



**Enhancing user-onboarding experience on vacation
rental management system**

Overview

- Futurestay is a SaaS platform which helps users book properties online and property managers manage their bookings.
- With over 100,000 vacation rentals in 120 countries, Futurestay is the leading independent vacation rental business solution.

Overview

Role

As an UX Researcher, worked with cross-functional teams (engg, product, marketing) to understand user perceptions while using Futurestay

Team

I was the only UX Intern. **Worked in 3 teams-**
Design, Marketing, Engineering

Duration

Feb 2019 - April 2019

Tools & Skills

Tools: usertesting.com, Google Forms, optimal workshop, Figma, Miro, Hubspot, Intercom

Skills: Usability testing, Surveys, Design Thinking, Interviews, Heuristic Evaluation, User flows, Mobile App design, Affinity Maps, Personas, Card-sorting, Competitor Analysis

Problem Statement

In this project, as an UX Researcher, I was tasked at helping the **engineering and product team** in understanding the users' pain-points while using the software and also **testing some of the software features**.

Methods

During my internship, I conducted user-research using five different methods:

- Usability Study
- Card-sorting
- Surveys
- Interviews
- Mobile app design

Usability Study: Process

Objectives

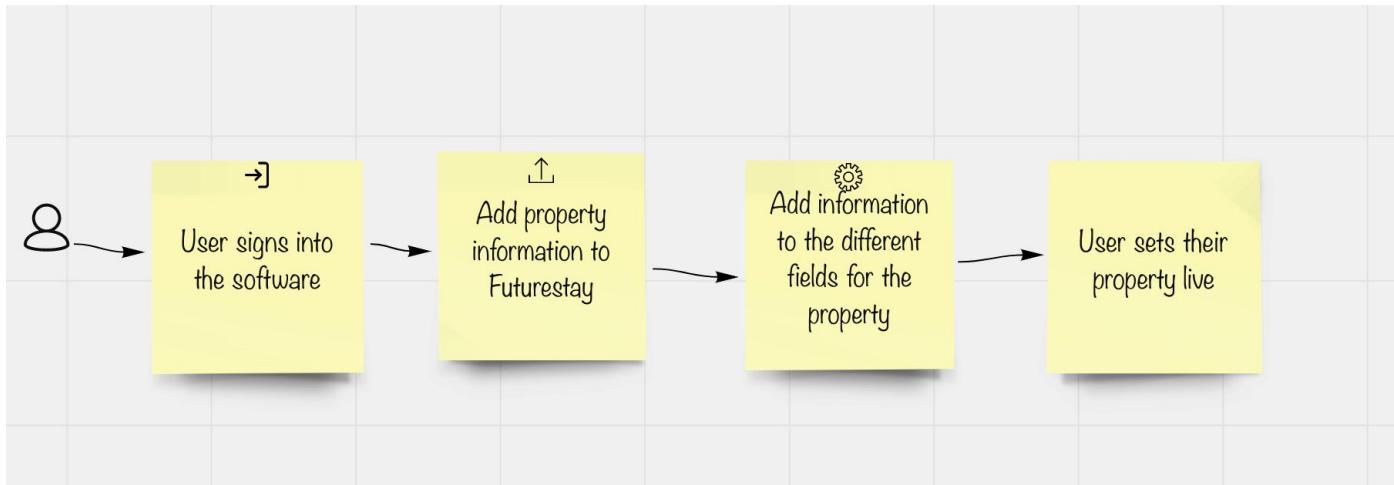
- Obtain user feedback on the different functionalities present in the Futurestay's software.
- Observe the users' pain points while using the software.
- Come up with recommendations for the tech team to improve on the UI.

To further the process of unmoderated usability testing: tasks, pre-tasks (demographic questionnaire), post-task (users' ratings on task/software) were uploaded on usertesting.com.

Users: 5 (Property managers recruited by usertesting.com)

Period: 2 weeks

Usability Study: Task Flow



Usability Study: Implementation

Tasks employed in the usability tests:

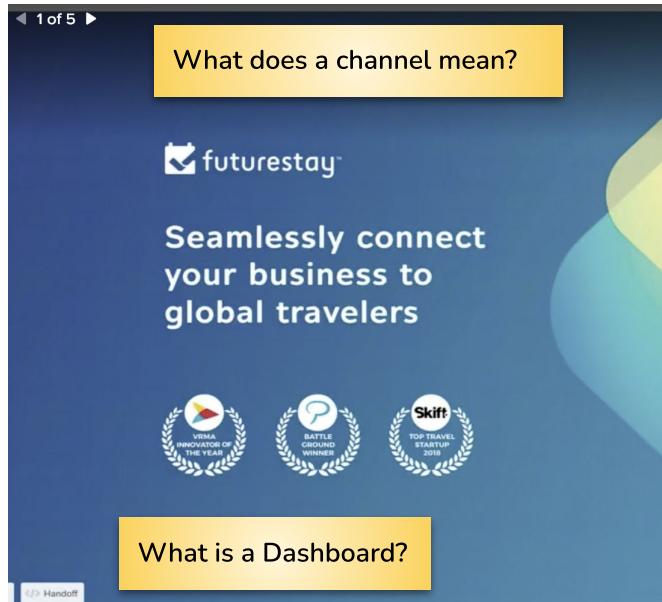
1. Add property information to Futurestay
2. Check your property information
3. Use the software to get the property live

After users completed the unmoderated usability tests, we coded the usability tests followed by calculating metrics such as **users' task performance, task-wise performance rate and time spent by user per task. Users were instructed to think-aloud while completing the tasks.**



Usability Study: Analysis/ Results

Interface recommendations

A screenshot of a sign-up form for Futurestay. The title "Sign Up" is at the top. It includes fields for "Name" (Amy Pond), "Email" (amy.pond01@gmail.com), "Phone" (9990099009), and "Password". Below these, a question asks "Do you have properties on any of these channels?" with checkboxes for Booking.com (checked), HomeAway (checked), Airbnb (checked), VRBO (unchecked), TripAdvisor (unchecked), and Expedia (unchecked). A checkbox for "Agree to our terms and conditions" is checked. A blue "Connect to my Free Dashboard" button is at the bottom.

