

# Redesign Report

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# Introduction

This report documents all of the problems, evidence, redesign ideas, and processes that we discovered on the official website of Starlight Inn Huntington Beach

(<http://starlightinnhuntingtonbeach.us/>). For each targets, we carried out the following steps:

1. Come up with six design targets and prioritized them;
2. Using pencil and paper, sketch out at least three different design solutions individually;
3. Put all of our ideas together or select our favorite approach(es) to develop wireframes. We do that first by sketching the elements out on pencil and paper, then digitizing them using an online prototyping tool called Moqup (<https://moqups.com/>);
4. Finalize our redesigns by refining the mockups, making adjustments if necessary, and filling in the details using Moqup.

## Redesign One

Provide clearer label names to ensure that they accurately reflect the content or button's action

### **Problem**

The labels of some buttons and tabs are misleading, causing the user to go to the wrong areas in search for the information they need, or performing extra tasks that distract from their main objective.

### **Evidence**

One of the biggest reasons behind this design comes from the “Show Price” button, that is currently located in a few different places on the homepage. The “Show Price” button closest to the top of the page simply brings the user down to the “Show Price” buttons near the booking process. However, these “Show Price” buttons provide no beneficial functionality either, as they simply provide an error message, telling the user to fill out the fields concerning their travel details. Once the user fills those fields out and selects “Search,” the “Show Price” buttons no longer exist, as they are relabeled as “Book Now.”

### *Usability Tests*

As mentioned in our usability evaluation report, when some users were trying to find out more about rooms to book, they tried clicking on the “Show Price” button

listed under the section to check for available rooms to book. When users clicked this button, they would not be shown a price for the room type. Instead they would have to click on the check in and check out dates first before proceeding. However, the site did not offer any feedback informing the user to perform these actions in order to search for rooms.

Clearly, the presence of the “Show Price” buttons adds no value to the user’s experience. Many wasted time in their task by clicking these buttons since they believed it would present them a price.

Another main reason for this redesign was the navigation bar at the top of the website. As discussed in our usability evaluation report, the navigation bar provided an issue, as it misled users in how it was labeled. For example, when looking for smoking policies, the user may think it would be available under the “Policies” tab; however, it is not located there. Or, when wanting to make a reservation, the user may want to click on the “My Booking” tab. However, that feature did not allow the user to book a room either; instead, it allowed the user to only check existing bookings.

Seeing our users take the wrong paths allowed us to see where they expected to find this information, influencing our ultimate goal to rename labels in a way that would not mislead them.

## **Process**

Throughout the redesign process, we had a range of sketches and designs proposed by each member:

- Mandy:
  - Replace adults and childs with “Guests.”
  - Combine check-in and check-out fields into Duration of stay.
  - Make check-in and check-out use the same calendar (1 month view).
  - Show search result/room detail ONLY after user clicked “Search.”
- Kaitlyn:
  - Eliminate the Show Price buttons since none of them provide any beneficial functionality.
  - Eliminate the “childs” option when searching for a room since it has no effect on the results.
  - Change USD to the swapping symbol for currency
- Jose:

- Navigation bar redirects existing about and policies tab to a new page and adds address, number and hours to contact us form. An alternative option was removing the about and policies tab as well as changing the label for currency tab to either an icon or “currency”.
- Michelle:
  - Remove the “Show Price” button on the top of the page and from the check available rooms section since the button does not provide functionality.

After going over each member’s ideas we decided on the following redesigns:

- For the navigation bar, we changed the icon for the currency option from USD to a more universal used icon to make it easier for users to tell what the button does. This helped conform to conventional standards.
- For the booking process, we removed the Show Price button at the top of the page and moved the booking area up because the button had no real functionality since users have to search for rooms before finding out about the price.
- In the checking for room availability section, we changed adults and childs label to “Guests” because the cost for adults is the same for children.
- For the check-in and check-out date selections, we decided to use only one calendar to select the dates. For instance, after selecting the check in date, the cursor jumps to the second field of the calendar but doesn’t reload.
- Initial search results such as king and queen bedroom are removed before dates are entered and a search is pressed.
- Removed the “Reservation” column label because it serves no purpose as a label in the checking for room availability section.

## Results

The following sections show the progression of ideas from sketches to wireframes, and high-fidelity mockups.

## Sketches:

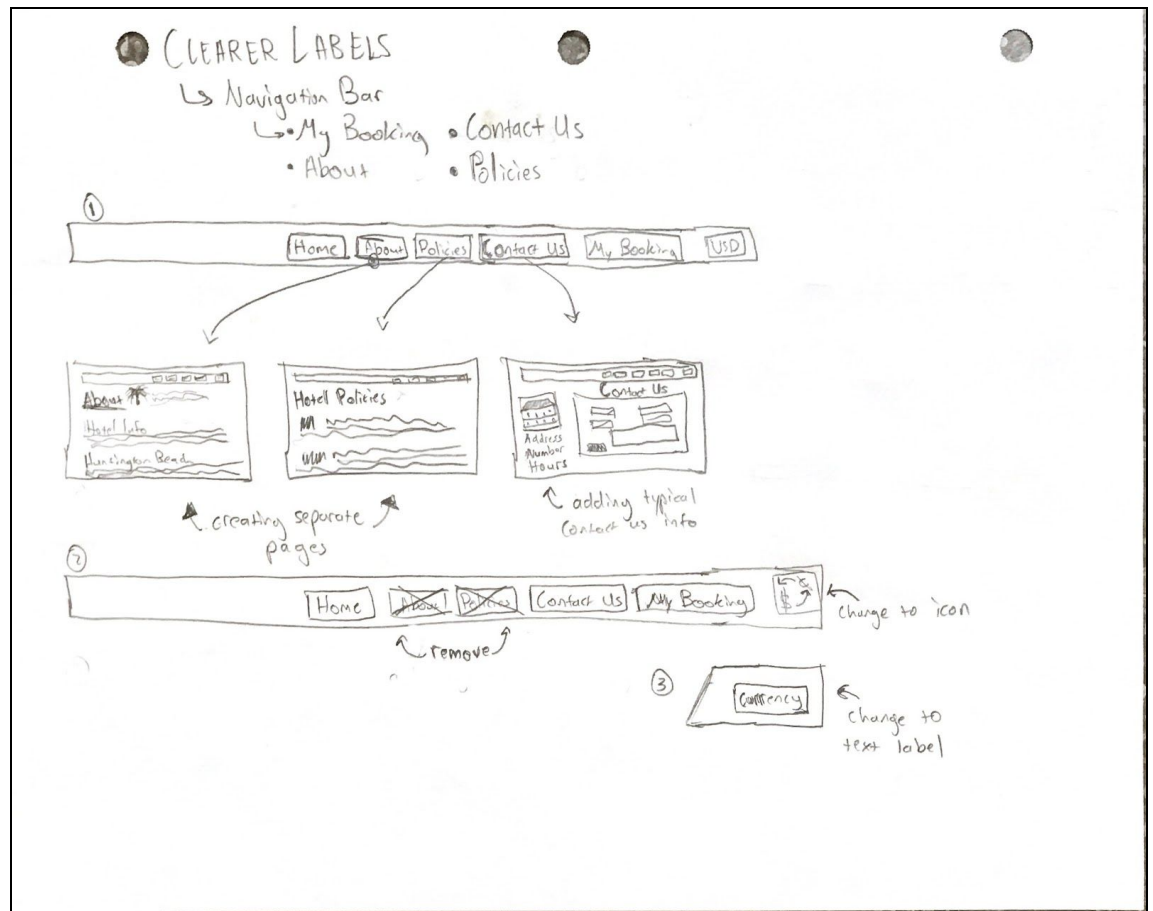


Figure 1: Sketch one shows the navigation bar with their respective added or re-designed pages linked to them. The about page is a new page that contains stuff like hotel info and huntington beach info from the homepage. Hotel policies adds a new page with all the policies and leaves only top/common ones on the homepage. The contact us form includes the addition of typical contact us information (address, number, and hours). In sketch two we see the ditching of the about and policies tab all together and change of the USD label to an icon.

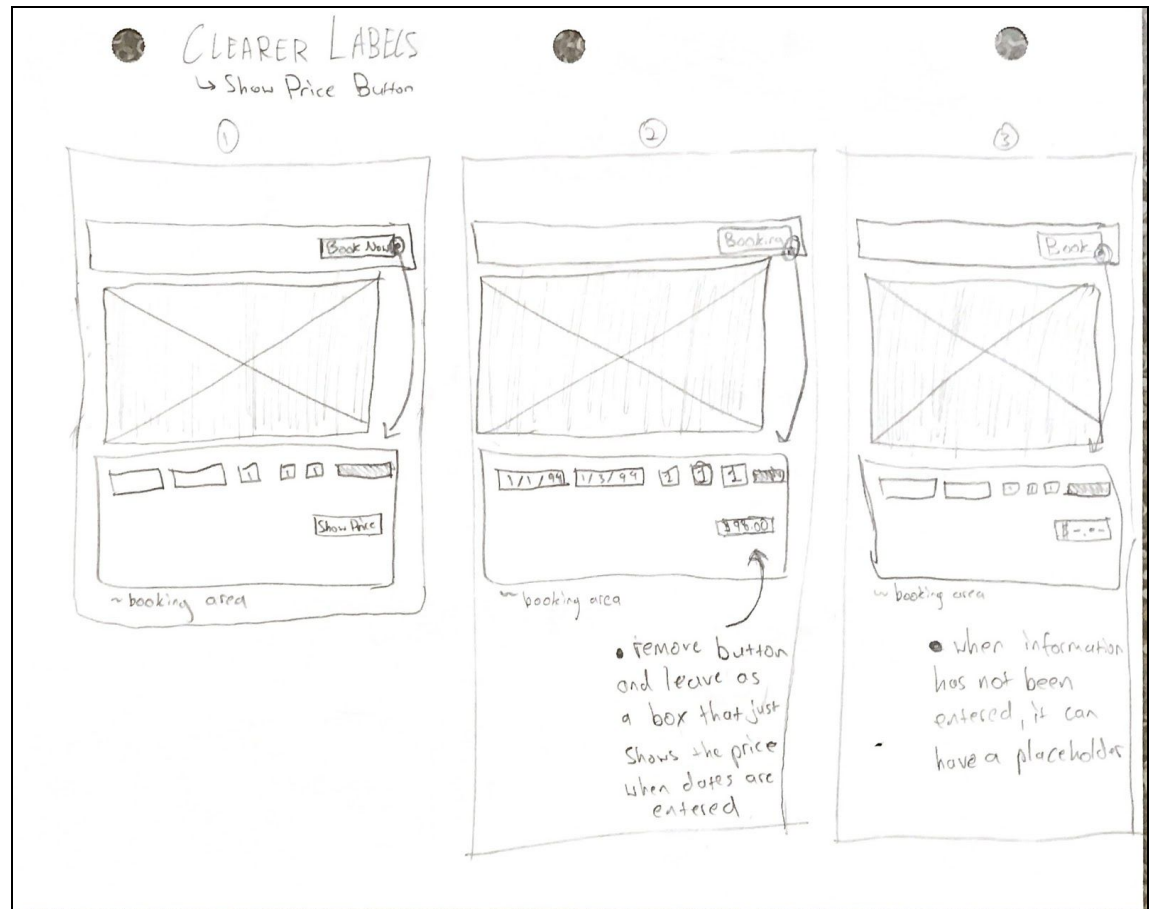


Figure 2: Sketch one renames the show price button at the top to “Book Now”. Sketch two renames the show price button to “Booking” and changes the second show price button to a box that will show the price when dates are entered. Sketch three renames the show price button to “Book” and leaves the second show price as a placeholder, updating it to show the price once dates have been selected.

**Top Left Sketch: Booking Section**

check-in  check-out

Adults  Children

Smoking preference  
☐ yes  
☐ no

**Bottom Left Sketch: Booking Section**

Duration of stay

☐ smoking room  
☐ non smoking room

Guests

Duration of stay

March	1	2	3	4	5	6

check-in date

check-out date

**Right Side Sketch: Booking Section**

Room	Description	Max occupancy
Queen RM		4
King RM		3

link to its own page

link to homepage

Title

**Bottom Right Sketch: Booking Section**

Figure 3: The two ideas on the left is a redesign of the booking section. It has eliminated the room information section, which had the “Show Price” buttons. The idea on the right keeps the room information section, but removes the “Price” column.



Wireframe:

After consolidating ideas from sketches we made a wireframe as seen below.

Moozilla

http://starlightinnhuntingtonbeach.us

Home About Policies Contact Us My Booking

Check-in 3/31/2019 Check-out 4/1/2019 Rooms 1 Guests 1

March 31, 2019 April 01, 2019

Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Search

Booking section (search criterias)

Room Type	Room Name	Max Occupancy	Conditions	Rate Per Night
	Queen Room	4		Book Now
	King Room	2		Book Now

Figure 4: This is a digital wireframe that combines ideas from all the sketches above. Here, the currency icon is changed from USD to the universally used icon and the check-in and check-out date selection is on a calendar feature that lets the user see both dates on the calendar. The filter for guests is set to "Guests" instead of Adults and Childs. The Reserve label is also removed.

## High Fidelity Mockup:

Mozilla

← → ↻ http://starlightinnhuntingtonbeach.us

Home About Gallery Policies Contact Us My Booking

STARLIGHT INN HUNTINGTON BEACH ★★  
18382 Beach Blvd, Huntington Beach, CA 92648

Check Room Availability

Check-in

3/31/2019

Check-out

4/1/2019

Rooms

1

Guests

1

Search

March 31, 2019

April 01, 2019

Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Available rooms for 3/31/2019 to 4/1/2019





Room Type	Room Name	Max Occupancy	Conditions	Rate Per Night
	Queen Room		Free Cancellation! PAY AT THE PROPERTY No prepayment needed	USD 85.00 Exclude tax recovery & Service Fees
	King Room		Free Cancellation! PAY AT THE PROPERTY No prepayment needed	USD 90.00 Exclude tax recovery & Service Fees

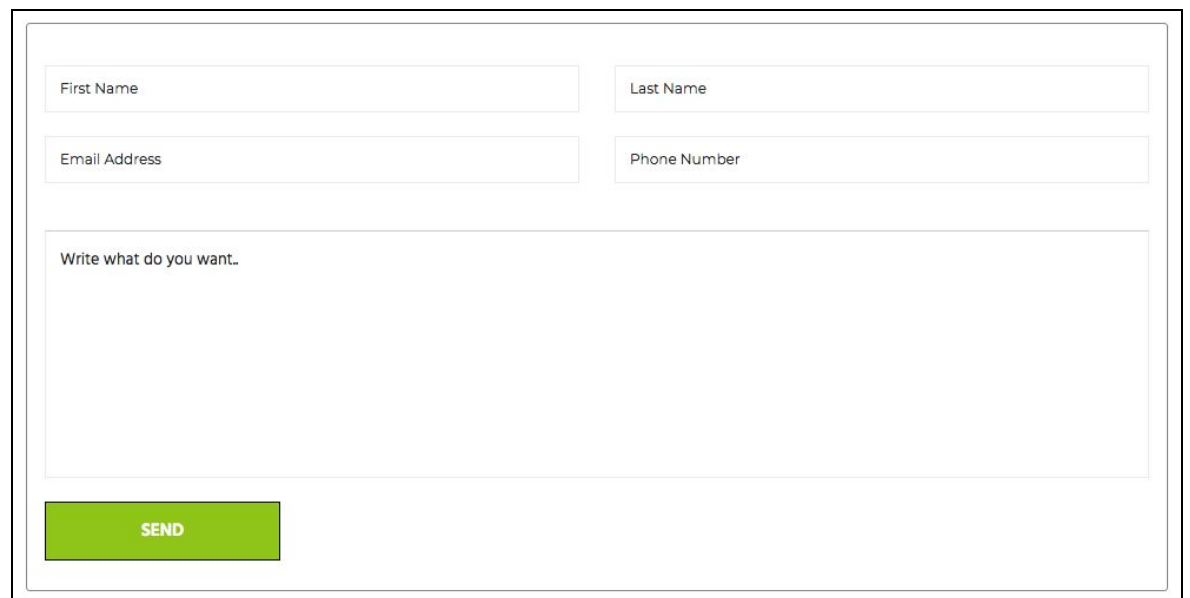
Figure 5: This is the final design of the top portion of the homepage. The section for users to check room availability is titled. Conditions and rate per night is kept the same as the initial website design. The Gallery tab of the menu bar is also added, this change was made due to another redesign explained later.

# Redesign Two

Provide more feedback on the Contact Us page

## Problem

The lack of informative feedback is a clear issue in the system. The main area where this is a concern is on the Contact Us page.



The image shows a contact form with the following elements:

- Two input fields for "First Name" and "Last Name" at the top.
- Two input fields for "Email Address" and "Phone Number" below the name fields.
- A large text area for writing a message, with the placeholder text "Write what do you want..".
- A green button labeled "SEND" at the bottom left of the form.

*Figure 6: This image depicts the necessary fields for sending a message to Starlight Inn.*

STARLIGHT INN HUNTINGTON BEACH ★ ★  
18382 Beach Boulevard, Huntington Beach, US

Jim Othy  
jim@ap hello  
what?  
SEND

*Figure 7: This image depicts how, even though many fields may be incorrectly filled out, only one incorrect field will be outlined in red, and no informative feedback is provided.*

For the Contact Us page, the system only provides one method of contacting them, which is by sending a message to them directly through the site. As depicted in Figure 7, the system does not notify the user if the type of information they enter is valid until after they hit the Send button. Furthermore, the feedback the system does provide is very minimal. It simply outlines one incorrect field in red but does not notify the user of why it is wrong, or more importantly, how to fix it.

## **Evidence**

### *Eight Golden Rules of Interface Design*

We identified this as an issue because it is a clear violation of the eight golden rules of interface design. More specifically, it violates the rule of offering informative feedback.

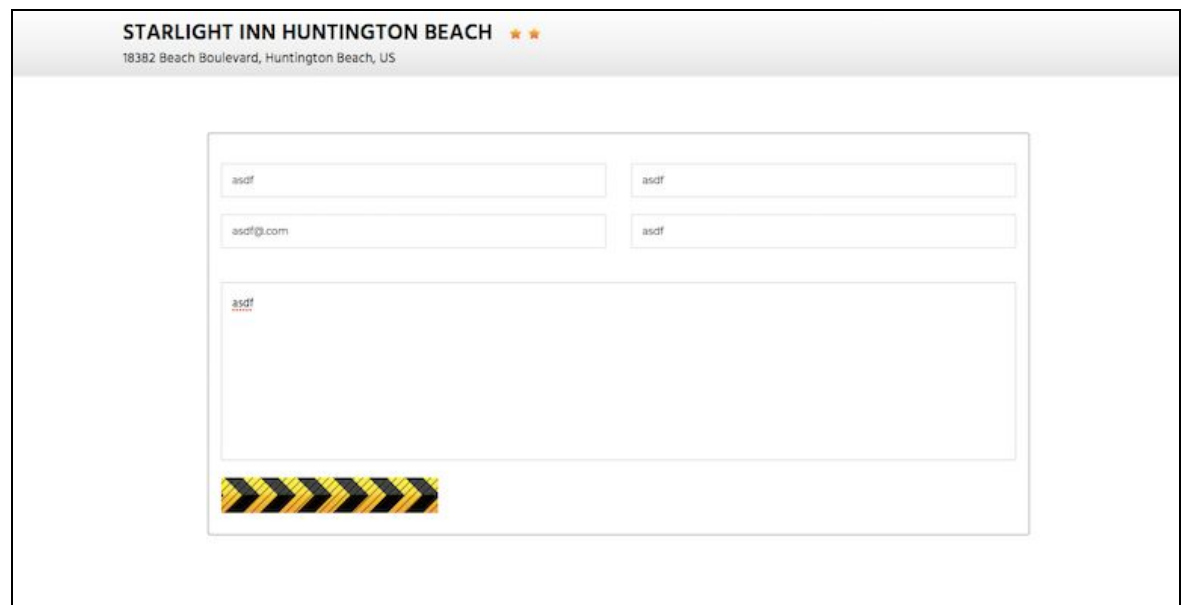
If users enter valid information, there is no feedback such as a check mark or any other symbolic indicator to confirm with the user that they have entered valid information. Similarly, if a user enters invalid information (e.g. an invalid email or letters in a phone number), the system does not inform the user about their mistake until they attempt to submit the form. It is only after the user selects Submit that the site checks each box for validity. When there are invalid entries, the system only outlines one incorrect field in red, instead of highlighting all

incorrect fields and informing the user of why their input is invalid, and how to fix it.

