mobile devices. |