-Avoid using jargons such as channel/
dashboard
-Instead of channel
maybe use website



Usability Study: Analysis/ Results

User Feedback/ Pain points

Welcome to Futurestay!

It only takes a few minutes to set up your Dashboard. We will walk you through it.

Next

1 Import
Automatically import your property. Don't worry, nothing is Live until you approve it!

2 Connect
Review and approve your imported properties. Once imported you can also connect them to any listing site you want!

Start

Maybe adding info such as "Set up your Dashboard in just 2 steps;" "few minutes" may be misleading

Some PMs are not familiar (referred them as Bird's nest/paperclip) with the Airbnb and HomeAway logos

Can either be a label or a way you could the channel names come up while hovering on the mouse on the logos

Usability Study: Analysis/ Results

User Feedback/ Pain points

The screenshot shows a user profile for 'zaraa03' (36 - male - \$80,000 - \$99,999 - United States) at the top. Below it, there's a message 'Add your property information to Futurestay' with a warning icon. A progress bar indicates '1 of 5'. In the center, there's a section titled 'Import Properties' with a 'Finish later' button (which says 'Your progress will be saved') and an 'Import to Dashboard' button. At the bottom, there's a text input field for pasting URLs, with a note: 'Copy and paste one or more property URLs' and 'Psst! Importing from our partners gives best results!' followed by icons for Booking.com, Airbnb, and HomeAway.

How does the property get imported?

Can I add two or more URLs at a time?

Confusing as the property already imported in the prototype



Usability Study: Analysis/ Results

User Feedback/ Pain points

Import Properties

Finish later
Your progress will be saved

Import to Dashboard

Where are your properties listed? ⓘ

Copy and paste one or more property URLs

Psst! Importing from our partners gives best results!

- Apart from knowing where are their properties listed; we also want to ask them to add the property URL in simple text.
- What is the max limit of adding URLs, and would it show all the properties on the same page.
- So, “more” is how much much?



Usability Study: Analysis/ Results

User Feedback/ Pain points

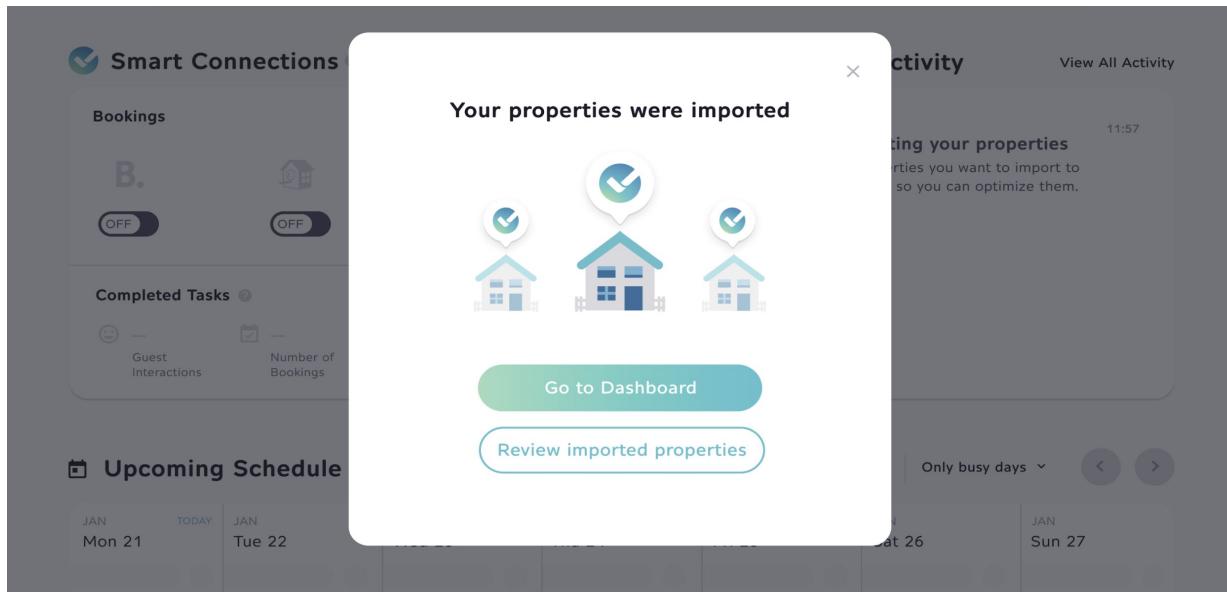
The screenshot shows the 'Import Properties' page. At the top, there's a header with a back arrow, '1 of 5', and a progress bar. Below the header, there are two main buttons: 'Finish later' (with a note 'Your progress will be saved') and 'Import to Dashboard'. A yellow banner at the top right says 'Add your property information to Futurestay' and '⚠ Don't forget to think out loud!'. A large text box in the center says 'Copy and paste one or more property URLs' with a note 'Psst! Importing from our partners gives best results!' followed by icons for Booking.com, Airbnb, and Homeaway. Below this, a question 'Are these the properties you want to import?' is displayed. Two property cards are shown: 'Cozy 2 Bedroom Apartment' (Homeaway listing) and 'Happy Home on the...' (Airbnb listing). Each card has a checkmark icon in a blue circle. At the bottom left, there are navigation links for 'menu' and 'Handoff'.