### *Universal Usability*

Another issue with this simplistic feedback is its lack of consideration for a more diversified user base. For example, this simple feedback can be problematic for users that are color blind and are unable to clearly see the red outline. It is also another widely known concept to design for universal usability, which is another motivating factor to provide feedback more informative than a colored outline.

### *Cognitive Walkthrough*

The image shows a web form for 'STARLIGHT INN HUNTINGTON BEACH' with the address '18382 Beach Boulevard, Huntington Beach, US'. The form contains several input fields: a first name field with 'asdf', a last name field with 'asdf', an email field with 'asdf@.com', and a password field with 'asdf'. The password field has a red outline, indicating it is invalid. Below the password field is a submit button with a yellow and black chevron pattern, indicating it has been clicked. The form is set against a light gray background with a header bar.

*Figure 8: This image displays how the page responds when processing this invalid information. The submit button changes print to show that the user's actions have been received.*

STARLIGHT INN HUNTINGTON BEACH ★★  
18382 Beach Boulevard, Huntington Beach, US

First Name Last Name  
Email Address Phone Number

Write what do you want..

SEND

Your message was successfully sent.

*Figure 9: This image demonstrates the false positive the system delivers. The invalid information above was successfully processed.*

Other motivations for this redesign came from our cognitive walkthroughs. Our third task was to contact the hotel. During this task, we discovered that not only does the Contact Us page lack in informative feedback, but it also is lacking in the strength of its checking methods. Because of the system's checking methods, it is capable of providing false positive confirmations to the user. To send a message, the user simply needs to fill out fields for their first name, last name, email, phone number, and the message they would like to send. Different types of characters are required, depending on the field. However, instead of checking for specific types of text, the only checking the system performs is to see that the field is not empty. Not wanting to use our own personal information, we put in random information not thinking that it would work, however it actually went through. As depicted in the two images directly above, users can enter letters for phone numbers and invalid emails, and still send their message "successfully."

## Process

There were not too many design ideas that we had to iterate through in order to decide on our final redesign idea. Some of the ideas that we were considering, however, include the following:

- Provide X marks or check marks that indicate if the user's input is valid.
- If a user's input is invalid, provide a pop up error message that will explain why the input is invalid, and how to fix it.

- Disable the submit button until all required fields contain valid information.
- Provide a confirmation message at the end of sending a message so the user knows that their message was successfully completed and sent.
- Highlight the tab that the user is currently on in the navigation bar.
- Eliminate the ability of user's to send a message directly through the site to avoid the need to check input, and instead simply provide contact information for users to utilize outside of the hotel's site (email, phone number, etc.).

Our final redesign includes the following actions:

- Move labels from inside the textboxes to the top of the boxes, and provided sample text inside.
- Disable "Send" button until entered info is checked and valid.
- Add question mark buttons beside text fields that explain what kind of input is considered valid.
- Provide live feedback to the user by placing checks or x's beside the fields they have filled out, indicating whether that field currently contains valid or invalid information.
- Provide confirmation dialog window after the user presses Send, telling user that their message has been sent successfully and when to expect a reply by.

Our final redesign plan is essentially a combination of a lot of the team member's initial ideas to improve this section. Many of our ideas ended up being very similar. For the ideas that were different, each approached the issue from a very different angle, and did not put us in a position to pick between solutions. They were all changes that were easy to combine, which is why we decided to include many of the initial ideas in the final redesign.

## **Results**

The following sections will depict the progression of our ideas from sketches, to wireframes, and finally to high-fidelity mockups.

Sketches:

Lack of Error Prevention

1) Contact Us

### Contact Us

- Phone # Available times
- Email ~~~~~@gmail.com
- Contact Form (Online)

First name *	Last name *
<input type="text"/> (?)	<input type="text"/> (?)
Email address *	Phone # *
<input type="text"/> (?)	<input type="text"/> (?)

Inquiry

Submit

Figure 10: This is an idea to help prevent errors in the Contact Us form. Asterisks are added next to each text box to make it clear to the user that they need to fill out each box. Each input box also has a question mark icon that users can hover their mouse over to get an explanation of what input is required such as the type of characters.



3) 11 Contact Us

First Name  ✓

Last Name  ✓

Email address  (i)

Phone #  (i)

501-675-670

Invalid  (i) X

Please enter valid email address as: pamtenter@igmad.com

digits only

Submit

Figure 11: The idea of this sketch is to prevent errors made in the Contact Us form by adding confirmation icons next to each input box to inform the user if their input is valid before submitting the form to prevent errors. Each box also has a question mark users can hover over for an explanation. When users enter the wrong information the explanation of their error pops up so users can know how to fix it before submitting the form.

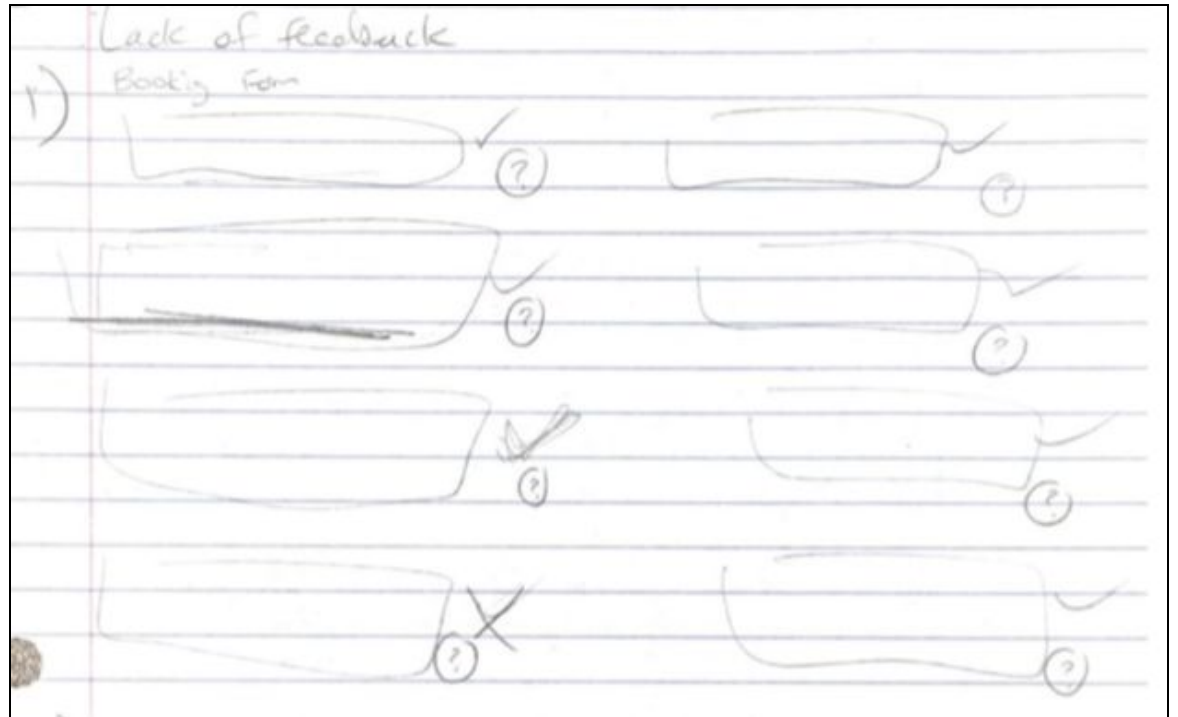


Figure 12: The idea of this sketch is to improve the lack of feedback in the booking form. The booking form shows a check mark or x mark to indicate if inputted values are correct to inform the user of their input.



*Figure 13: The idea of this sketch is to improve the lack of feedback in the contact form. The contact form shows a check mark or x mark to indicate if inputted values are correct to inform the user of their input.*

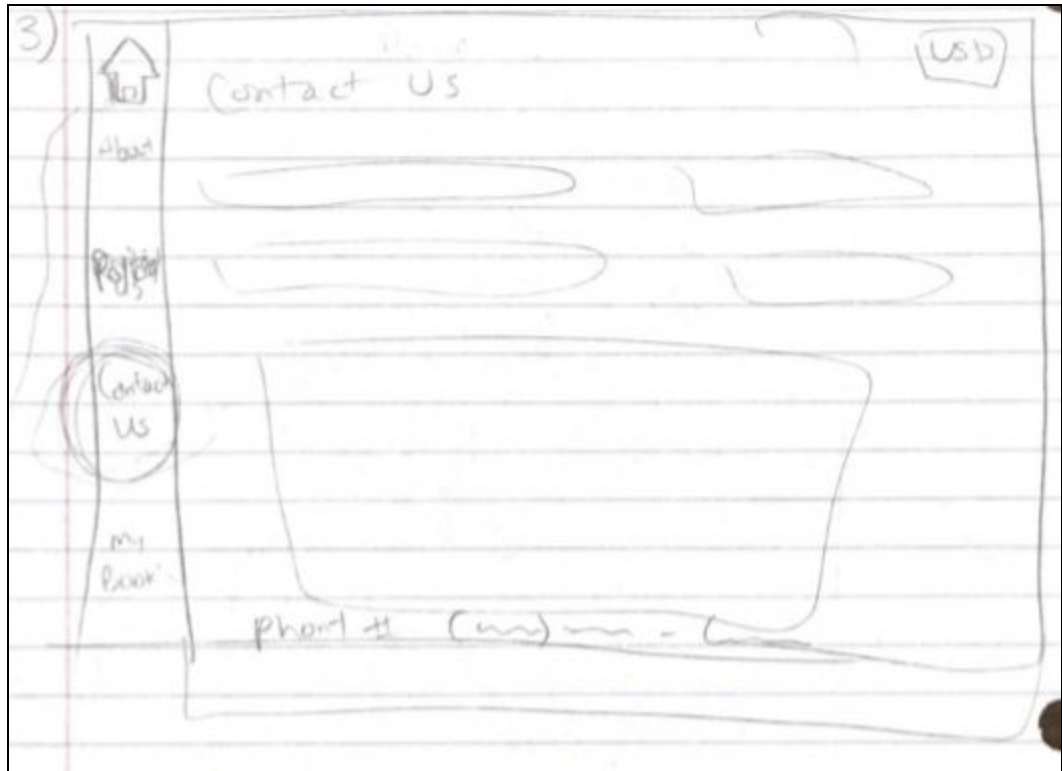


Figure 14: The idea of this sketch is to improve the lack of feedback on the menu bar. When users select a tab on the menu bar, the name of the tab is not highlighted to inform the user that it has been selected. This sketch moves the menu bar to the left side. When users select on a tab such as Contact Us, it will be circled to indicate what page the user is on.

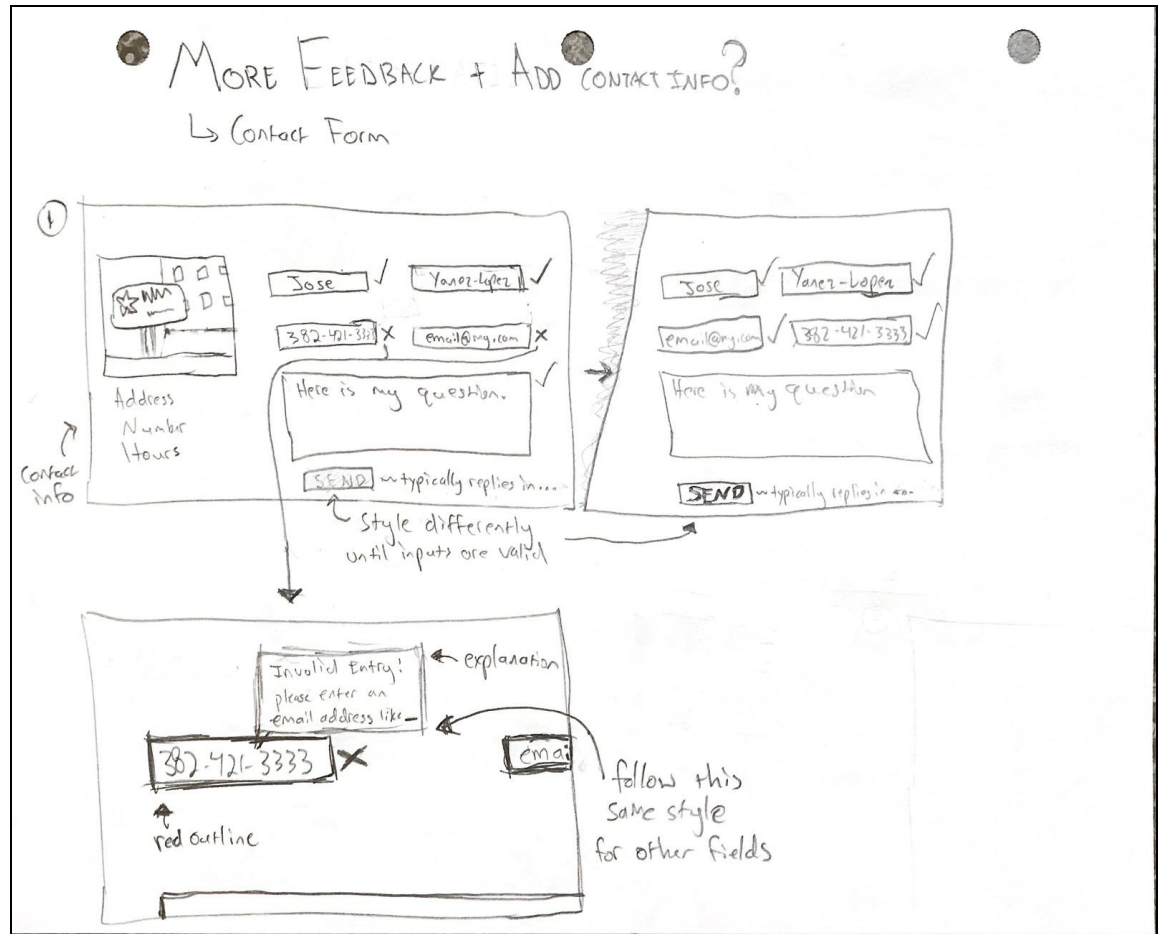


Figure 15: Sketch one adds verification to the fields on the Contact Us form and removes button functionality until all the inputs are valid. It also adds more contact information to the left of the form. The sketch branching to the right shows what it looks like after inputting all correct information, emphasizing the button being clickable once input is verified. The sketch branching below shows an example error message detail, informing the user what is wrong about their input.

Wireframes:

This wireframe shows a contact form layout. It includes fields for 'First Name' (containing 'Jim'), 'Last Name' (containing 'Othy'), 'Email Address' (containing 'abc@xyz.com'), and 'Phone Number' (containing '(123) 456 - 7890'). A 'Questions or Comments' section with a text area and a 'SEND' button is at the bottom. A tooltip with the text 'explanation explanation explanation explanation explanation explanation' is positioned over the 'Email Address' field's question mark icon.

Figure 16: This is the initial mockup for the contact page, showing example text in the fields as well as the question marks that provide explanations when hovered over.

This wireframe shows the same form fields as Figure 16, but with validation feedback. The 'Email Address' field, which now contains '(909) 303 - 4040', has a large 'X' next to it. The 'Phone Number' field, which contains '(909) 303 - 4040', has a checkmark next to it. The tooltip is still present over the 'Email Address' question mark.

Figure 17: This demonstrates the checking functionality that displays an X or check next to fields, depending on the legality of their contents.

This wireframe shows two 'SEND' buttons. The left button is disabled (greyed out), and the right button is enabled (active). A large arrow points from the disabled button to the enabled button, illustrating the state change.

Figure 18: This image demonstrates how the send button will be displayed when it is disabled vs. enabled.

### High Fidelity Mockups:

The following images demonstrate a successful flow using the messaging feature on the Contact Us page.

The screenshot shows a web browser window with the URL <http://starlightinnhuntingtonbeach.us>. The browser's address bar and tabs are visible. The website's navigation bar includes links for Home, About, Gallery, Policies, Contact Us, and My Booking. The main header for the Starlight Inn Huntington Beach (18382 Beach Blvd, Huntington Beach, CA 92648) is displayed. The 'Contact Us' section provides the address, phone number ((714) 848-8422), and hours (Thursday ... AM - PM). Below this, there are input fields for First Name (Robert), Last Name (Bobby), Email Address (abc@xyz.com), and Phone Number ((123) 456 - 7890). A tooltip message 'Please enter a valid email we will be able to contact you through.' is shown over the email address field. A large text area for 'Questions or Comments' is provided, with a 'SEND' button at the bottom.

Starlight Inn Huntington Beach

18382 Beach Blvd, Huntington Beach, CA 92648

Home About Gallery Policies Contact Us My Booking

**STARLIGHT INN HUNTINGTON BEACH** ★★

18382 Beach Blvd  
Huntington Beach, CA 92648

(714) 848-8422 Hours: Thursday ... AM - PM

First Name: Robert

Last Name: Bobby

Email Address: abc@xyz.com

Phone Number: (123) 456 - 7890

Questions or Comments

Write a message

SEND

Figure 19: This image demonstrates how users are able to hover over the question marks to receive more information on the corresponding field.