The word dashboard may be too loaded; we can only import one property at a time to the dashboard; but add several (more than one) properties on the “Import Properties” page.



Usability Study: Analysis/ Results

User Feedback/ Pain points: Discoverability issues



Is it possible to have the snippet of the properties imported instead of FS logo

There should be a way to let the users know the properties imported; how many of their properties have they added info. about and how many do they need to add info.

Say, if they have imported 10 properties, if they are adding info for the first property, then 1/10 properties they have added info

Usability Study: Analysis/ Results

User Feedback/ Pain points: Typography issues

The screenshot shows a user interface for managing property pricing and stay rules. At the top, there's a navigation bar with links for Home, Properties, Rates, Connections, Reservations, and Web Build. A search bar says "Check your property information". On the left, there's a sidebar with a checklist for "Happy Home with Furniture" and a "Preview" button. The main content area has a title "Manage Pricing & Stay Rules". It includes fields for "Base Nightly Rate" (set to USD 80.00) and "Online Payment" (set to "Pay in Full - Full Balance Required to Book"). Below these are sections for "Prices and Stay Rules", "Listing Rate Displayed to Travelers as: \$65.00 per night", "Full Rate Breakdown" (listing service markup, credit card processing fee, and payment after fee), and "Minimum/Maximum Stay Requirements" and "Check in and Check out". A large blue "Save" button is at the bottom right.

Missing panel headline?

There should be a way to let the users know what is the panel.

Obviously the \$80 and \$65 prices are wrong.



Usability Study: Analysis/ Results

User Feedback/ Pain points: Typography issues

A1
Happy Home with Furniture

Preview

✓ Prices and Stay Rules
✓ Photo Gallery
✓ Amenities
✓ Details and Description
✓ Rooms Details
✓ Address and Map **Completed!**
✓ Lease and Agreements
✓ Reviews

Set Live
Complete property information before setting it live

Your Property's Address, Display Settings & Privacy

Enter your property's full address: your address is not displayed to travelers until after a booking is completed, unless you choose to reveal it on map.

*Country: U.S. *Region: Florida
*Street Address: 15th Street Apartment # (optional): 553
*City: Miami Zipcode/postcode: 33154

Map & Streetview Display: Display Map and Street View on Property Page
Address Privacy: control how travelers see your property on map
Display exact address

Control Where Your Property Displays on Map

Streetview: click to change view
533 15th St Miami Beach, Florida [View on Google Maps](#)

Map: drag property icon to move location

Save

-Unsure why the “Completed” option is placed in an odd manner
-Is there a reason why only “Address and Map” and “Prices and Stay Rules” option is available on the prototype

Usability Study: Analysis/ Results

User Feedback/ Pain points: Information Architecture issues

The screenshot shows a software interface for managing property pricing and stay rules. On the left, a sidebar lists various property details like 'Prices and Stay Rules', 'Photo Gallery', and 'Reviews'. The main area has tabs for 'Base Nightly Rate' and 'Online Payment'. A yellow callout box contains two questions: '-Why is the Set Live Option unavailable but present on this page? -How is Save and Set Live different?' A large yellow arrow points from this box to the 'Save' and 'Set Live' buttons at the bottom. Another yellow callout box at the bottom right states: 'Major issue, it was difficult for the users to figure out the difference between the two Save and Set Live'.

A1
Happy Home with Furniture

Home Properties Rates Connections Reservations Web Build Check your property information

Manage Pricing & Stay Rules

Base Nightly Rate USD

Online Payment

Deposits or Full Payment:
Choose between requiring a full payment or a deposit to book your property. When a user pays a deposit, the remainder of their balance will be automatically charged to their credit card before their check-in date. They are required to select the date of the balance payment when booking.

Pay in Full - Full Balance Required to Book

Minimum/Maximum Stay Requirements

Check in and Check out

Save

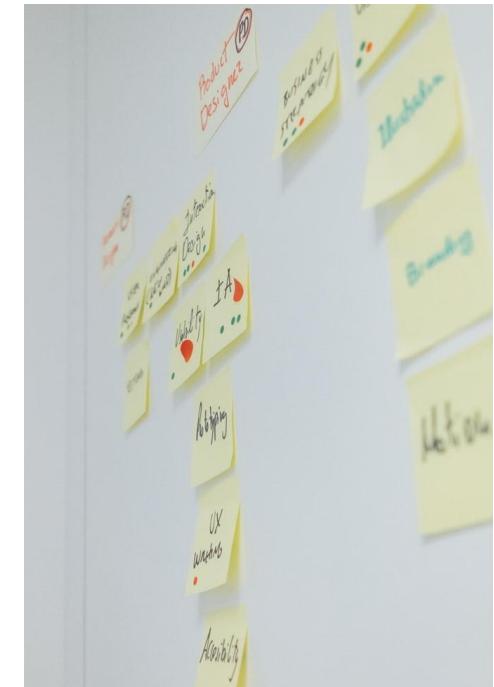
- Why is the Set Live Option unavailable but present on this page?
- How is Save and Set Live different?