Mozilla

← → ↻ http://starlightinnhuntingtonbeach.us

Home About Gallery Policies Contact Us My Booking

**STARLIGHT INN HUNTINGTON BEACH** ★★  
18382 Beach Blvd, Huntington Beach, CA 92648

**Contact Us**  
18382 Beach Blvd  
Huntington Beach, CA 92648  
(714) 848-8422 Hours: Thursday ... AM - PM ⓘ

First Name  
Jim ✓

Last Name  
Othy ✓

Email Address ⓘ  
Jimothy@gmail.com ✓

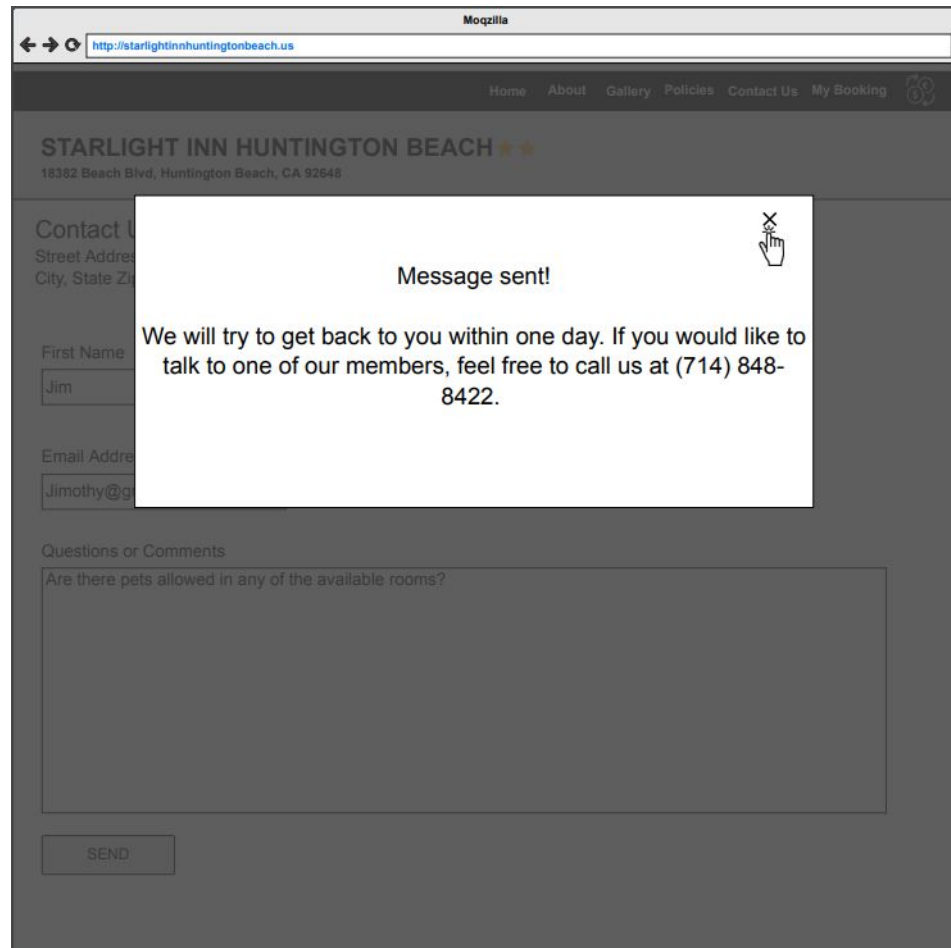
Phone Number ⓘ  
(626) 142 - 2234 ✓

Questions or Comments  
Are there pets allowed in any of the available rooms?

SEND

Figure 20: This image displays the live checking the system performs, by providing the check marks besides the fields that contain valid information. This image also demonstrates how the send button will be enabled once check marks appear next to all fields.





*Figure 21: This image displays the confirmation message the user will receive after successfully submitting their message.*

Mozilla

← → ↻ http://starlightinnhuntingtonbeach.us

Home About Gallery Policies Contact Us My Booking ↻

**STARLIGHT INN HUNTINGTON BEACH** ★★  
18382 Beach Blvd, Huntington Beach, CA 92648

**Contact Us**  
18382 Beach Blvd  
Huntington Beach, CA 92648

(714) 848-8422    Hours: Thursday ... AM - PM ⓘ

First Name

Last Name

Email Address ⓘ

Phone Number ⓘ

Questions or Comments

SEND

*Figure 22: This image displays the end of the flow. This is what the user will see after clicking out of their confirmation message. The Contact Us page will be reset and ready to send another message if needed.*

# Redesign Three

## Reduce the amount of information presented on the home page

### **Problem**

There is too much information that clutters the homepage, making it difficult for the user to locate the information that they are trying to find.

### **Evidence**

#### *Usability Evaluation Report*

This was identified as an issue based on our usability tests. As mentioned in our usability evaluation report, we often saw users scrolling up and down the page multiple times trying to locate the information they needed. During the usability tests that required users to book a room and locate information about various policies, some participants mentioned how cluttered or disorganized the site is, adding to the difficulty in completing their tasks. The amount of content that is currently provided on the homepage ultimately provides too much information for the users to sift through when looking for the information they need.

During these tests, not only did we notice that the clutter on the homepage made it more difficult for the users to locate particular pieces of information, but it also revealed to us where the users expected to find the information instead. This insight helped us in developing our redesign, as we had a better idea of where users are more likely to look for high profile amenities or policies. As discussed in our report, some users attempted to click on the policies tab to locate the policy they needed, which is why we decided to relocate all policies to their own tab instead of having a few sprinkled in less discoverable spots throughout the booking process.

#### *Cognitive Walkthrough*

Some tasks in our cognitive walkthroughs also involved searching for particular policies during the booking process. Even through our own experience, we found that the clutter on the homepage added to the time it took for us to complete our task.

## Process

Some of the initial ideas we went through while coming up with this redesign include the following:

- Move photos and reviews into its own tab labeled “Photos+Reviews” to reduce clutter on the homepage. Move policies onto its own page as well to reduce clutter.
- Moving the hotel info under the image gallery next to the map showing where the hotel is located, making the hotel name bigger and centered to highlight its hierarchical importance
- Removing the booking section and placing policies and amenities side by side, renaming the show price button to “Book Now!” and linking it to a new separate booking page, creating a slideshow with 3 images at the top of the page and below it listing nearby landmarks or what to do around here and directions to the hotel.
- Reducing clutter by reorganizing the amenities and policies sections to be more concise. The elaborated information for policies would be on a separate page.

Our final redesign idea ended up including the following:

- Moving all information about policies into its own individual Policies tab.
- Consolidating all amenities information into one area on the homepage, instead of supplying it in multiple areas throughout the homepage and booking process.
- Adding a Gallery tab to contain most of the images, while only keeping a few on the homepage to advertise the property.

Overall, we decided on the actions that make up our final redesign for a few reasons. Through surveys, interviews, and the example of many other competing booking websites, we discovered the importance and impact of pictures, so we decided to keep a few key pictures on a short slideshow at the top of the homepage. But with the intention of reducing the clutter, we decided to create a separate tab for the entire collection of pictures called Gallery. Through our own opinions and observation through cognitive walkthroughs, we noticed a lot of redundancy in how the amenities are currently listed on the homepage, which is why we decided to consolidate all of that information into one area instead on the page.

## Results

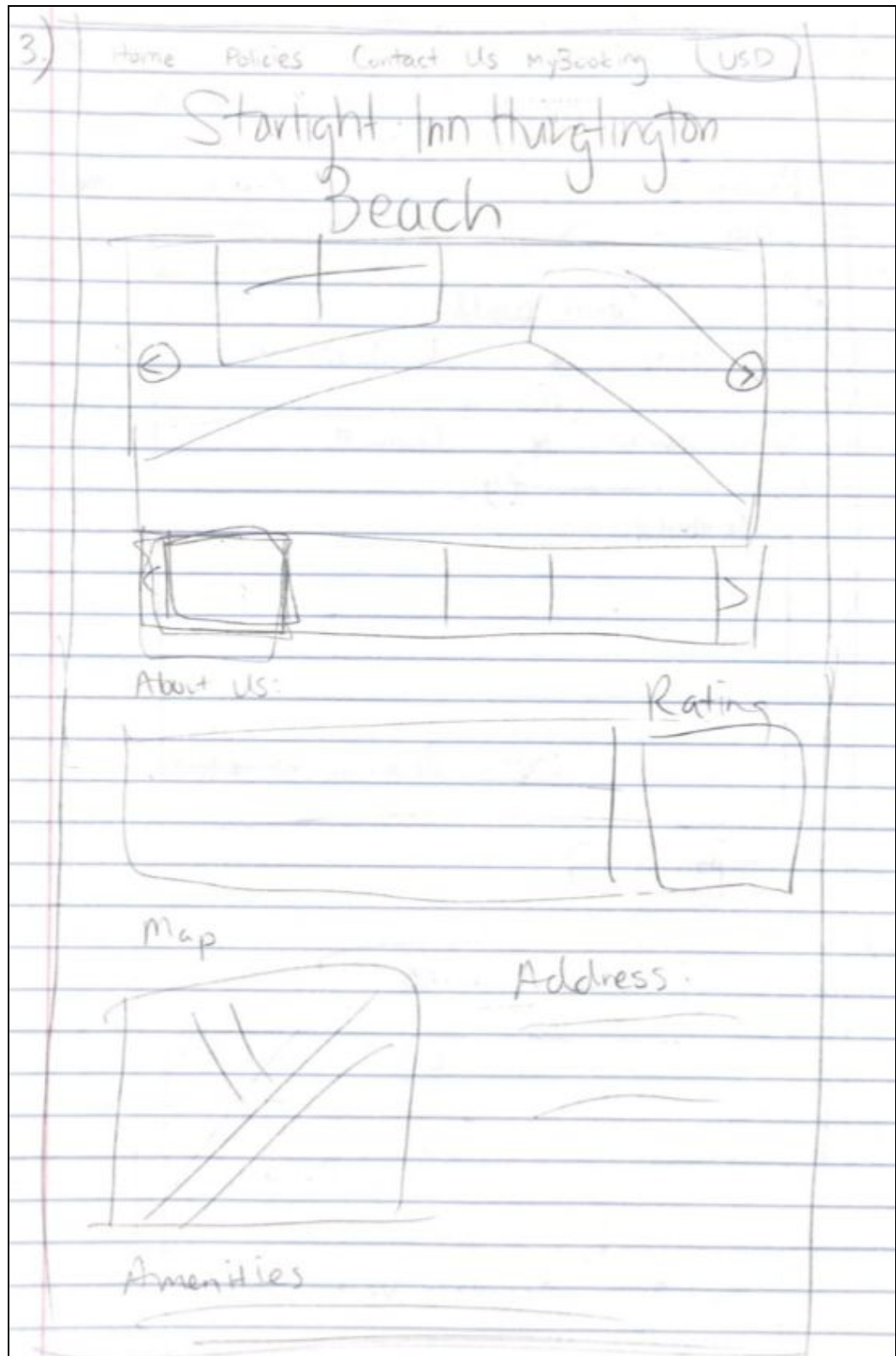


Figure 23: This is an idea to reorganize the homepage. The name of the hotel is made bigger and centered at the top of the page to highlight its hierarchical importance. Images that are currently selected on the slideshow are highlighted in an outline so the user won't be confused. The hotel info section is renamed About Us and the hotel rating is placed next to the hotel info so that users can easily see how well the hotel is rated.

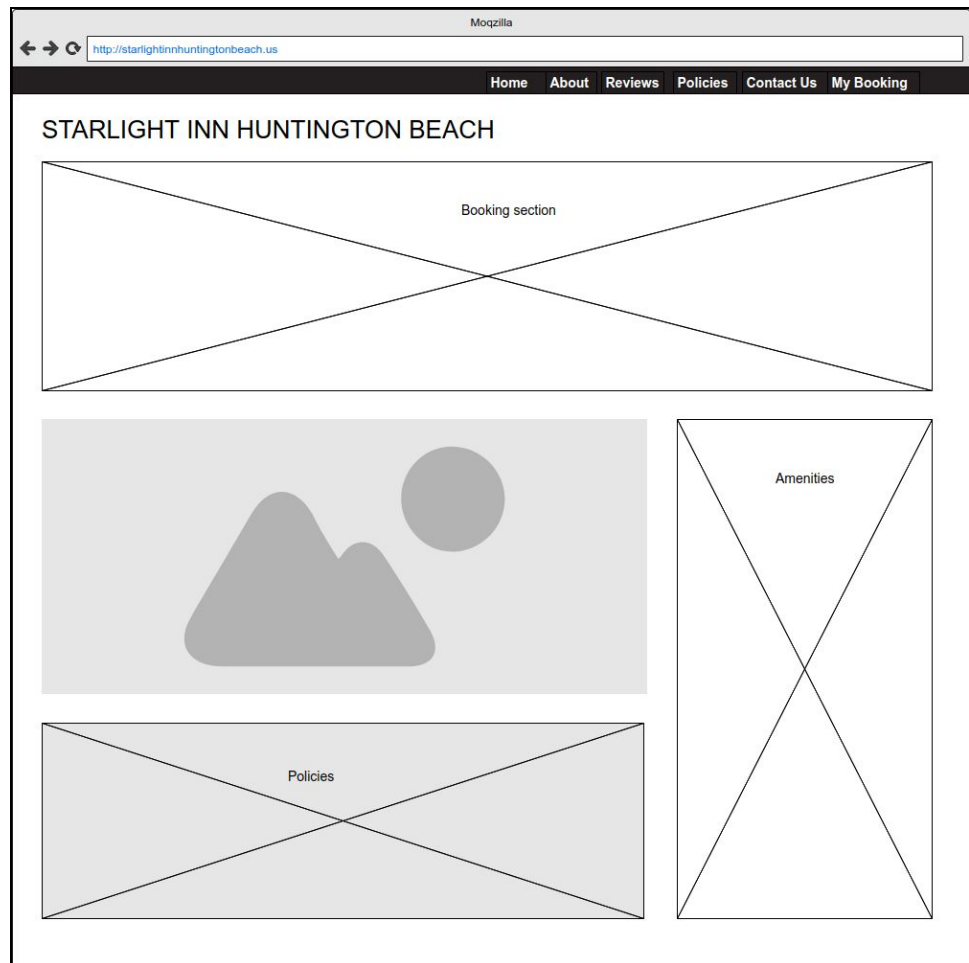


Figure 24: This is our wireframe. We have divided up the locations to place each piece of information on the homepage. Although there are some details added to the navigation bar, they are added just so we know what it is for.

Mozzila
http://starlightinnhuntingtonbeach.us

Home
About
Gallery
Policies
Contact Us
My Booking

**STARLIGHT INN HUNTINGTON BEACH** ★★  
18382 Beach Blvd, Huntington Beach, CA 92648

**Check Room Availability**

Check-in	Check-out	Rooms	Guests	
3/31/2019	4/1/2019	1	1	Search

**Amenities**

Free Internet	On Site Parking
No Smoking Rooms/Facilities	Family Rooms
Air Conditioning	Vending Machines
24 Hour Front Desk	WiFi
Heater	Wake Up Service
TV (Satellite & Cable)	Bathroom
Refrigerator	Desk

Figure 25: This is the final design of the homepage. We have the booking section on the top, image slideshow under it, and Amenities at the bottom of the page.

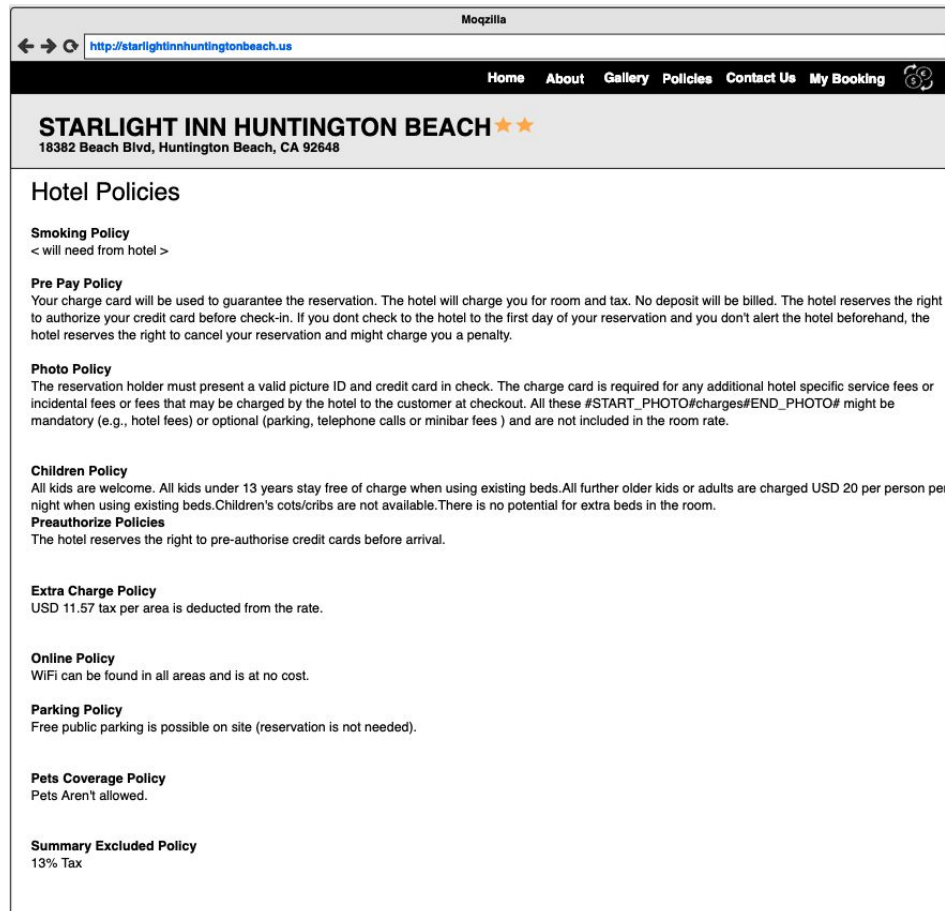


Figure 26: This is the final design of the new policies page. We added a smoking policy.



# Redesign Four

Add phone number, postal address, hours of operation into contact us page

## Problem

There are actually three different ways to contact Starlight Inn using the features on the official website. However, the contact information is widely scattered and we argue that most of it is hidden.

The first contact information is postal address, which can be found:

1. Under the heading “STARLIGHT INN HUNTINGTON BEACH” on the homepage, the Contact Us page, and the My Booking page (underlined in red in Figure 27);
2. In a Google Maps pop up that appears at the click of the “Show Map” link on the homepage (boxed in red in Figure 27);
3. In a Google Maps pop up that appears at the click of the out-of-focus map embedded by the hotel images section on the homepage (boxed in red in Figure 27); and
4. In a Google Maps preview that is located towards the bottom of the homepage.

Besides location one and location four listed on the list above, we argue that address at the other two locations are *hidden*, since there are not enough hints for users to immediately notice it. Another problem with postal address is that users today are not likely to send physical letters for inquiries. This trend greatly decreases the value in postal address as a piece of contact information.

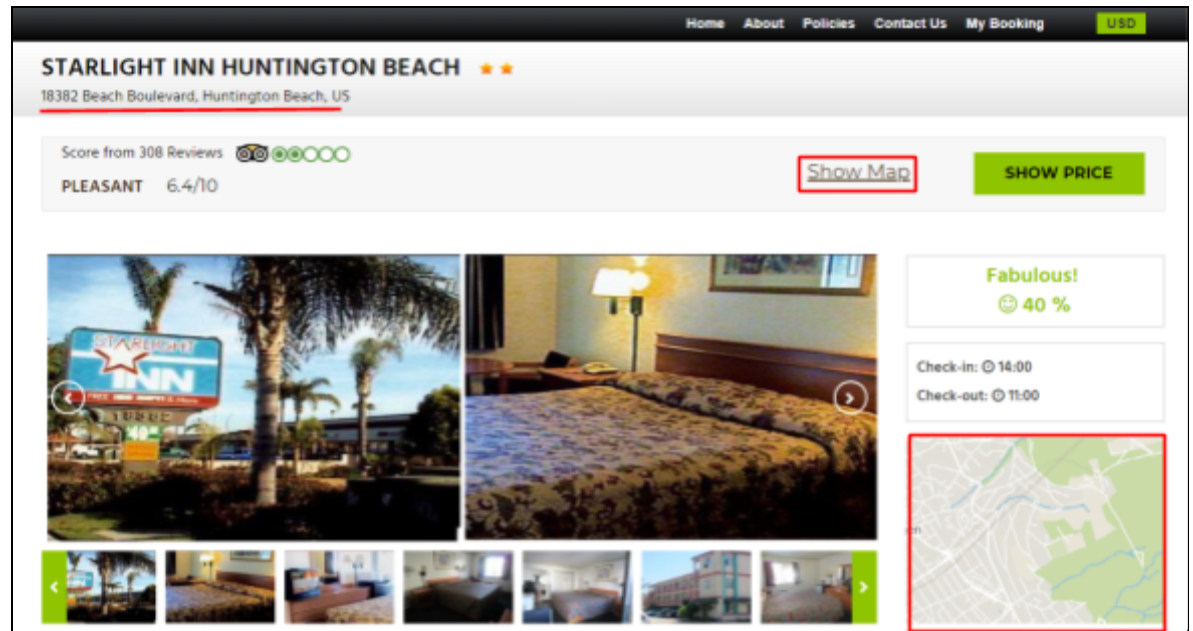


Figure 27: This is a screenshot of Starlight Inn’s official website. The first bullet point above refers to the information underlined in red on the upper left corner of the screenshot. The second bullet point refers to the link boxed in red on the top. The third bullet point refers to the unsuccessfully embedded map at the bottom right corner of the screenshot.

The second contact information is phone number, which can be found in any of the embedded Google Maps by clicking the “View larger map” link to be redirected to Google Maps’ website (<http://maps.google.com>). Although this information can be found through Starlight Inn’s website, we do not consider this piece of information available on Starlight Inn’s website.

The last contact information should be more accurately phrased as contact method, than as an information. It is the contact form located on the Contact Us page.

Because the contact information and method are either undesirable or hidden, we have decided to include this problem as one of our six redesign targets.

## Evidence

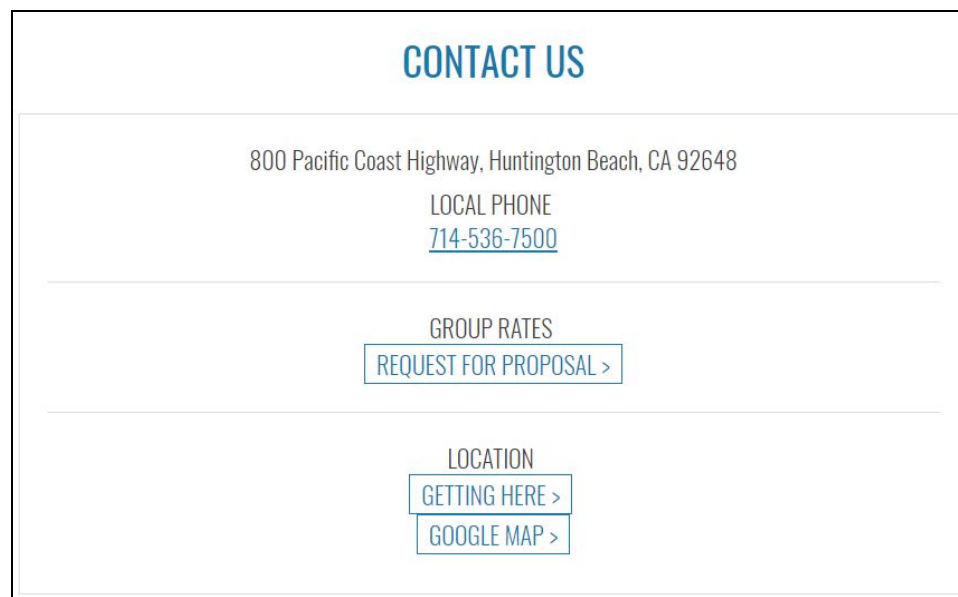
At the beginning when we were exploring the website, we have noticed that the Contact Us page only has an email form that users can use to communicate with the inn. As users, we find this unusual, since previous hotel websites that we had experience with provide more than one communication channels. We were unsure

if this inconvenience would affect the majority of the users, so we put it through multiple tests. From multiple participants, we found evidence that prove the lack of contact options a problem worth solving.

### *Competitor Analysis*

As mentioned above, we believe Starlight Inn's website differs from the norm observed from multiple direct and indirect competitors.

One of the direct competitor we analyzed is the Huntington Beach Inn (<http://www.huntingtonbeachinn.com/>). In their Contact page as shown in Figure 28, users can immediately find the inn's postal address and local phone number. The contact form can also be found if they followed the "REQUEST FOR PROPOSAL" link.



*Figure 28: This is a screenshot of Huntington Beach Inn's Contact page (<http://www.huntingtonbeachinn.com/contactus.php>). All of the contact information is neatly organized on the same page.*

Another direct competitor, Hyatt Regency: Huntington Beach Resort and Spa (<https://www.hyatt.com/en-US/hotel/california/hyatt-regency-huntington-beach-resort-and-spa/hunrh>) does the same, but make it even more immediately available. On the homepage, the resort clearly shows an embedded Google Maps, the postal address, the phone number, the region email address, and a link that directs users

to more detailed information. In addition to that, the resort also allows users to connect with it through multiple social media platforms.

On the other hand, both of the indirect competitors that we analyzed have several communication options available for hotels and hosts. Expedia (<https://www.expedia.com/>) provides hotels' phone numbers in the search result, and further information can be found after selecting a hotel from the results list. Airbnb (<https://www.airbnb.com/>) provides hosts' contact information if the users log in to the website.

### *Interview*

Although the interviewees were not asked to comment about their preference in contact options, many expressed that they would call the hotel if they faced challenges while interacting with a hotel's website.

### *Usability Tests*

As we wrote in our usability evaluation reports, some users had questions they wanted answered. They wanted to directly speak to the hotel front desk but were unable to because the phone number was not listed.

For instance, during one of the usability tests, the participant was unable to find information about smoker rooms and tried to find the phone number to call but could not find it because it was not listed.

When asked to find a way to contact the hotel, another participant directly expresses disfavor in the contact form presented on the Contact Us page. He said that he would like to get immediate feedback or reply, so contact options such as a live chat or phone number will be ideal.

With all of the evidence summarized above, we have agreed that the Contact Us page should be redesigned.

## **Process**

All group members agreed to consolidate all of the contact information on the Contact Us page in our individual sketches. Our sketches vary by arrangement

and inclusion of small elements, but all included postal address and phone number.

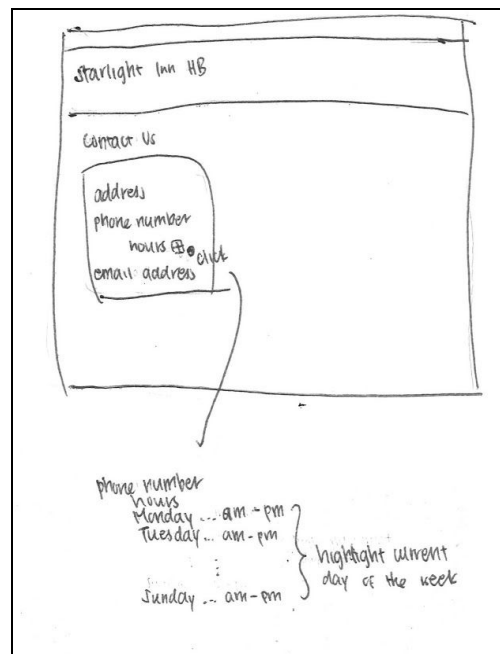
One element that we have considered including is an embedded Google Maps focusing on Starlight Inn. This could be helpful for users to refer to when they are looking at the postal address. However, we decided to exclude it from the final design because we will have a map in the About page.

Another element that we have considered is including the email address, so the users can email the inn whenever they want on their emailing applications. This will prevent them from having to visit the site to send the email. We decided to leave this out of our final design, because we do not have enough evidence to suggest that providing the email address is better than providing the contact form.

Our final design is to have postal address, phone number, hours of operation, and a contact form.

## Results

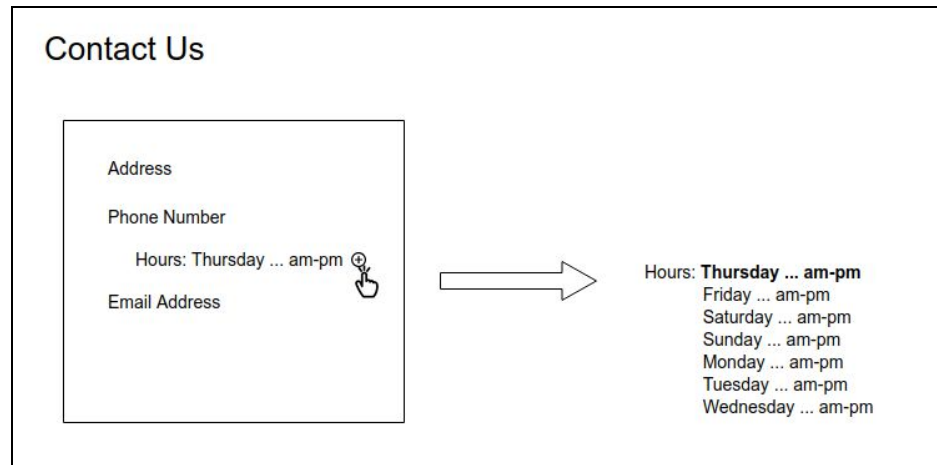
We started with the idea in the following sketch, in which all communication channels are introduced on the same page:



*Figure 29: The idea focuses on another standard that should be implemented -- providing phone number and the hours that they will be answering calls.*

In our wireframe shown in Figure 30, we organized contact information by the order that we have observed from competitor's websites:

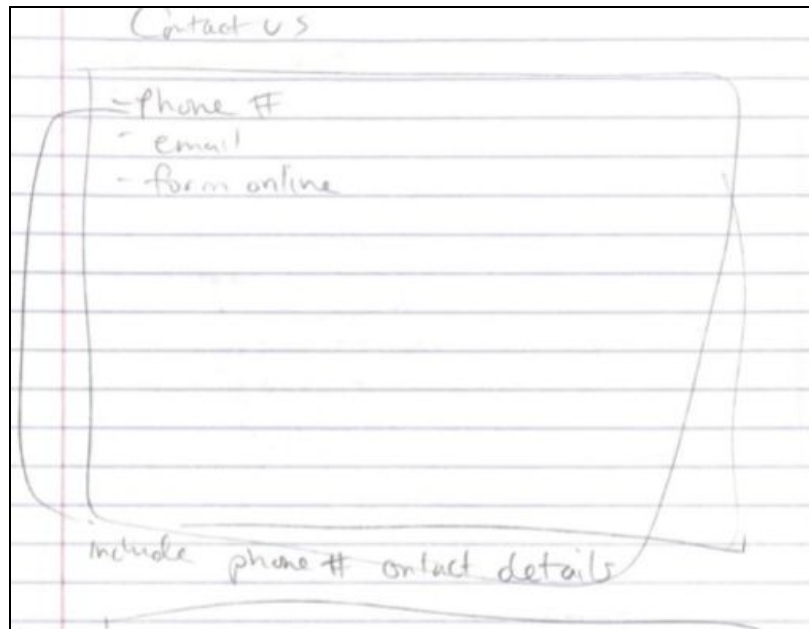
1. Postal address;
2. Phone number and hours of operation as an expandable list with the current day of the week highlighted;
3. Email address.



*Figure 30: A digitized version of the combination of redesign ideas collected from the group members' individual sketches. Other details of the page is excluded on purpose, for this redesign target is focusing on the contact information rather than the final look of the page. More information about redesign ideas from individual sketches can be found in Appendix 1.0 Sketches.*

After deeper discussion on the wireframe and review of other sketches, we decided to keep the contact form and remove the email address.

We borrow the idea from the following sketch:



*Figure 31: This is the second sketch dealing with the lack of conventional standards. Hotel websites usually offer their users phone numbers as an option for contact. This idea adds the phone number and email in addition to the contact form already available in the Contact Us page.*

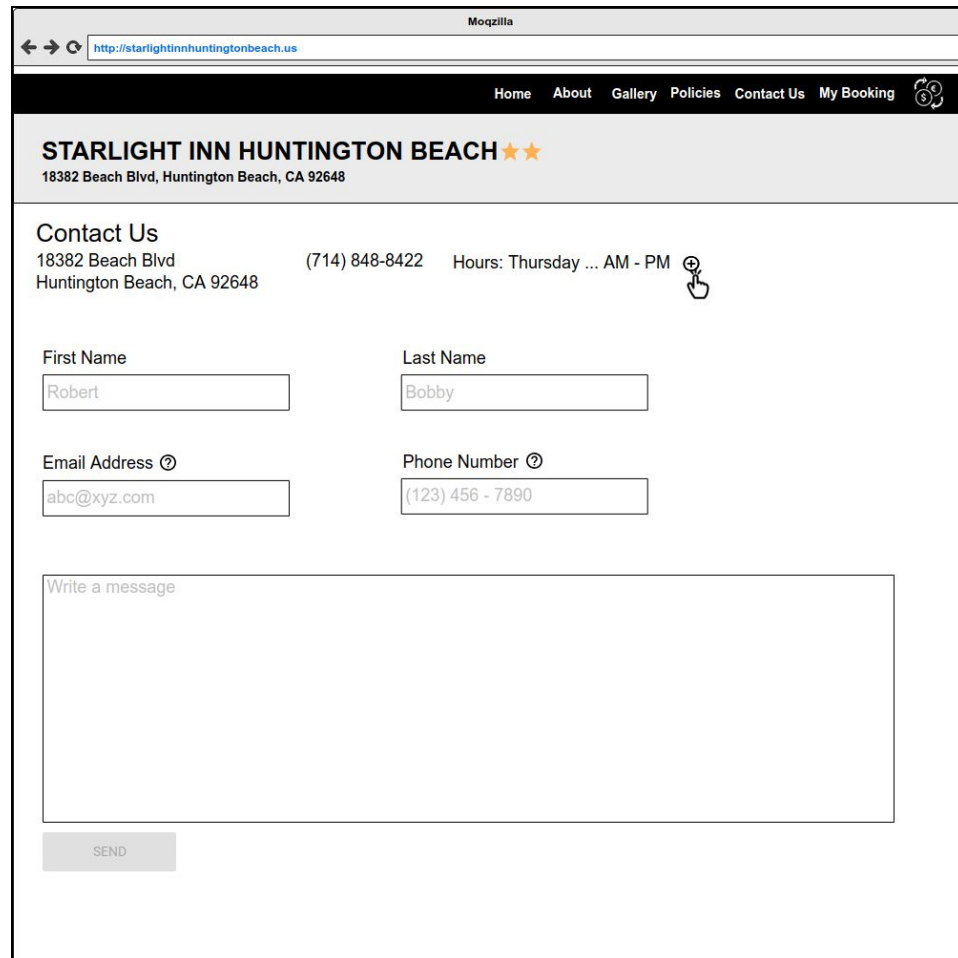
That becomes our only modification on the wireframe. The final design of the contact information to include and their organization can be seen in the image below:

The image is a screenshot of a web browser displaying the contact page for Starlight Inn Huntington Beach. The browser's address bar shows the URL <http://starlightinnhuntingtonbeach.us>. The page has a dark navigation bar with links: Home, About, Gallery, Policies, Contact Us, and My Booking. Below the navigation bar is a header section with the hotel's name, "STARLIGHT INN HUNTINGTON BEACH", followed by two orange stars and the address "18382 Beach Blvd, Huntington Beach, CA 92648". The main content area is titled "Contact Us" and includes the address "18382 Beach Blvd, Huntington Beach, CA 92648", the phone number "(714) 848-8422", and the hours "Hours: Thursday ... AM - PM" with a plus icon. Below this information is a contact form with four input fields: "First Name" (containing "Robert"), "Last Name" (containing "Bobby"), "Email Address" (containing "abc@xyz.com"), and "Phone Number" (containing "(123) 456 - 7890"). Each field has a small circular icon to its right. Below the input fields is a large text area labeled "Write a message". At the bottom left of the form is a "SEND" button.

*Figure 32: This the final design of the contact information layout. In the box above the contact form, there is the postal address, the phone number, and the hours of operation. Below that, there is a contact form, where users must fill in appropriate information in each field to send a message.*



To find out the hours of operation for other days of the week, the user can click the plus, or expand, symbol:



The screenshot shows a web browser window with the URL <http://starlightinnhuntingtonbeach.us>. The website header includes navigation links: Home, About, Gallery, Policies, Contact Us, and My Booking. The main heading is "STARLIGHT INN HUNTINGTON BEACH" with two stars and the address "18382 Beach Blvd, Huntington Beach, CA 92648".

The "Contact Us" section displays the address "18382 Beach Blvd, Huntington Beach, CA 92648", the phone number "(714) 848-8422", and the hours "Hours: Thursday ... AM - PM". A small plus symbol (+) is located at the end of the hours text, with a mouse cursor pointing at it.

Below the contact information is a form with the following fields:

- First Name**: Input field containing "Robert".
- Last Name**: Input field containing "Bobby".
- Email Address**: Input field containing "abc@xyz.com".
- Phone Number**: Input field containing "(123) 456 - 7890".

Below the form is a large text area labeled "Write a message" and a "SEND" button.

*Figure 33: This image shows a user clicking the little plus symbol at the end of the day's hours of operation. Doing so will expand a list of hours of operation.*

After clicking the expand symbol, hours of operation for all days in the week will be shown as below:

The screenshot shows a web browser window with the URL <http://starlightinnhuntingtonbeach.us>. The website header includes navigation links: Home, About, Gallery, Policies, Contact Us, and My Booking. The main heading is "STARLIGHT INN HUNTINGTON BEACH" with a three-star rating and the address "18382 Beach Blvd, Huntington Beach, CA 92648".

The "Contact Us" section displays the address "18382 Beach Blvd, Huntington Beach, CA 92648" and the phone number "(714) 848-8422". The hours of operation are listed for each day of the week, with "Thursday" bolded as the current day:

Day	Hours
<b>Thursday</b>	... AM - PM
Friday	... AM - PM
Saturday	... AM - PM
Sunday	... AM - PM
Monday	... AM - PM
Tuesday	... AM - PM
Wednesday	... AM - PM

Below the hours, there are input fields for "First Name" (containing "Robert"), "Last Name" (containing "Bobby"), "Email Address" (containing "abc@xyz.com"), and "Phone Number" (containing "(123) 456 - 7890"). A large text area for "Write a message" is also present, followed by a "SEND" button.

*Figure 34: This image shows the expanded list of hours of operation. The current day of the week is bolded and placed on the first row.*

The order of the days will depend on the current day of the week, with the current day on the first row. Once the list is expanded, the expansion symbol will disappear. The user will not be able to collapse the list, unless the page is reloaded.

## Redesign Five

Enable the users to enlarge the images of the hotel

### Problem

The images on Starlight Inn's website are all small. There are only two places where images are shown on the website: image section on the homepage and the Amenities drop down in search results.

On the top of the homepage, there is an image section (as shown in Figure 35). When users click on the thumbnail below, the image will be projected to the top, where two images are shown at the same time. In this case, the image is enlarged, but the image still isn't big enough to show the details.



*Figure 35: This is a screenshot of the image section on Starlight Inn's homepage. Users can click through the images using all four arrows.*

After entering the search conditions in the booking section and selecting "Search," users can click the room name link or expand the Amenities drop down (both boxed in red in Figure 36) to view images of a specific room type. The problem here is: the images cannot be enlarged. The thumbnail in the "Room Type" column is clickable, but nothing happens when it is clicked. The images shown under the "Room Images" are not clickable.