Major issue, it was difficult for the users to figure out the difference between the two Save and Set Live

Usability Study: Analysis/ Results

Specific User Feedback with Quotes

- **Positives:** “I loved the website” (Beagleton) – clean, clutter free, good use of white-space, less crowded
- **Negatives:** “How to sign up” (Beagleton) or “How to set the property live” (Beagleton) – Unsure what is a dashboard; Set Live option present but unavailable; unhappy with the prototype
- **Errors:** “The prototype was misleading” (zaraa03, Beagleton, Atrium) – Prototype did not have lot of functionalities; task description as unclear; a section for property information with a headline would be nice.





Usability Study: Analysis/ Results

Task Wise Performance Rate

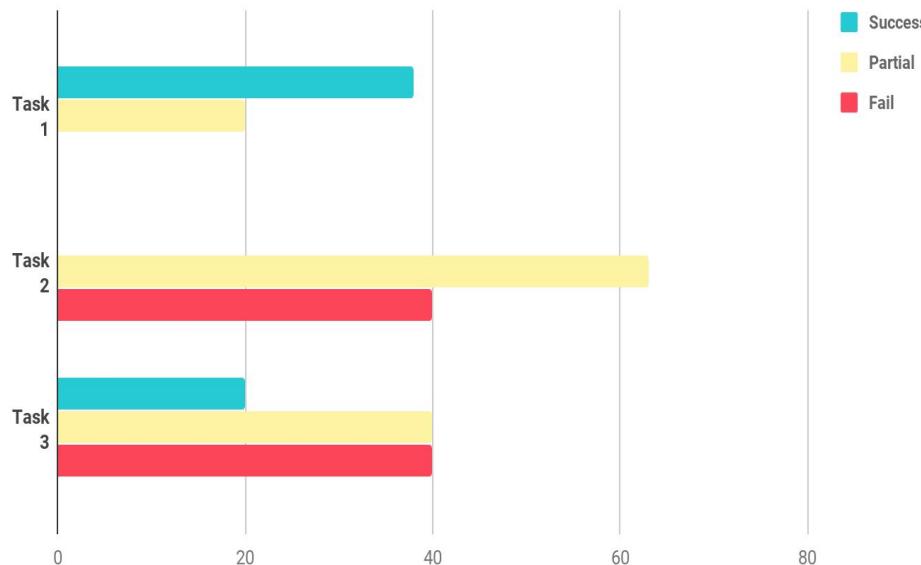


Users' pain points : Issues

- No fail rate in Task 1-“Add property information to Futurestay.”
- High partial success rate for all the tasks -- adding property info, check property info, and setting property live.
- Same fail rate and partial success rate for Task 3 - “Do whatever to get the property live.”

Usability Study: Analysis/ Results

Task Wise Performance Rate



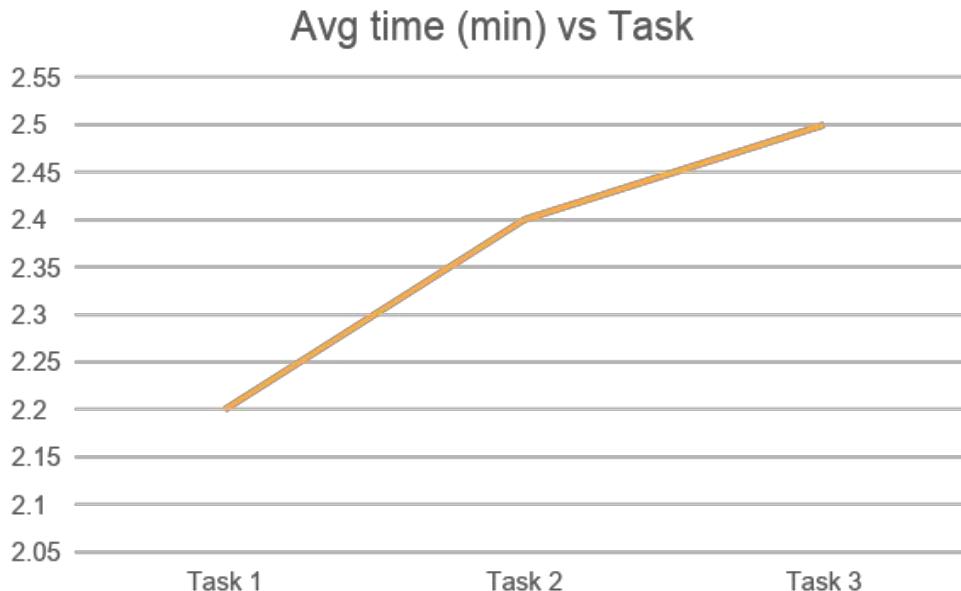
Users' pain points : Issues

- No fail rate in Task 1—"Add property information to Futurestay."
- High partial success rate for all the tasks -- adding property info, check property info, and setting property live.
- Same fail rate and partial success rate for Task 3 - "Do whatever to get the property live."