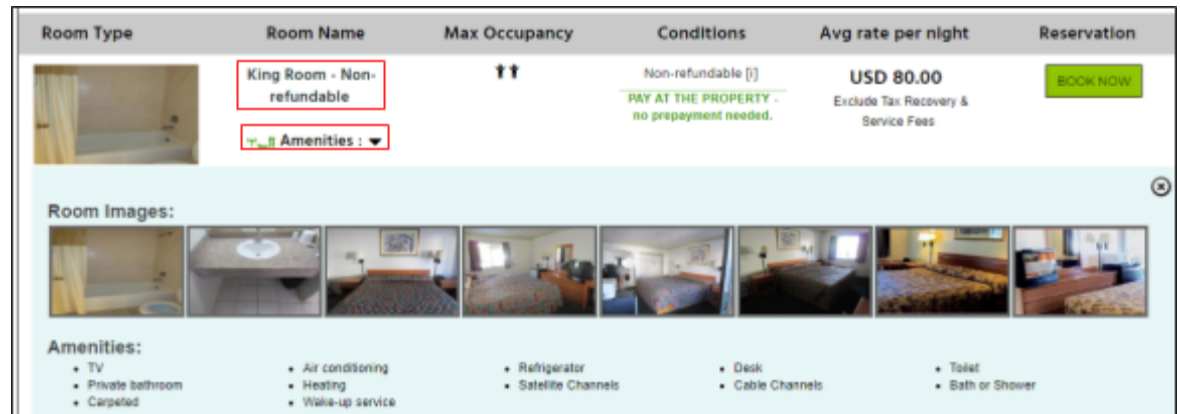


Figure 36: This is a screenshot of the search result on Starlight Inn's website. The first red box on the top that reads "King Room - Non-refundable" is a link that will expand the room details section (highlighted in blue). The second red box on the bottom is an Amenities drop down that also expands the room details section.

Users often wanted to get a clearer look at the property by clicking on the images provided, but were unsuccessful in their attempts. So, we decided to make this one of our redesign targets.

## Evidence

We did not find this to be a problem until we heard about it from our interviewees. Some commented briefly on the matter, while others expanded their thoughts on the problem. Because of that, we decided to find out more about what people think about the images.

### Interview and Survey

During the interview, we asked our interviewees to quickly browse through the website and share any thoughts that came to their mind. None of the interviewees reported problems on the images there. Then, we asked the interviewees to take closer looks as if they were considering to book a hotel there. Some interviewees then report that the "images are too small" or the image quality is "ghetto looking."

Because of these responses, we decided to add the option "Pictures" to our survey question "If you've used a booking website before, what type of information on the site influences your decision the most?" There are nine out of twenty-nine respondents selected "Pictures" as the most influential decision factor.

### *Usability Test*

There are also a couple of hints collected from our usability evaluation report. Multiple users during our usability tests attempted to click on the images in hope they could get a better view. After clicking the image and not getting the desired response of viewing the image, they showed signs of confusion on their face or muttered utterances about why it wasn't pulling up the picture.

Because of these evidence, we have decided to redesign the way images are presented. However, since the matter isn't crucial, we ranked it with the lowest priority.

### **Process**

To solve this problem, we first sketch out our ideas individually. From the individual sketches, we can tell that most of our ideas come from what have already been implemented on a variety of websites, which is not restricted to hotel websites.

Since our ideas are already similar, we selected the one that we like the most. Then, we look through our competitor's websites again and make minor adjustments to our wireframe.

One idea that appears in multiple individual sketches is to make the images large enough that the users don't have to click to enlarge. We left this idea out of our redesign because the page will be too long, and we are afraid that users may be discouraged to scroll through the whole page.

The idea that we finally settle on is to have images in a grid form. When an image is selected, it will be enlarged and shown as a pop up on the same page. Users will be able to click through the images by selecting the left or right arrow on the sides of the pop up. They will also be able to exit the pop up view by clicking the shaded background around the pop up window.

We are using the Gallery page to show all of the features that we have designed for pop up feature. However, it is important to note that users will be able to enlarge all images on the website, regardless of the page they are on. However, if

images are not put in consecutive order, users will not be able to move from one image to the next using the direction arrows.

## Results

We chose the following base sketches to be the main style that we want to include in our redesign:

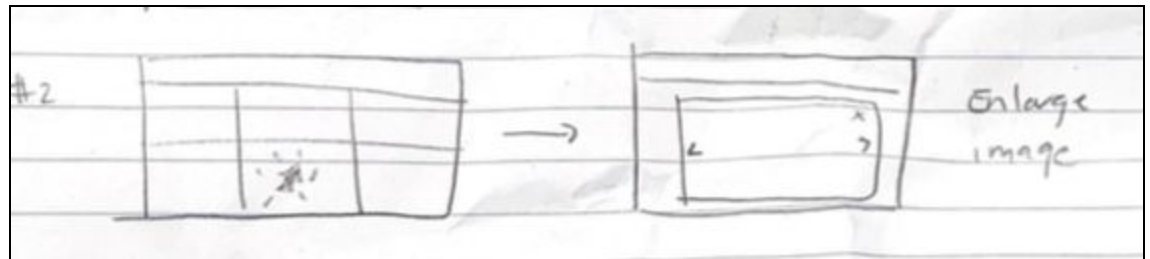


Figure 37: The idea in this sketch is to enable the users to enlarge an image by clicking on it. This feature is currently available on most other booking platforms, but not for Starlight Inn.

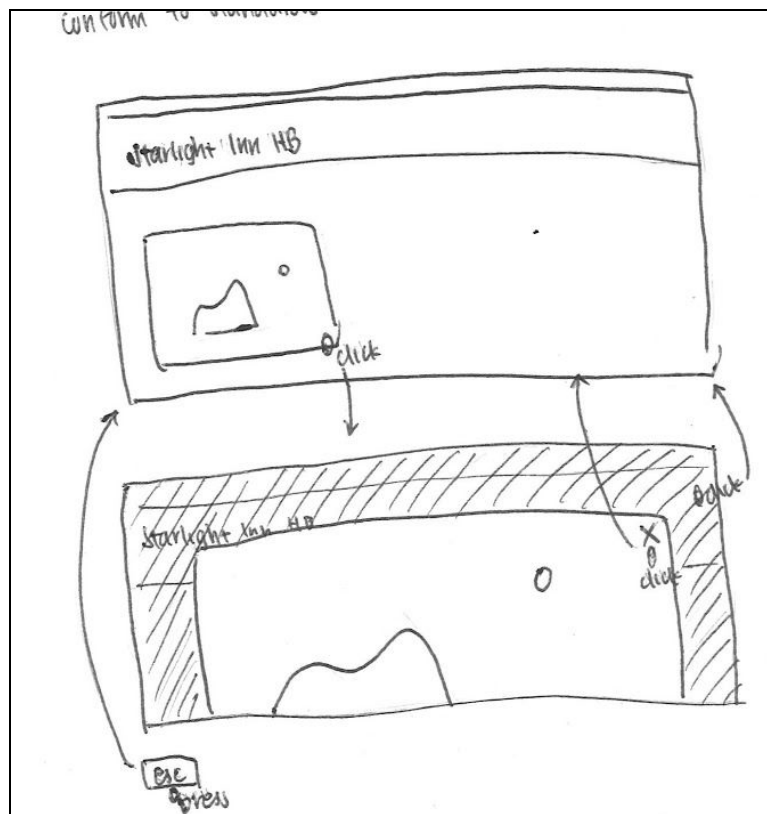
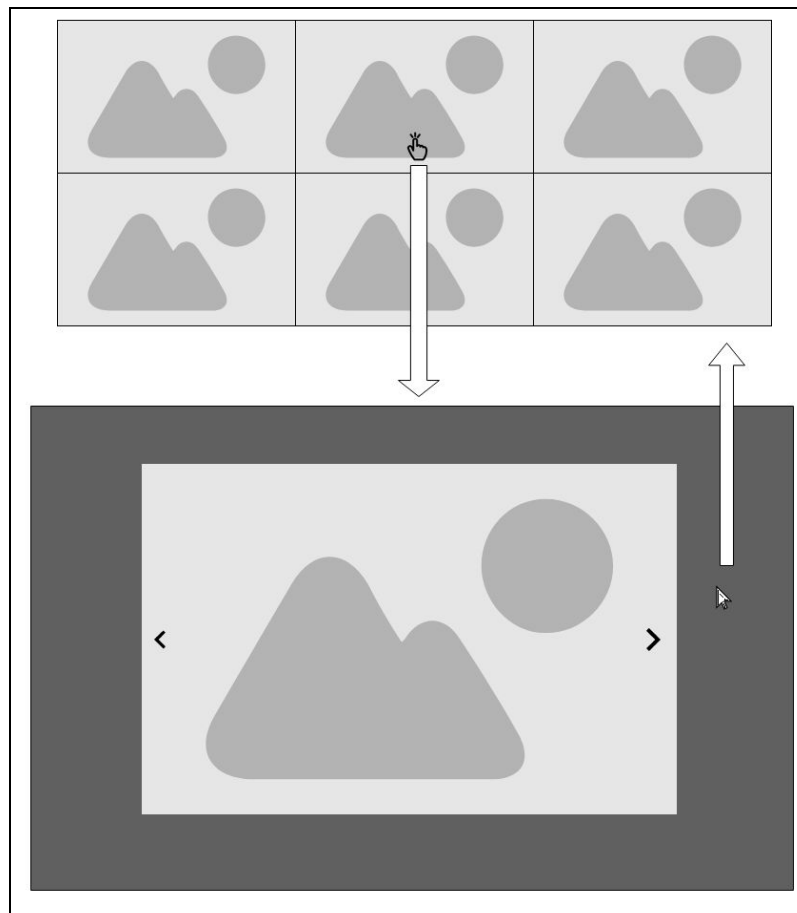


Figure 38: The image enlarges as a pop up on the same page when clicked by the user. Clicking the X mark on the upper right corner of the image or the shaded background, the user can return to original page.

The image below shows the action of enlarging an image (see Figure 39). Clicking an image from the grid will bring up a pop up window that lies on top of the current page. By clicking the shaded background, users can return to the grid view page.

The left arrow, or a less than symbol (<), on the image brings user to the previous image. In the case of our wireframe, users will be shown an enlarged first image of the first row. When the users is on the very first image of the page, the left arrow will be disabled.

The right arrow, or a greater than symbol (>), on the image brings users to the next image. In the case of our wireframe, users will be shown an enlarged third image of the first row. Clicking the arrow again will show users the first image of the second row. When the user is on the very last image of the page, the right arrow will be disabled.



*Figure 39: This is a wireframe that is also a digitized version to one of our individual sketches. On the top of the wireframe, six images are shown in*

a grid. The clicking cursor shows that the second image of the first row is selected. After the selection, a pop up window appears as shown in the bottom half of the wireframe. Clicking anywhere on the shaded background will bring users back to the grid view shown on the upper half of the wireframe.

The following images are the final designs of the Gallery page. Figure 40-42 shows the action sequence to enlarge an image. First the user have to navigate to the Gallery page shown below:

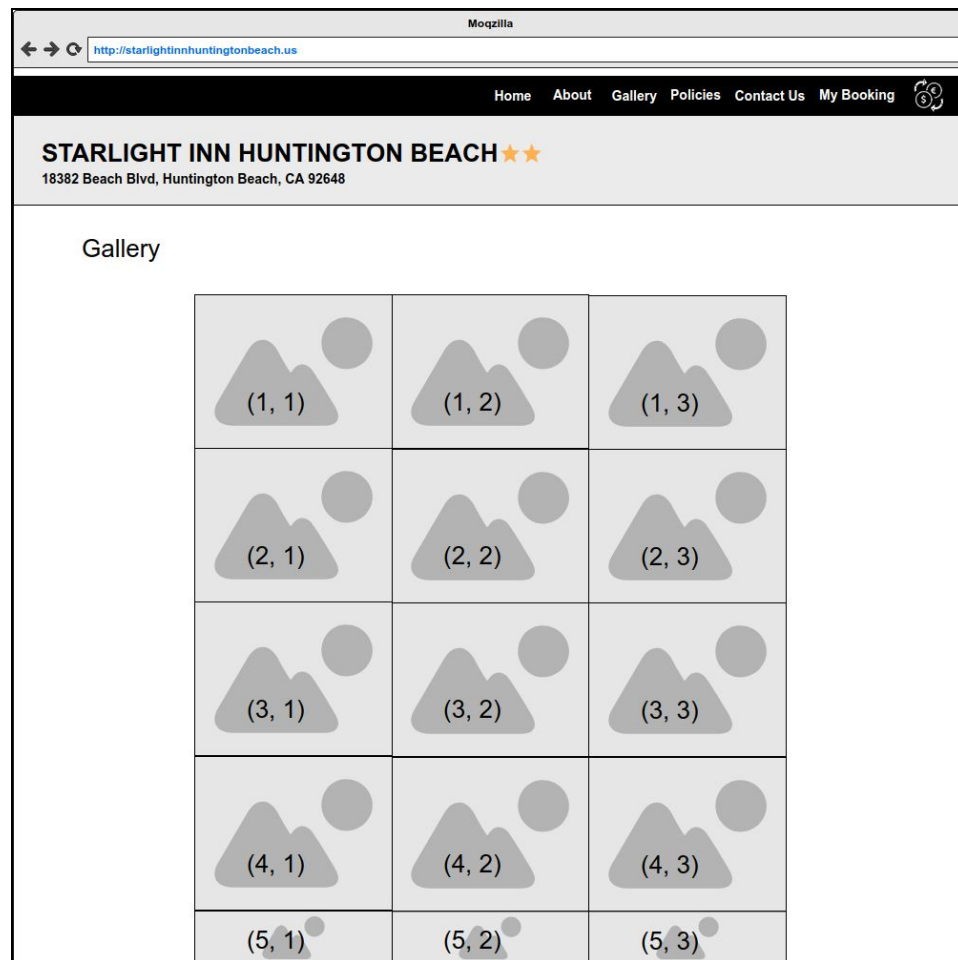


Figure 40: This is the final design of the Gallery page. Thumbnail images are shown in grids.



Then, the user should select the image to enlarge:

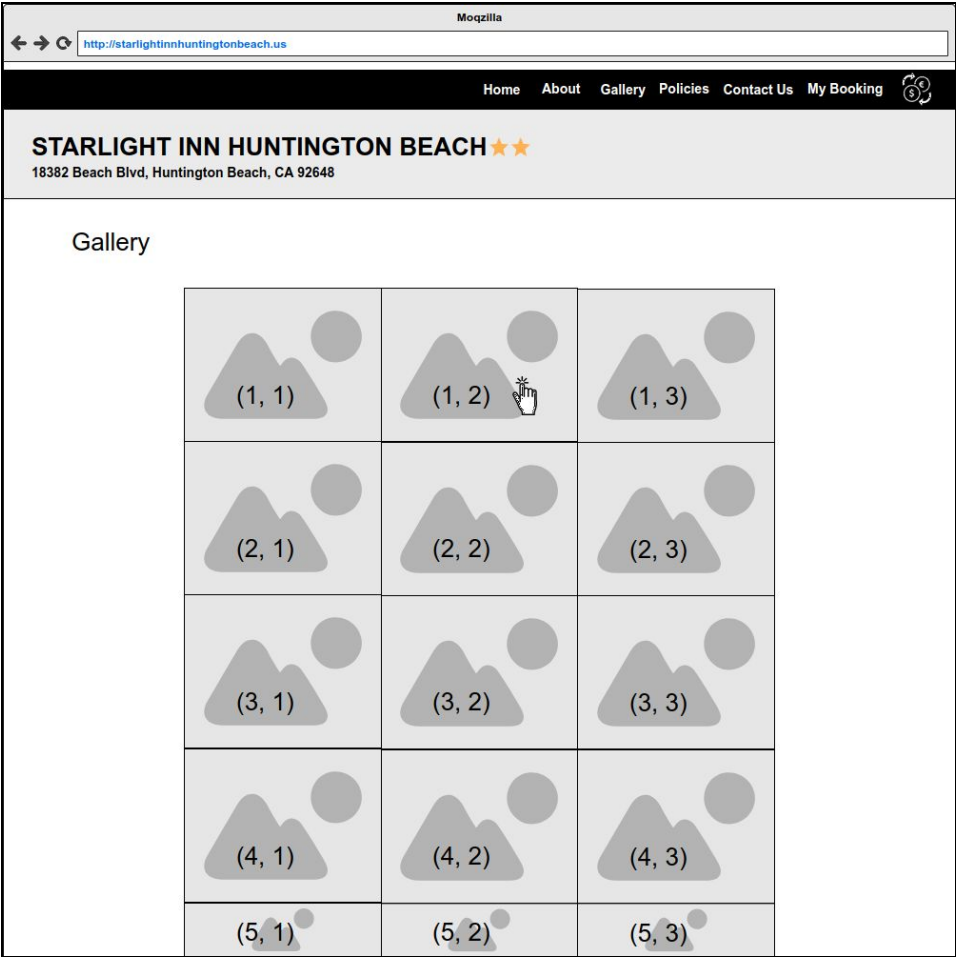
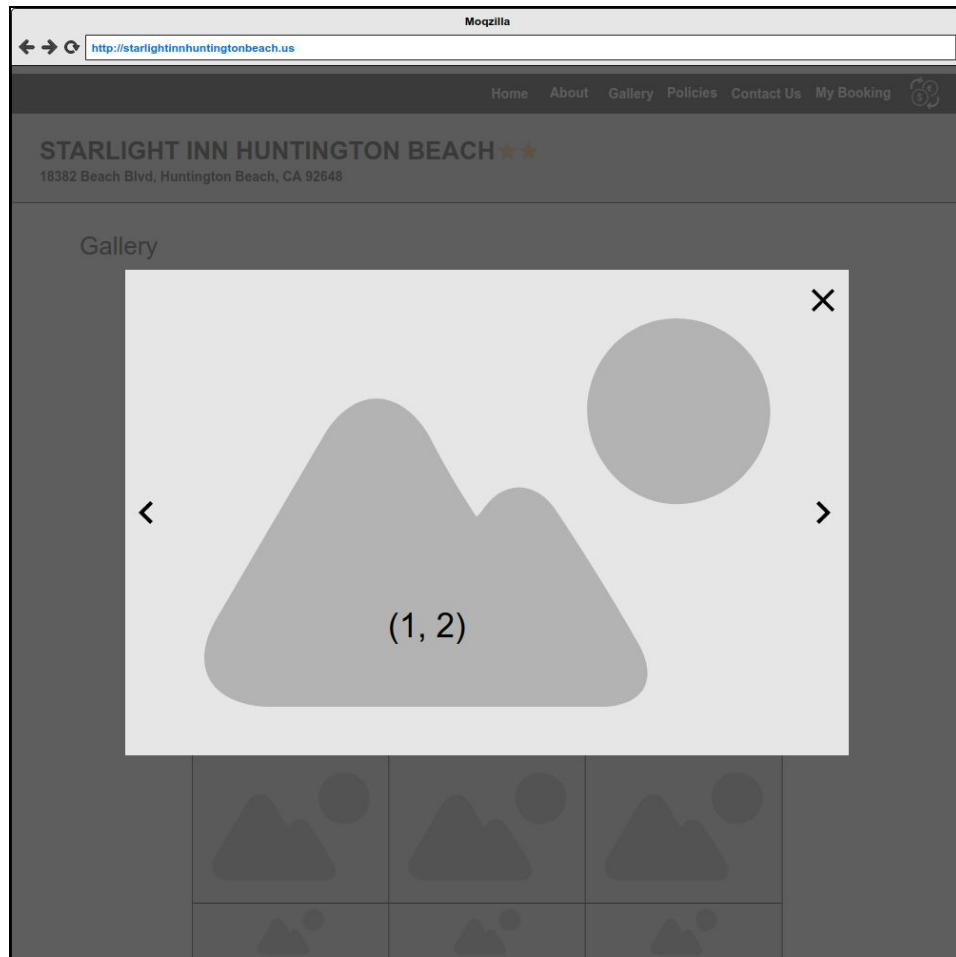


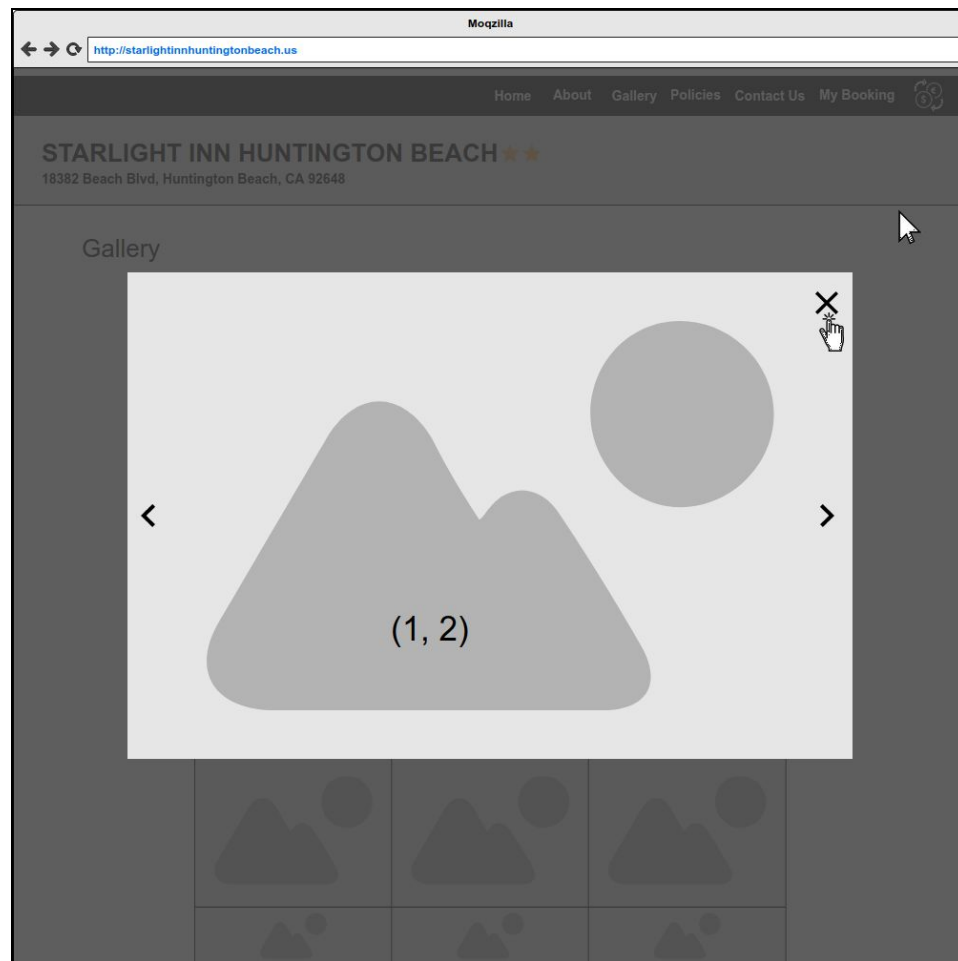
Figure 41: This image shows the action that triggers the pop up window. In this case, the user is clicking on the second image of the first row, labeled (1, 2).

Finally, a pop up window of the enlarged selected image will appear:



*Figure 42: This image shows the pop up window that is centered to the webpage. The Gallery page, the heading ribbon, and the navigation bar are all shaded to provide the users with a full screen experience. The image enlarged should be the image that is selected in the previous step (shown in Figure 41).*

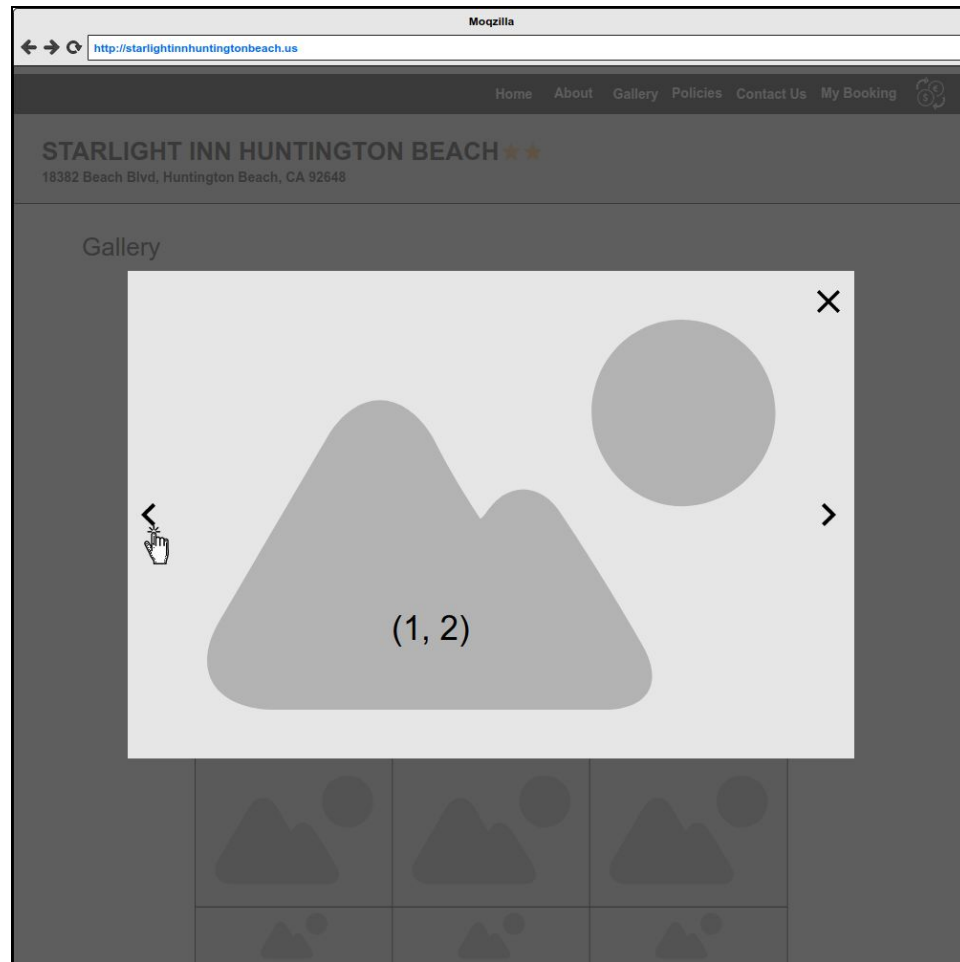
There are two different ways to exit the pop up window, as shown below:



*Figure 43: There are two actions shown in this image, but both allows the user to close the pop up window. The user can either click the X mark on the upper right corner of the enlarged image, or click anywhere on the shaded area around the enlarged image to exit the pop up view.*

After doing either of the actions above to exit the pop up window, the user will be brought back to the Gallery page with thumbnails in Figure 40.

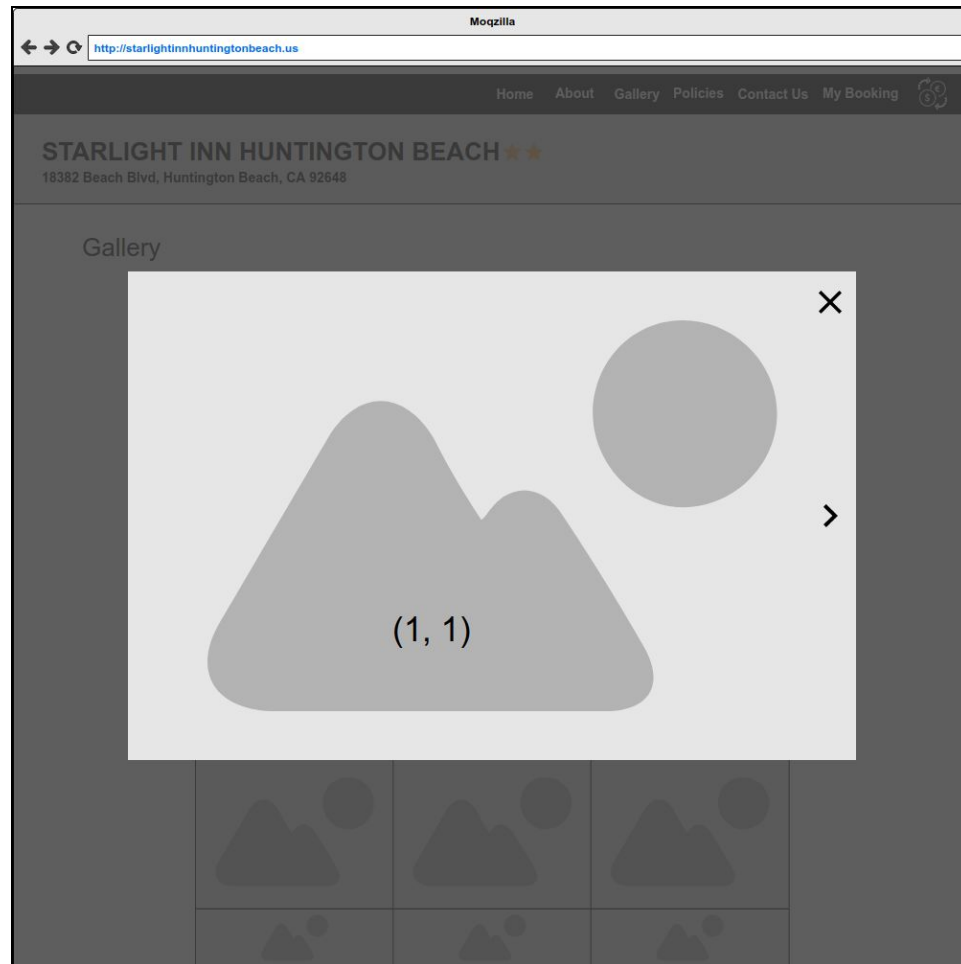
Going back to the pop up window shown in Figure 42, if the user wants to view the previous image, they can easily click the left arrow shown below:



*Figure 44: The action shown in this image allows users to view the previous image according to the queue on the grid view. By clicking the left arrow, the user will be presented the enlarged version of the previous image, image (1, 1) (refer to Figure 40). By clicking the right arrow, the user will be presented the enlarged version of the next image, image (1, 3) (refer to Figure 40).*

Another way to achieve the same goal is to follow the previous steps of exiting the pop up window and selecting the previous image to open another pop up window.

After completing the step described above, the user will be presented the previous image, as shown below:



*Figure 45: This image is the result of the action done in Figure 44. There is no left arrow, because there is no preceding image. There is a right arrow, because there is a following image, image (1, 2).*

Note that the left arrow is absent from this image. The reason is that there is no preceding image. The same logic applies to the right arrow. If there is no following image, then there will be no right arrow.

# Appendice

## 1.0 Sketches

### 1.1 Kaitlyn Nguyen's Sketches

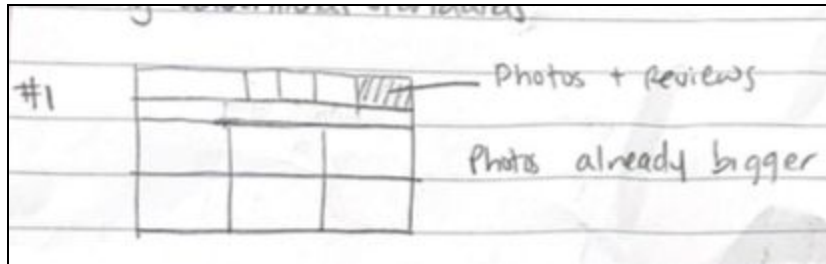


Figure 46: The idea in this image is to provide a photos and review section to reduce clutter on the homepage, and to also follow the example of many other booking websites, as many of them provide a separate section entirely just for photos and reviews of the property.

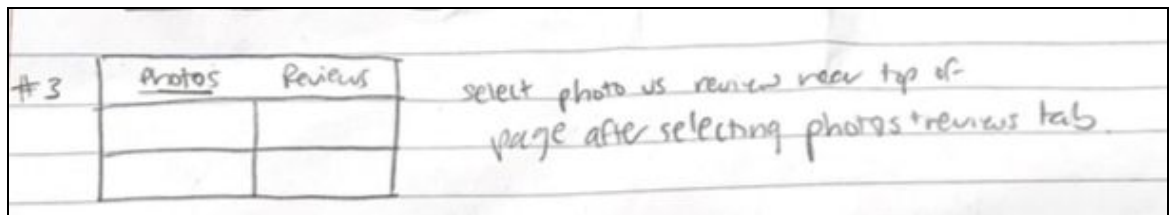


Figure 47: The idea in this sketch is to provide a way to divide the content within the photos and reviews tab, if there does end up being a photos and review tab. This would make it easier for users to navigate the collections of data and more easily locate what they want.

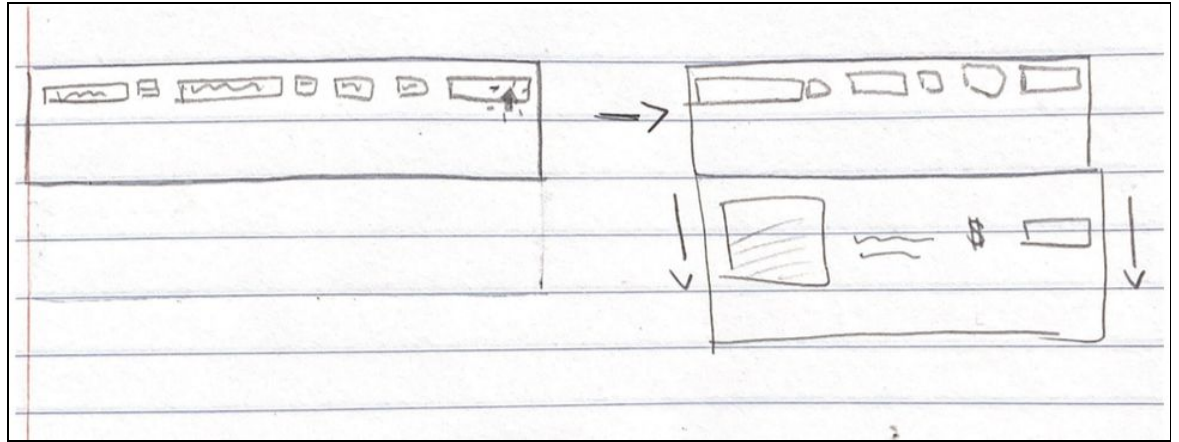


Figure 48: The idea in this sketch is to prevent the error of clicking Show Price too early, by not providing the option to click it at all until the necessary fields to make the button functional are performed first.

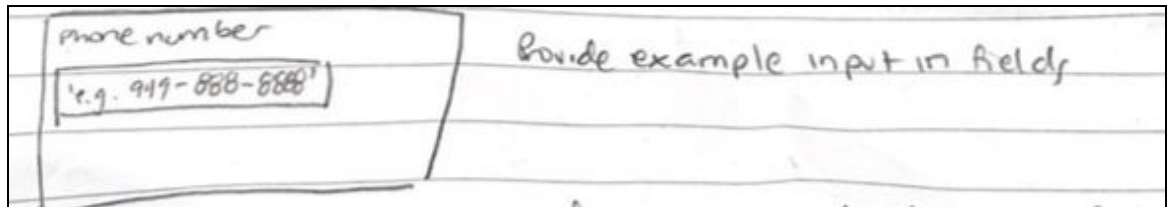


Figure 49: The idea in this sketch is to prevent the error of inputting invalid information into fields by providing example text for the user to get an idea of what they should be entering.

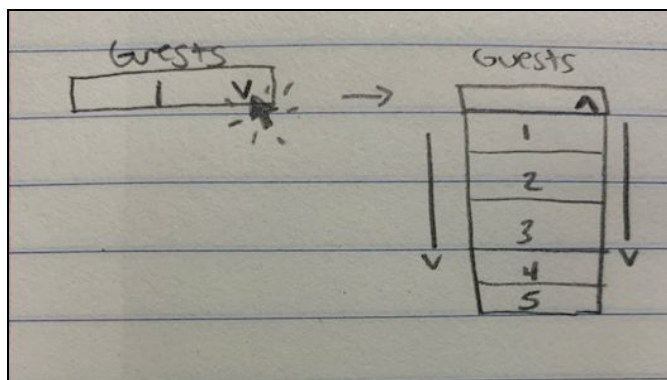


Figure 50: The idea in this sketch is to prevent the error of giving the system unreasonable criteria to use when searching for available rooms by limiting the user to selecting from only plausible options.

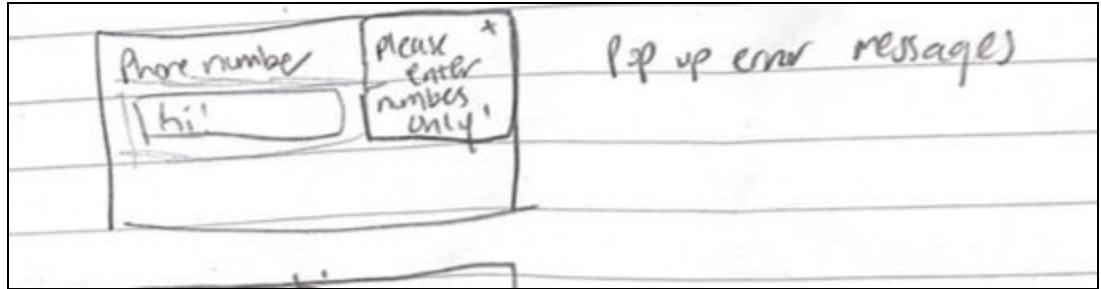


Figure 51: This sketch demonstrates one form of feedback that the system can give to the users when invalid input is provided. Instead of just highlighting the field in red, an error message can pop up as well.

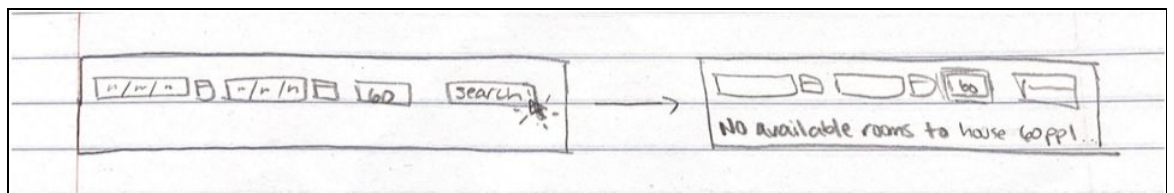


Figure 52: This sketch demonstrates another form of feedback that the system can give to the users when invalid input is provided. Instead of just notifying the user that there are no rooms available, the system can inform the user of which search criteria caused no rooms to show up in the results.