Usability Study: Analysis/ Results

Time vs Task



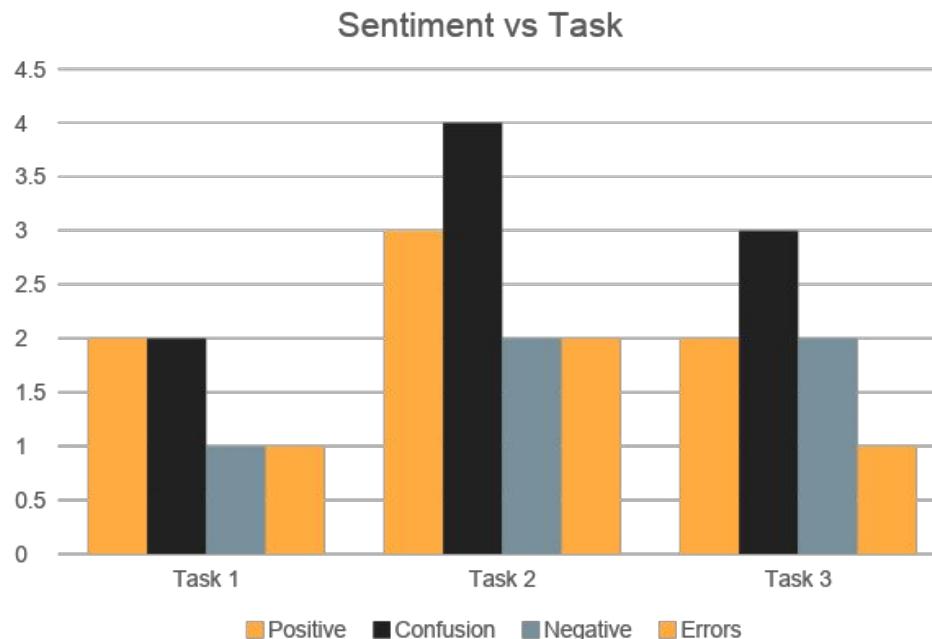
Potential reasons:

- Too much time spent to understand the task description and updating property information page : Task 3 - “Do whatever to get the property live.”
- Prototype was confusing to use -- different placement of different option in the business



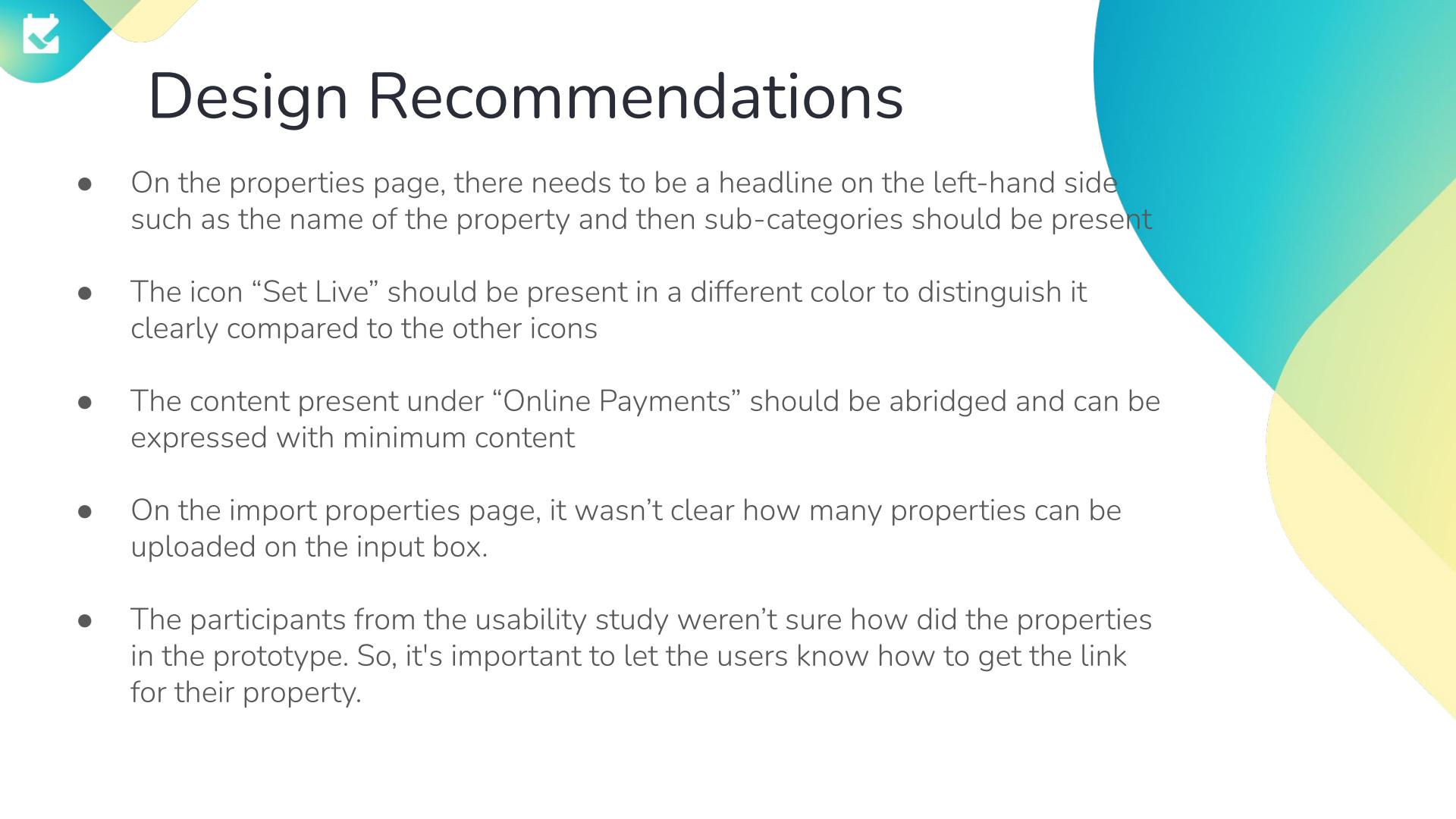
Usability Study: Analysis/ Results

Sentiment vs Task



Highlights

- Displaying users' feedback per task
- Users' positive, negative, confused, feedback along with errors made by users