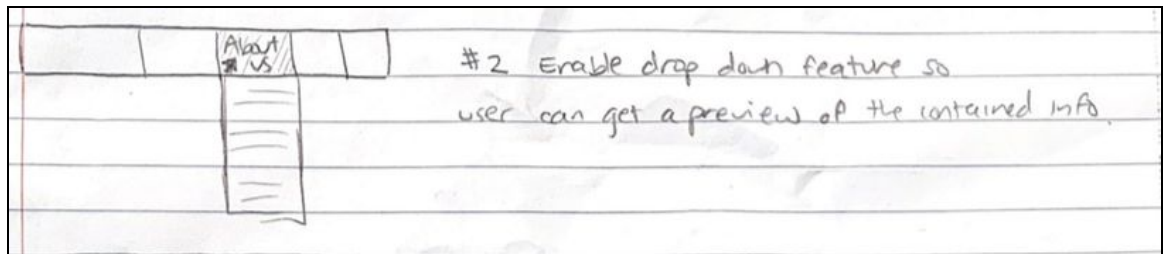
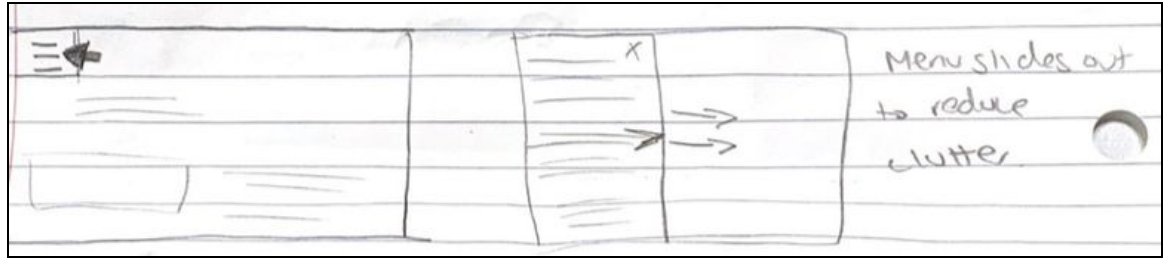


Figure 53: This sketch provides a method that allows users to more accurately search for their location, by providing a drop down menu under each tab with subsections that give users more insight on what kind of information is contained in the tab.





*Figure 54: This sketch demonstrates one way to reduce clutter and another way to organize all the information on the site. We can implement a sidebar menu that slides out when the user clicks on the symbol, so that the entire page can be utilized by content instead of a navigation bar as well.*

## 1.2 Michelle Lac's Sketches

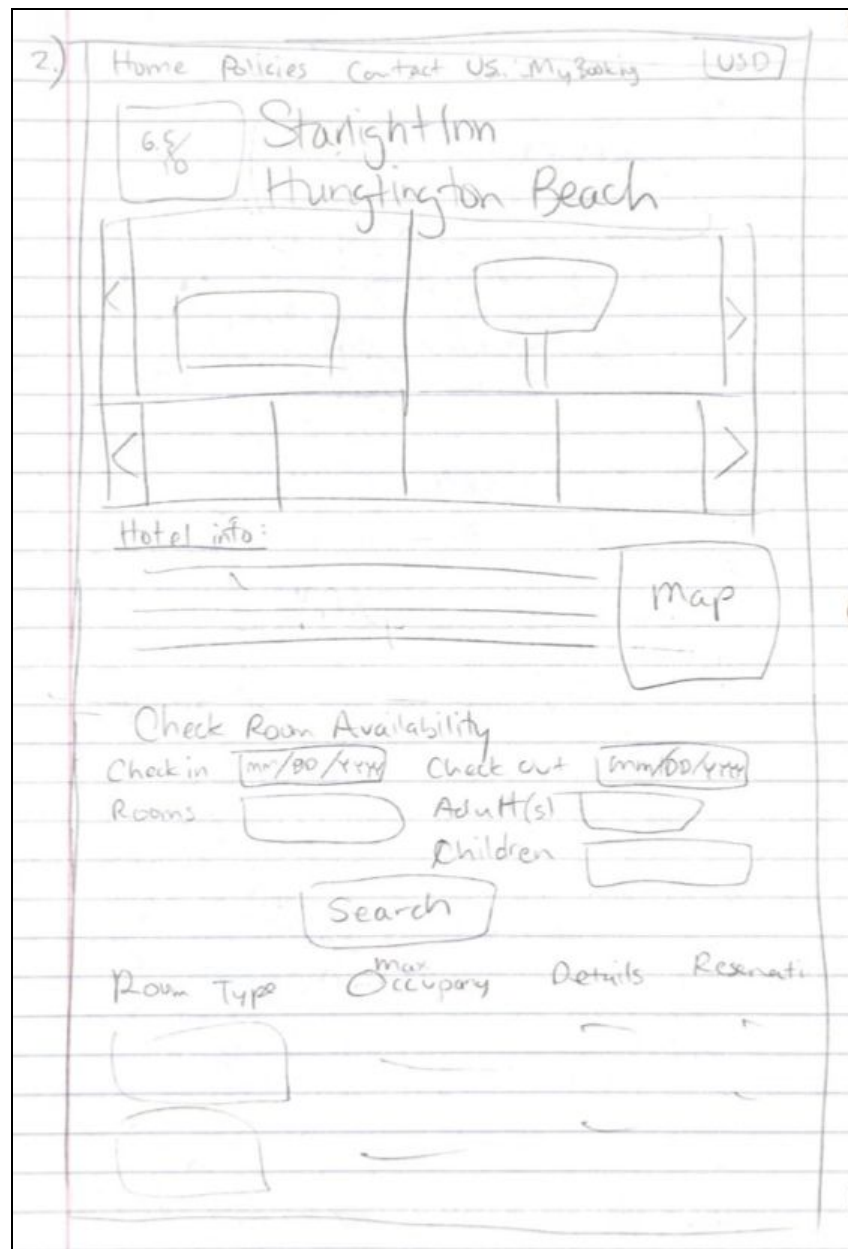


Figure 55 : The idea of this sketch is to deal with disorganized information. It reorganizes the home page so that it is less confusing and cluttered. The hotel info is placed under the image gallery next to the map showing where the hotel is located.

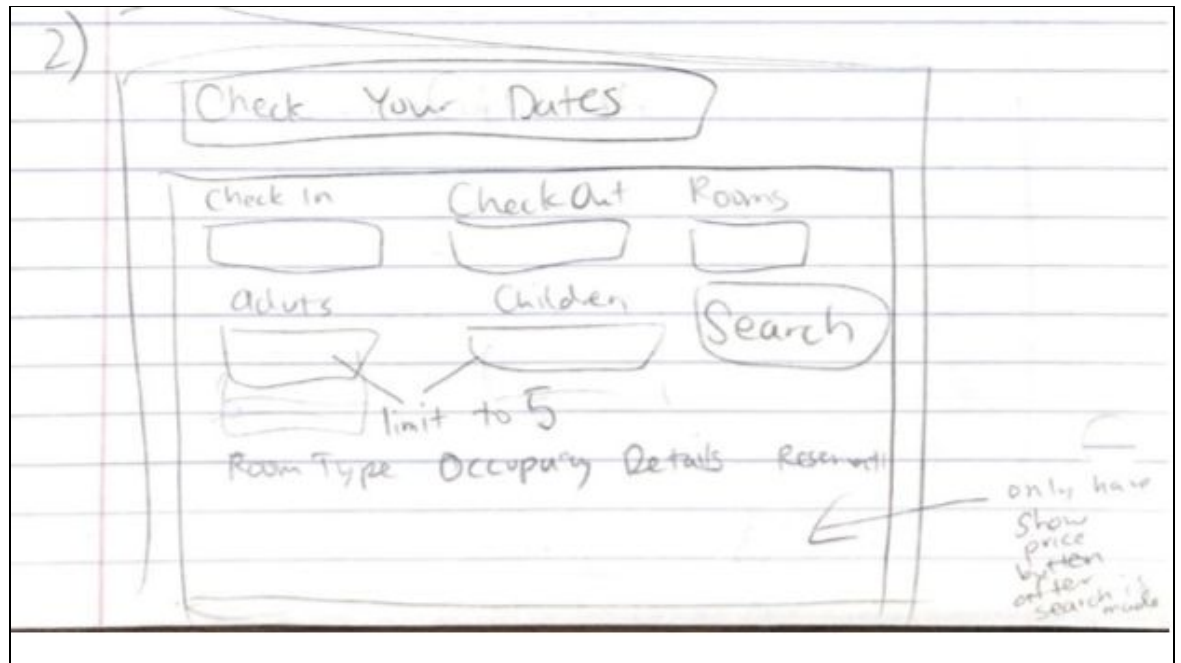
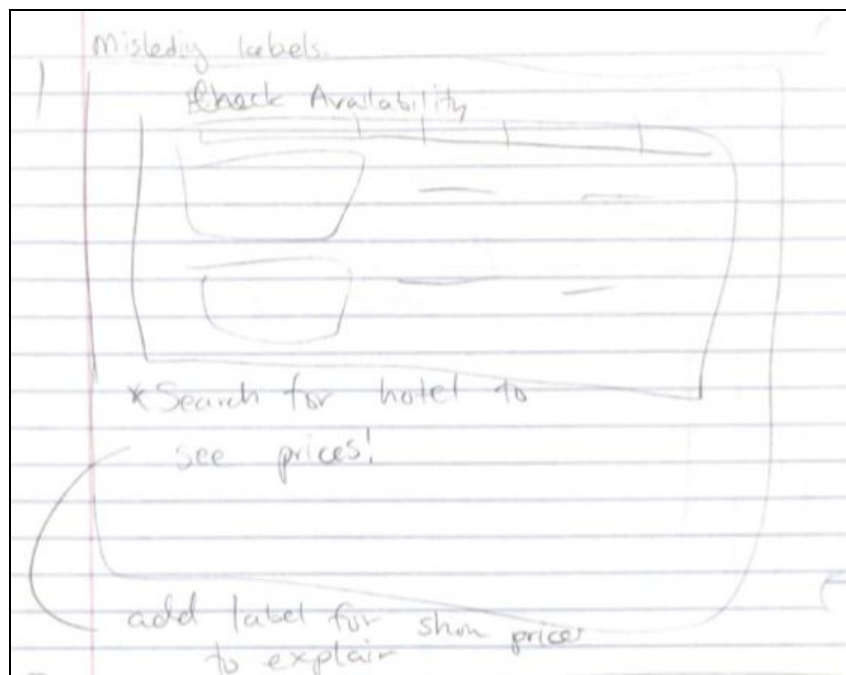
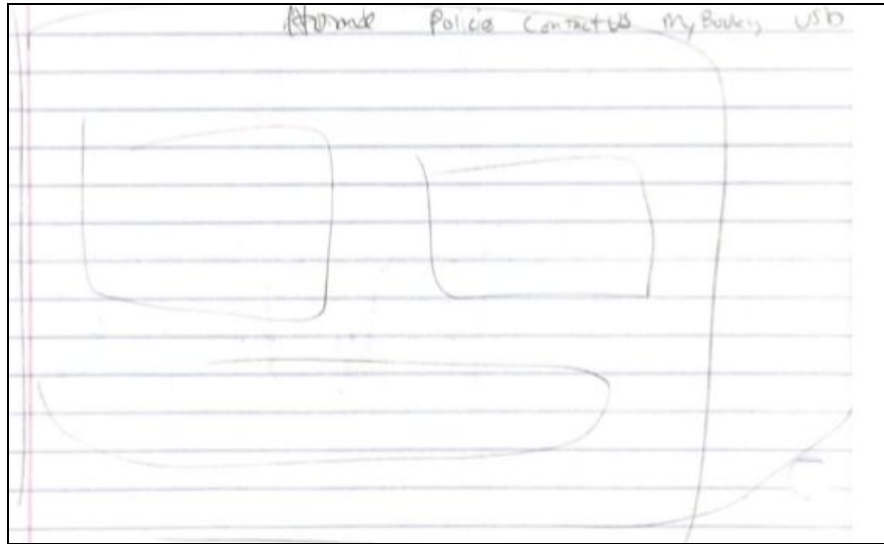


Figure56 : The idea of this sketch is to promote error prevention by limiting the number of adults and children users can select when searching for available rooms. By limiting to a lower number, it lowers the chance of errors occurring due to offering users the option of too many adults and childrens than the hotel can possibly accommodate. The show price button is also removed to prevent users from clicking it and getting no results.



*Figure 57: The idea of this sketch is to resolve the issue of misleading labels on the website by removing the “show prices” because it is misleading and instead add an explanation to the user to search for available hotel rooms first before they can check prices.*



*Figure 58: The idea of this sketch is to reduce misleading labels on the website by removing the “About” section on the menu bar. The About section of the menu bar does nothing; it does not redirect users to a page giving an overview of the hotel. Therefore, its a better idea to just remove the section from the menu bar.*

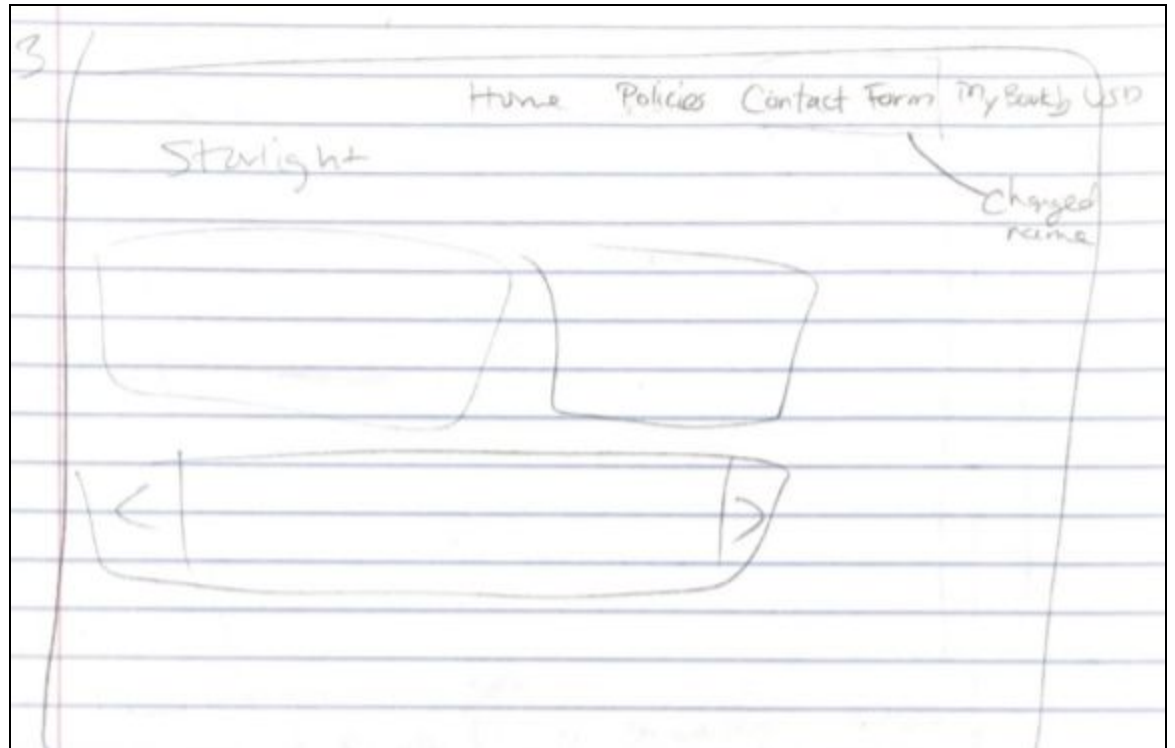


Figure 59: This is the third sketch tackling the idea of misleading labels. Since the website does not offer the user any other options (phone number, email address, etc) besides an online contact form that they can submit through the website's Contact Us page, I changed the name of Contact Us to Contact Form to remove the misleading name that implies the website might have other means of contact.

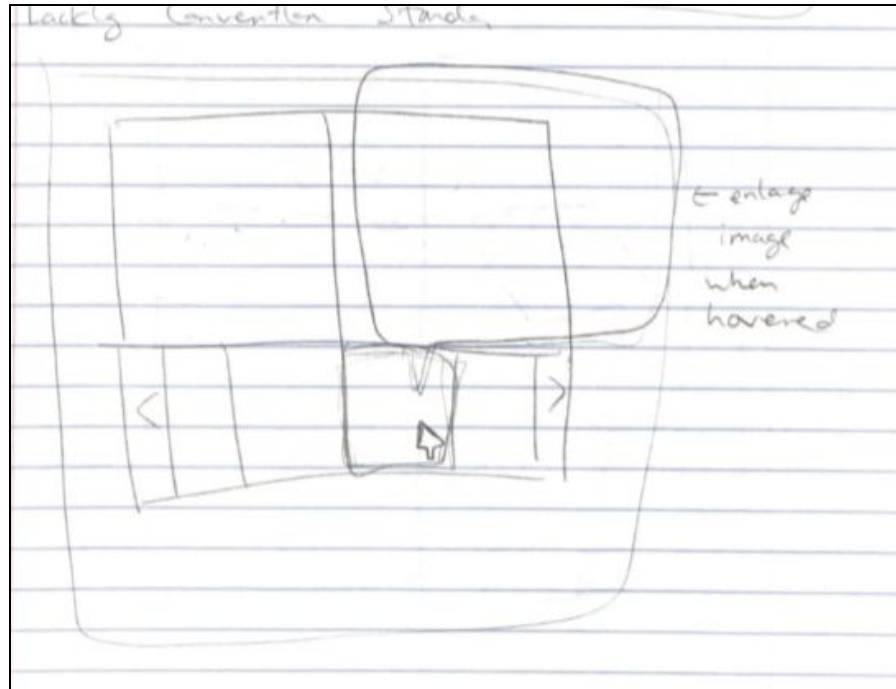
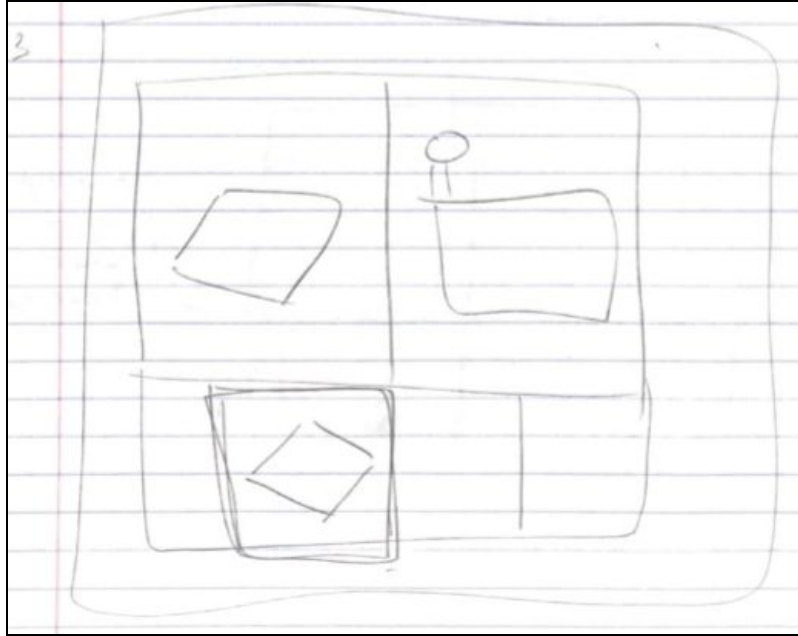


Figure 60 : This sketch deals with the problems of lacking conventional standards. Based on direct competitors with Starlight Inn, most websites would allow users to view an image larger when they clicked on it. This design enlarges images when users hover over them for a better view of each image.



*Figure 61: This sketch is an idea to conform to conventional standards and consistency. When users select an image on the slideshow, the image should be shown larger above.*

### 1.3 Mandy Tsai's Sketches

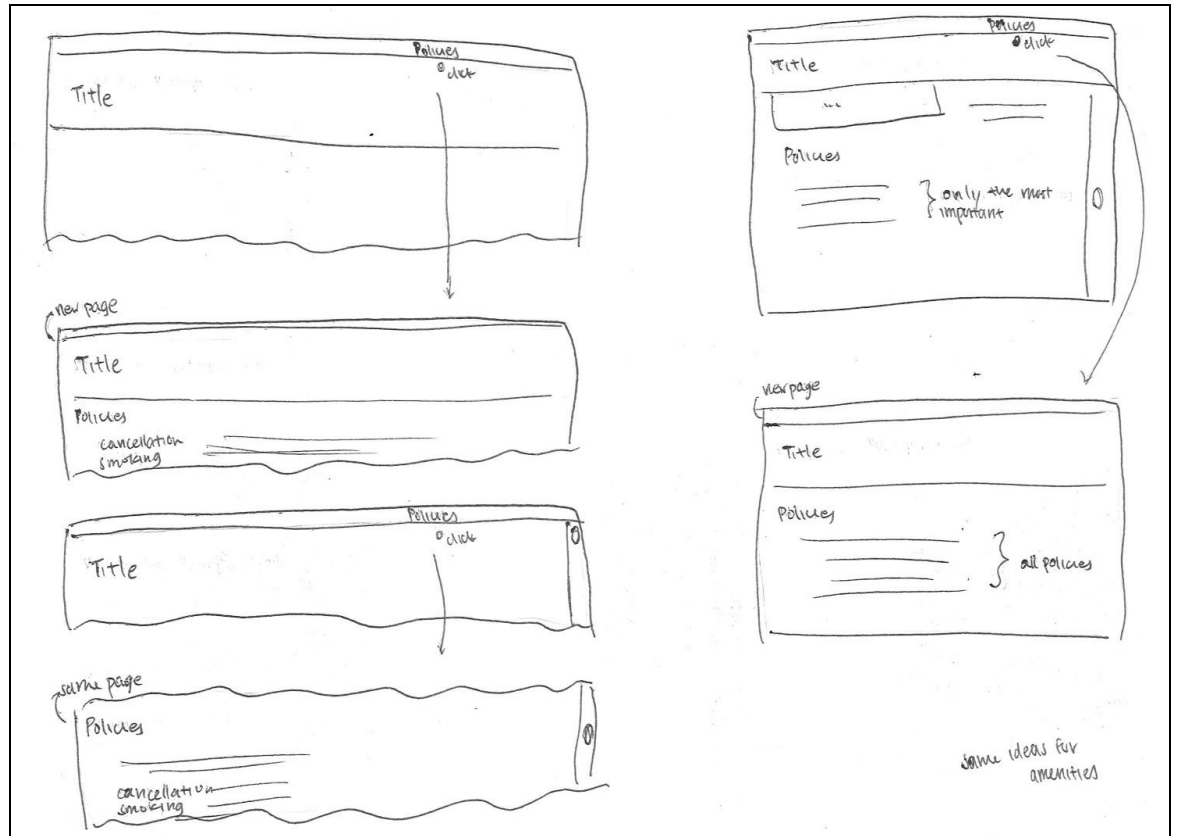


Figure 62: The idea on the upper left moves policies completely to a new page. The idea on the lower left keeps all policies on the homepage, which is similar to what the website is currently doing. The idea on the right keeps the important policies on the homepage, and other details on the Policies page.



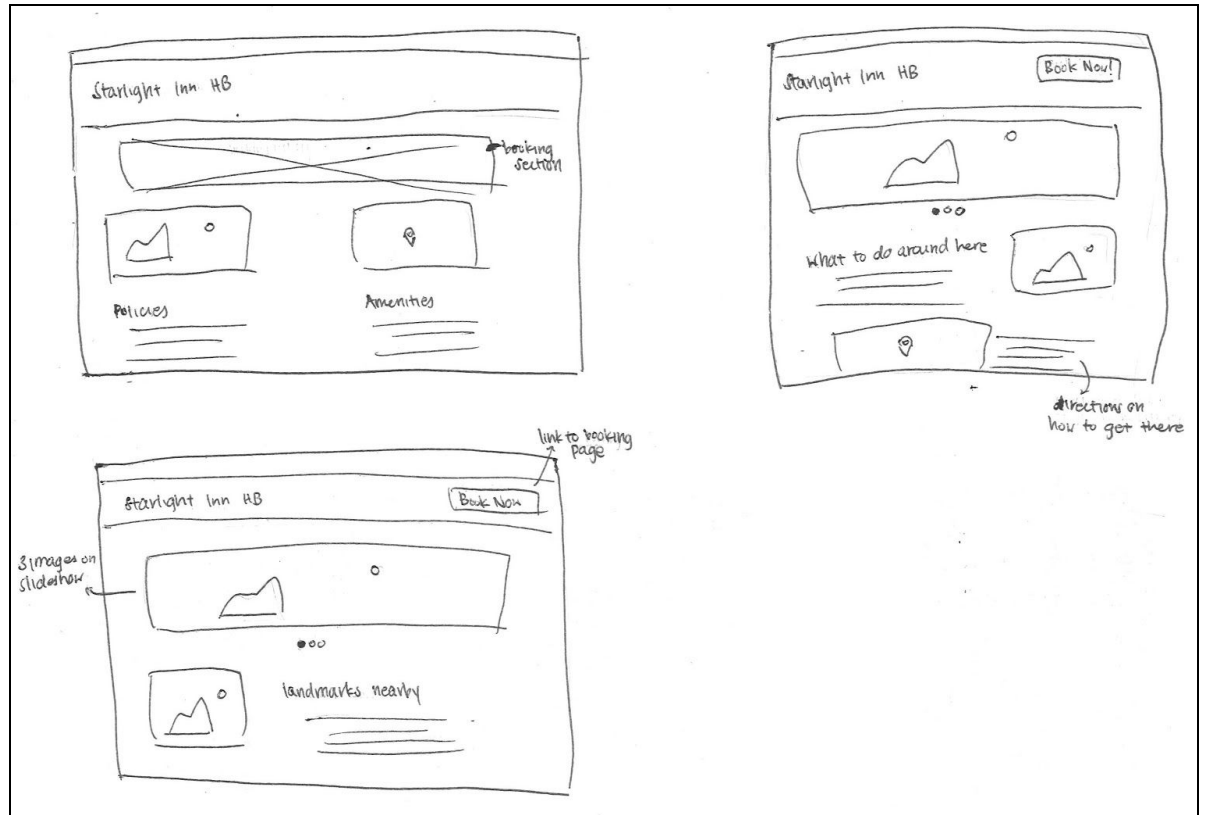
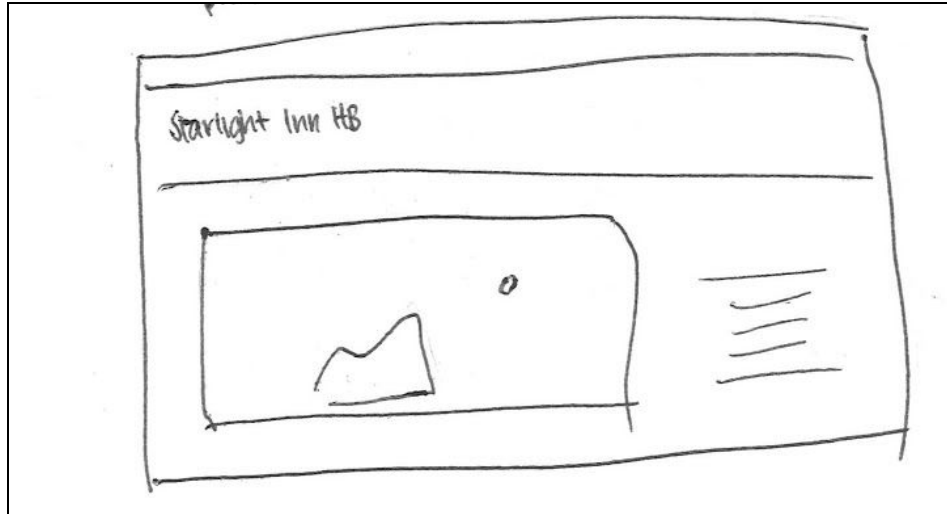


Figure 63: The idea on the upper left keeps most of the information that the hotel homepage currently has, but rearranged them to more clearly separate the sections. The idea on the lower left removes the booking section out of the homepage; instead, it has a button that says "Book Now!" that redirects users to a page with the reservation feature. The idea also has minimal information on the homepage, making it serve more as an introduction to the hotel. The sketch on the upper right shares the same big picture idea as the one on the lower left.



*Figure 64: The idea focuses on another standard that should be implemented -- providing phone number and the hours that they will be answering calls.*

## 1.4 Jose Yanez-Lopez's Sketches

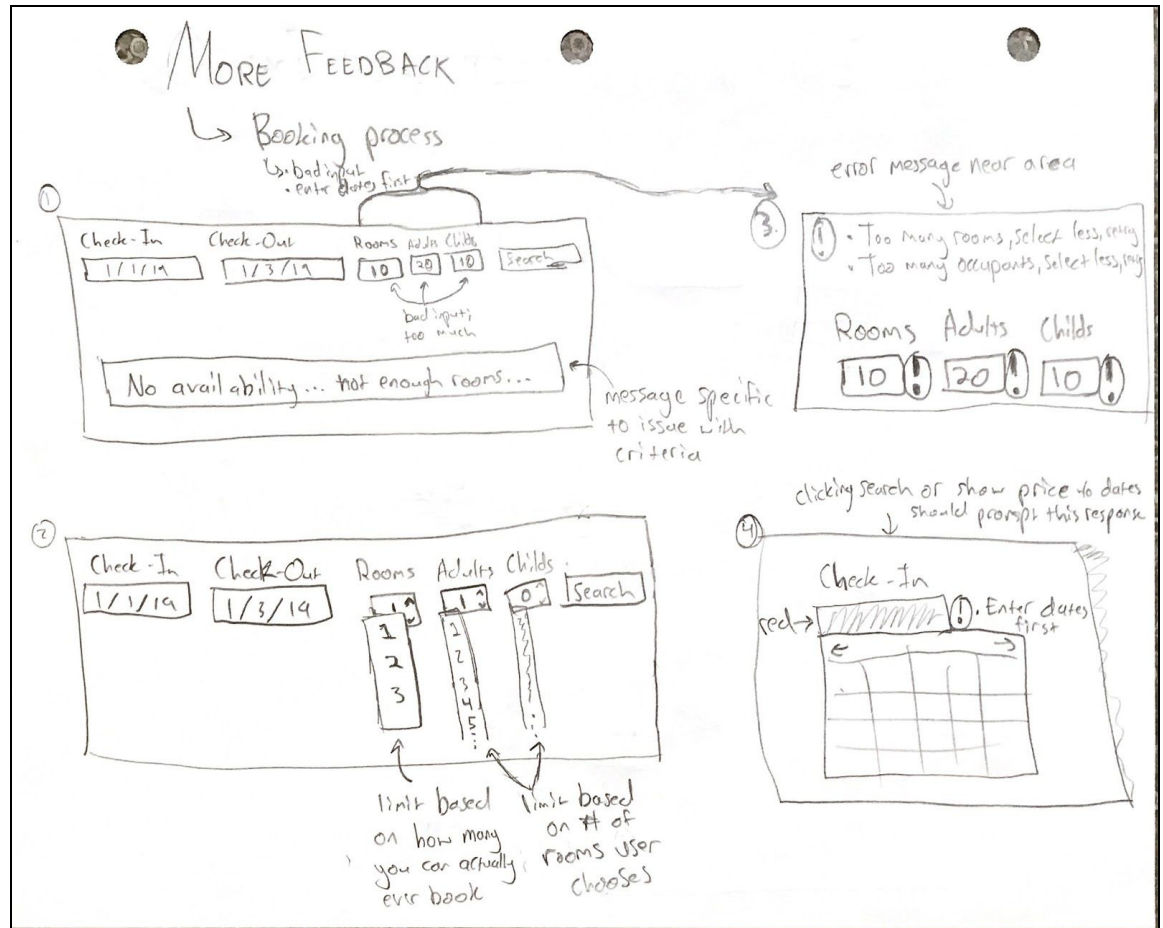


Figure 65: The sketch labeled one shows a rewritten error message that adds "not enough rooms" to describe the situation better than simply "No availability". The point of adding this would be to give more feedback as to why no rooms were found. Sketch two reduces the number of rooms, adults and children that can be selected based on a realistic amount of each that you can select and still get results. Sketch three alerts adds an error message near the criteria fields that will tell you specifically why a room wasn't found. It also adds exclamation marks next to the field with issues. Sketch four introduces a red box and an exclamation mark to the calendar when dates have not yet been entered but are required before proceeding.

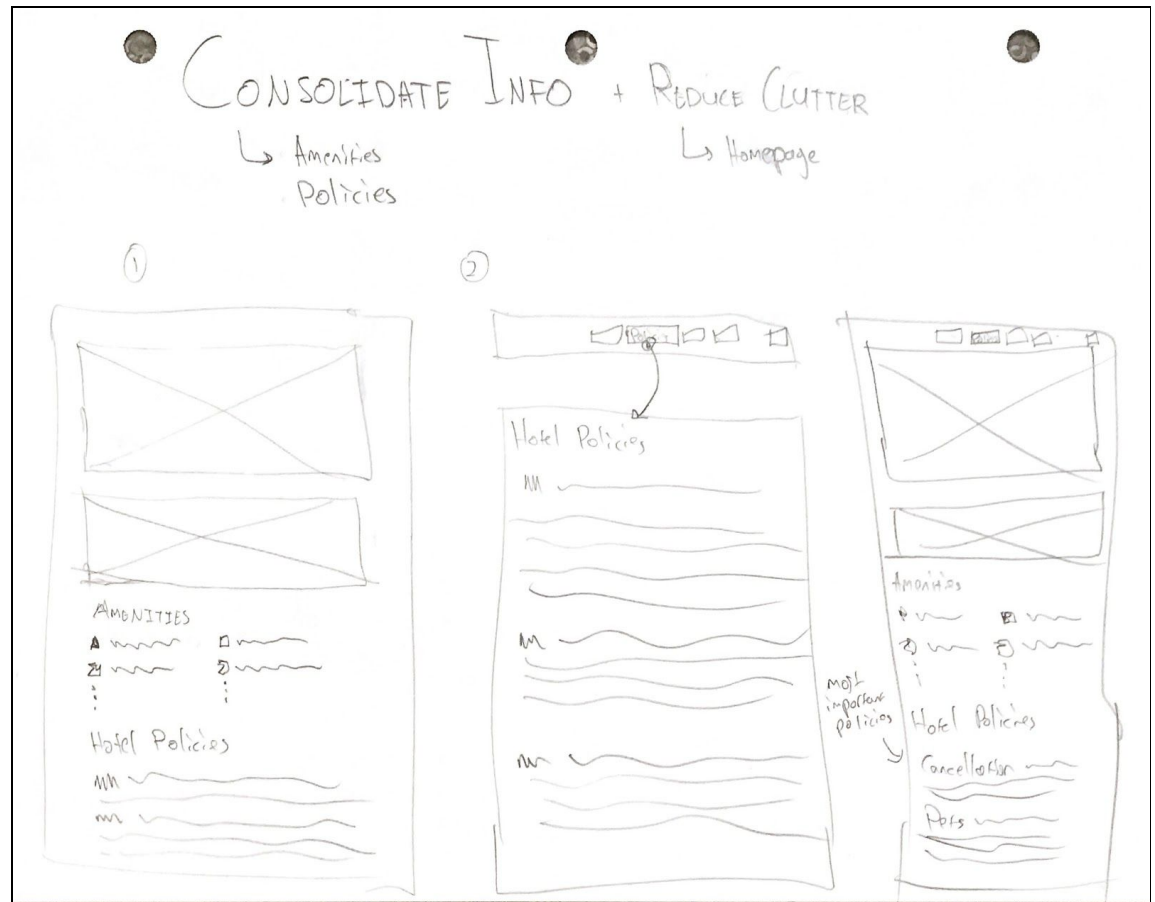


Figure 66: Sketch one shows the amenities and hotel policies organized into two clear sections that span the width of the page. Sketch two shows a way to organize Hotel Policies which includes linking the Policies tab on the navigation bar to a separate page with all the policies. The sketches to the right show the hotel policies remaining on the homepage but reduced to what is most relevant to users (example policies chosen).

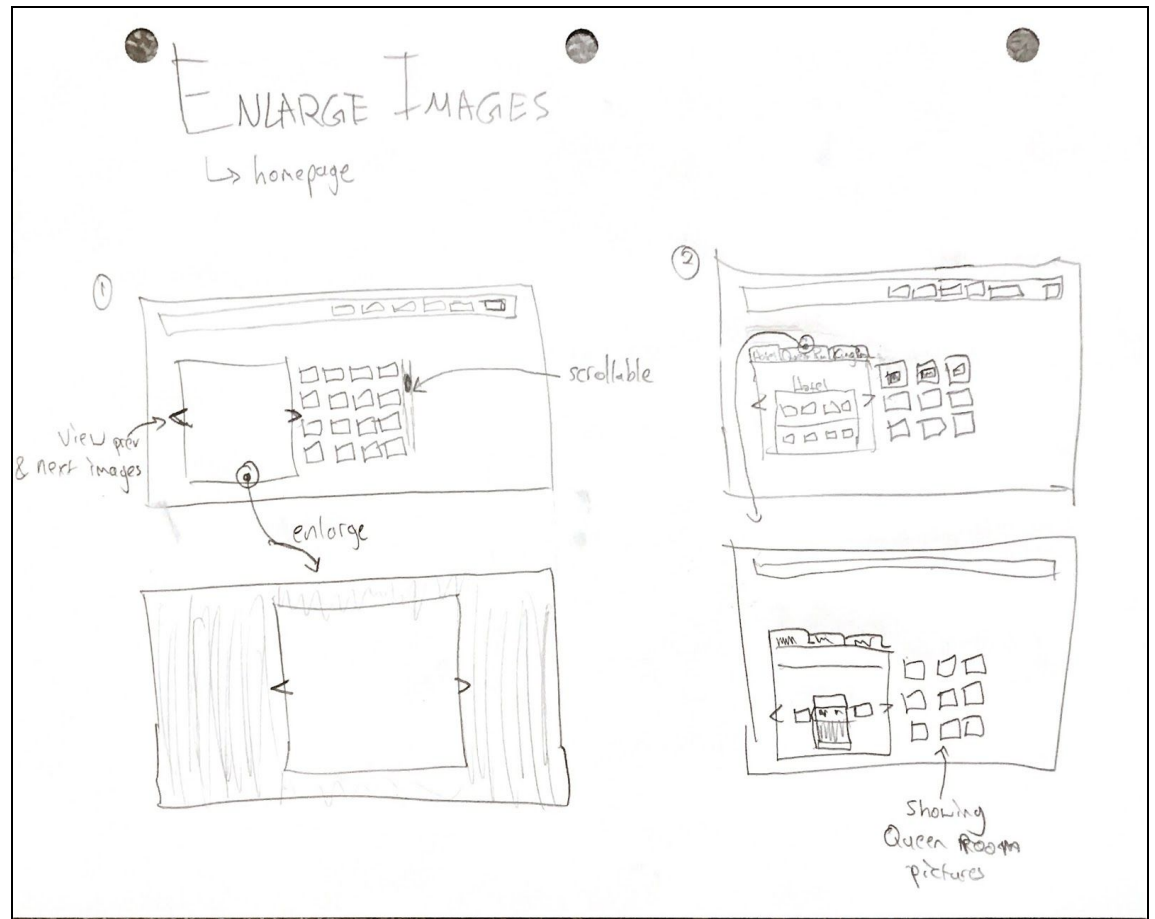


Figure 67: Sketch one introduces the idea of having one single, big picture viewer with smaller images to the right. Clicking on the single, big picture will allow you to view the image in full screen with the ability to move left and right in the album. Sketch two shows a similar idea but with a tab on the single, big picture frame. The tabs would organize photos by hotel and rooms, displaying all the pictures for each category to the right.