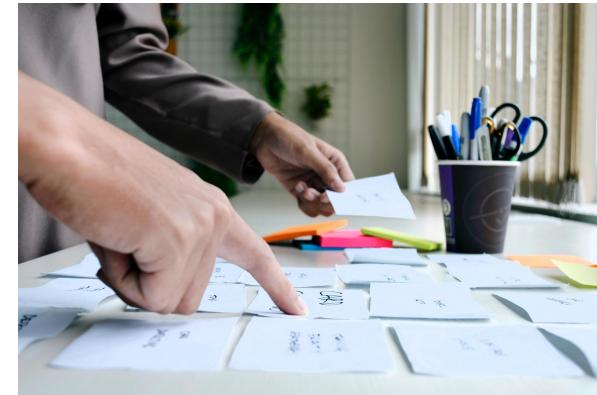


Design Recommendations

- On the properties page, there needs to be a headline on the left-hand side such as the name of the property and then sub-categories should be present
- The icon “Set Live” should be present in a different color to distinguish it clearly compared to the other icons
- The content present under “Online Payments” should be abridged and can be expressed with minimum content
- On the import properties page, it wasn’t clear how many properties can be uploaded on the input box.
- The participants from the usability study weren’t sure how did the properties in the prototype. So, it's important to let the users know how to get the link for their property.

Card sorting

- Context: From the usability studies results, it was found the settings page also required structuring keeping in mind the information architecture of the page





Card sorting

- Process:
 - We firstly created the cards, which were essentially the categories present on the property(s) page using the software named OptimalSort (<https://www.optimalworkshop.com/optimalsort>)
 - Firstly, researcher along with the mentors created 27 cards based on the different categories present on the properties page
 - After the cards were created on the software, a study link was generated. Here is the link <https://512q2c8c.optimalworkshop.com/optimalsort/7ixsi21g-0>
 - Before, sending the link to the users, a **pilot study** was designed and minor modifications were made based on revisions
 - The link was sent to users who have either used a vacation rental softwares such as Futurestay, Airbnb, Homeaway, or Booking.com.



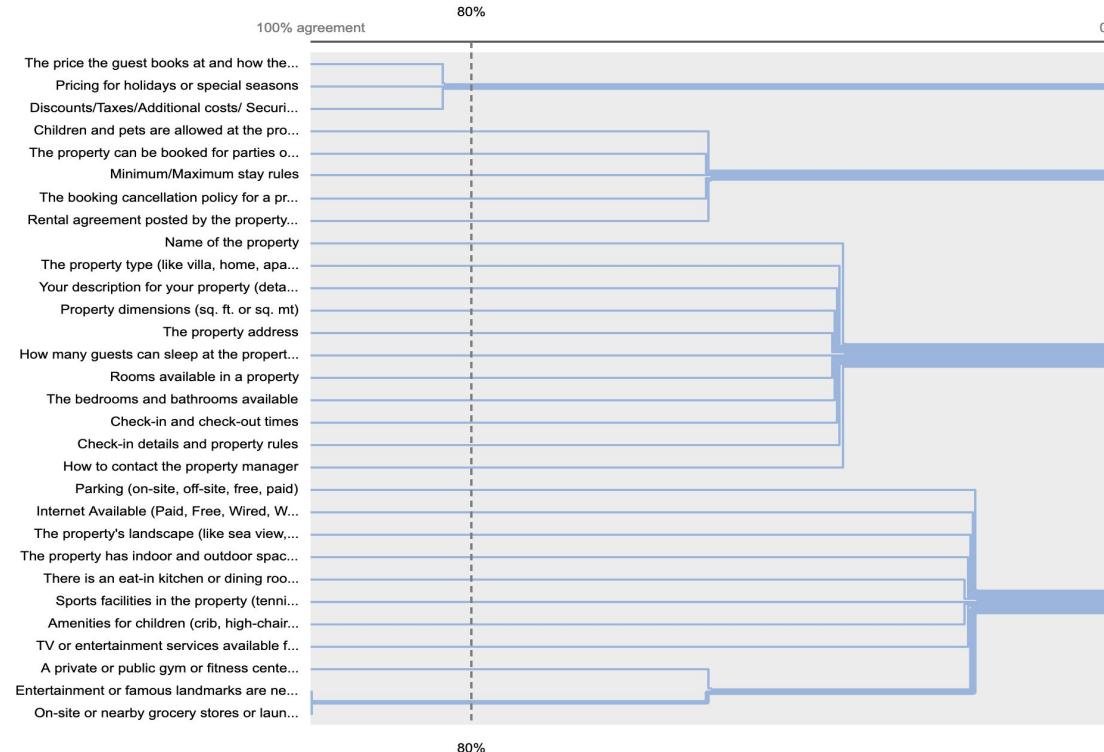
Results from Card sorting Exercises

- The study link was sent to customers to sort the cards under different categories/groups.
- The study was completed by six users within 6 min and 52 seconds
- Users were tasked to classify cards into: **property details, amenities, check-in/check out, pricing**
- While analyzing the results for this card sorting exercises, we made of **agreement scores** as the measure of analysis



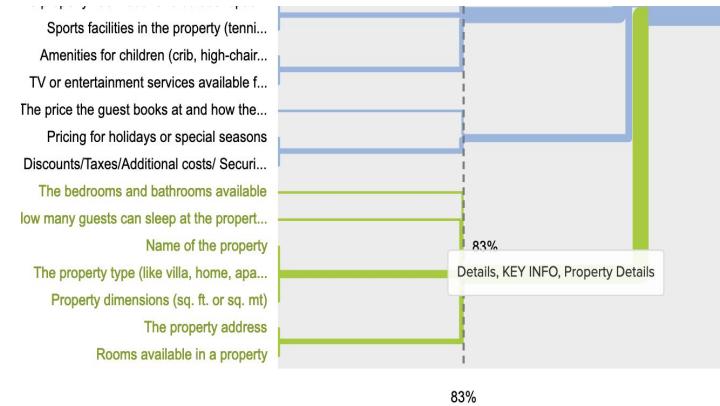
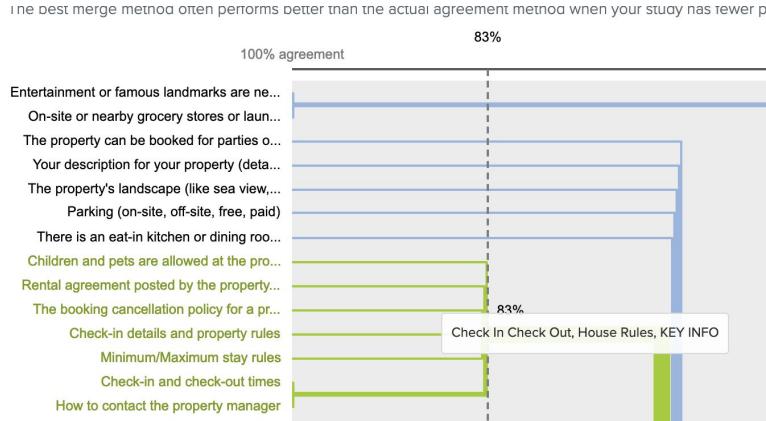
Analysis: Min/Max agreement

The actual agreement method works best with 30 or more participants and will depict only absolutely factual relationships. We call this the skeptical dendrogram.





Agreement scores: Check-in/out, house rules, and key info, property details



Agreement scores provides the agreement level between the cards placed in each category. Higher agreement score shows more participants agreed with the provided cards in a category.



Results

- After finishing the card-sorting experiments, although the agreement scores showed dispersed agreement scores.
- Here are the original cards along with the cards condensed based on the card-sorting results

<https://github.com/manasarath/manasarath.github.io/blob/master/Properties%20Page%20Card%20Sorting.xlsx>

- This issue could be resolved by recruiting more users in future studies



Surveys

- To further understand users' perceptions regarding the vacation rental management system and ways to resolve the product issues in Futurestay.
- The objective for conducting surveys include identifying Futurestay's (FS) users, their perceptions about FS, specific features of FS which the users made use of and further improvements that can be made in Futurestay.





Surveys

Process

- Two surveys were designed to obtain user perceptions on vacation-rental management systems.
- Surveys were designed on Google forms and the survey link was sent out to users over an email
 - Survey 1 was sent out to Futurestay users
 - Survey 2 was sent out to non-Futurestay users



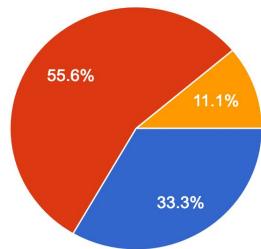
Surveys

- Here is the list of survey questions:

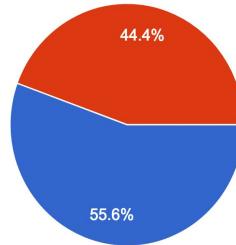
https://github.com/manasarath/manasarath.github.io/blob/master/SurveyQuestions_FS.docx.pdf



Prime Surveys Results

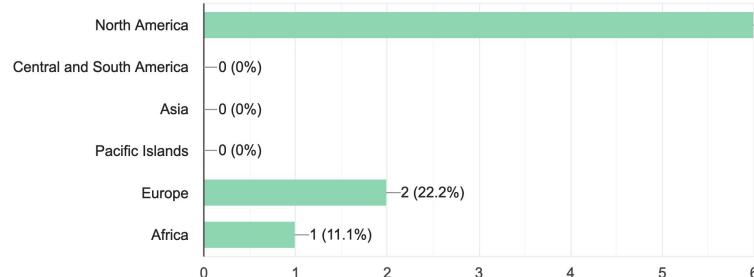


- 20-30 years old
- 31-45 years old
- 46-55 years old
- 56-65 years old
- 65+ years old

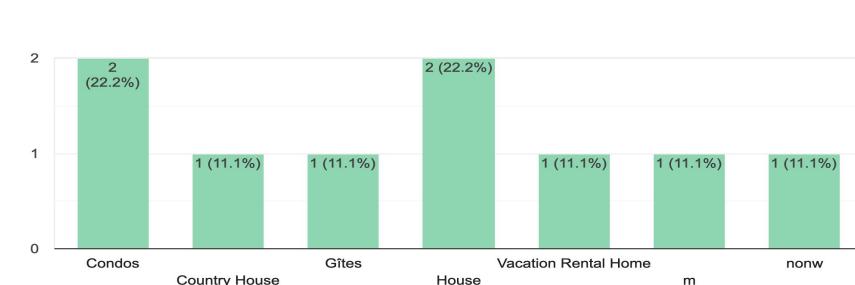


- Female
- Male
- Prefer not to say

Demographic features of the survey participants



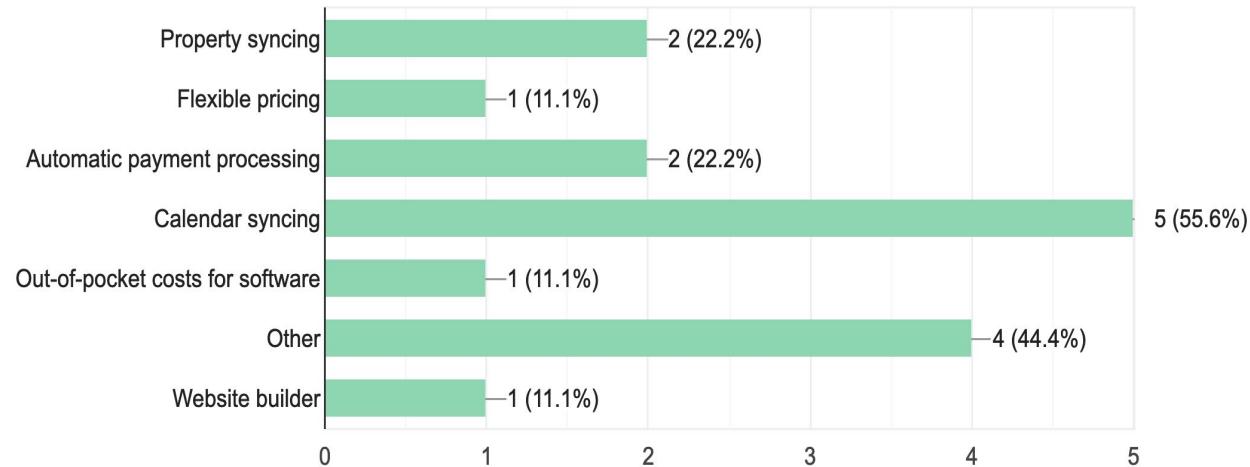
Geographical location of the users who took the survey



Type of property owned by the users who took the survey



Main Survey results



Specific functionalities in FS that the users find valuable



Surveys

- On the basis of survey results, following findings were reported:
 - Resolve the technological issues soon
 - Promote the Futurestay website
 - Allow users to remove functionalities such as Hidden Listings and update New Listings
 - Provide better customer support
 - Having clear onboarding instructions for the users



After understanding users' pain points, it is important to come up with user personas which would reflect on a products' different user types, user characteristics, needs and goals to gain valuable insights into user journeys, and then prototype them in future.



Persona Development

- To build personas a set of open and close ended interview questions to understand how might users use a particular product or service.
- To delve deeper in constructing users' personas : personal background, industry/business, role, goals, and challenges while achieving the goals as a property manager, processes that go into decision-making, objections about FS softwares/services, along with information sources used by the users.



Persona Development

- List of questions included in the interview were based on the following categories:
 - Personal Background
 - Industry and Business
 - Role
 - Goals
 - Challenges
 - Decision Making
 - Objections
 - Information Sources

Here is the complete list of questions under each of the categories

https://github.com/manasarath/manasarath.github.io/blob/master/Persona_Questions.docx



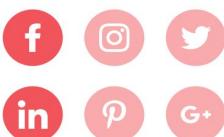
Persona Development



Age
45 to 54 years

Highest Level of Education
Master's degree

Social Networks



Industry
Real Estate

Organization Size
11-50 employees

Preferred Method of Communication

- Phone
- Email
- Social Media
- Face-To-face

Goals or Objectives

Revenue generation, increase occupancy rate of his properties

They Gain Information By

Customer feedback

Biggest Challenges

- Navigating Client Relationships & Communications
- Communication
- Collaboration & Creativity
- Resources

Tools/Skills

Managing website-builder, building spreadsheets
Google sheets/docs, calendar

Tools They Need to Do Their Job

- Employee Scheduling Software
- Reporting Software
- Business Intelligence Dashboards
- Word Processing Programs

Job Responsibilities

Taking care of guest payments, tax end/ accounting, managing calendars, using website builders

Their Job Is Measured By

Customer success, hosting a guest a great experience

Reports to

None/Self employed



Social media/Customer-platform research

- As a User Researcher, it's important to triangulate research findings to multiple resources to understand users' issues
- To further understand users' pain-points, we dig deeper into users' problems that they have pointed out on forums such as Intercom and Hubspot along with prominent social media platforms



Secondary Research

- To further understand users' pain-points, we dig deeper into users' problems that they have pointed out on forums such as Intercom and Hubspot



To categorize users' questions and feedback on the platforms, Affinity Maps were created to categorize user issues; this process was iterated multiple times



Competitor Analysis

- As a part of my competitor analysis study, it involved looking into major Futurestay competitors and look into their product features
- Apart from looking into the features, their social media reviews were also analyzed by me with the team



Mobile development

- To build personas a set of open and close ended interview questions to understand how might users a particular product or service.
- To delve deeper in constructing users' personas : personal background, industry/business, role, goals, and challenges while achieving the goals as a property manager, processes that go into decision-making, objections about FS softwares/services, along with information sources used by the users.



Mobile development

- To build personas a set of open and close ended interview questions to understand how might users a particular product or service.
- To delve deeper in constructing users' personas : personal background, industry/business, role, goals, and challenges while achieving the goals as a property manager, processes that go into decision-making, objections about FS softwares/services, along with information sources used by the users.

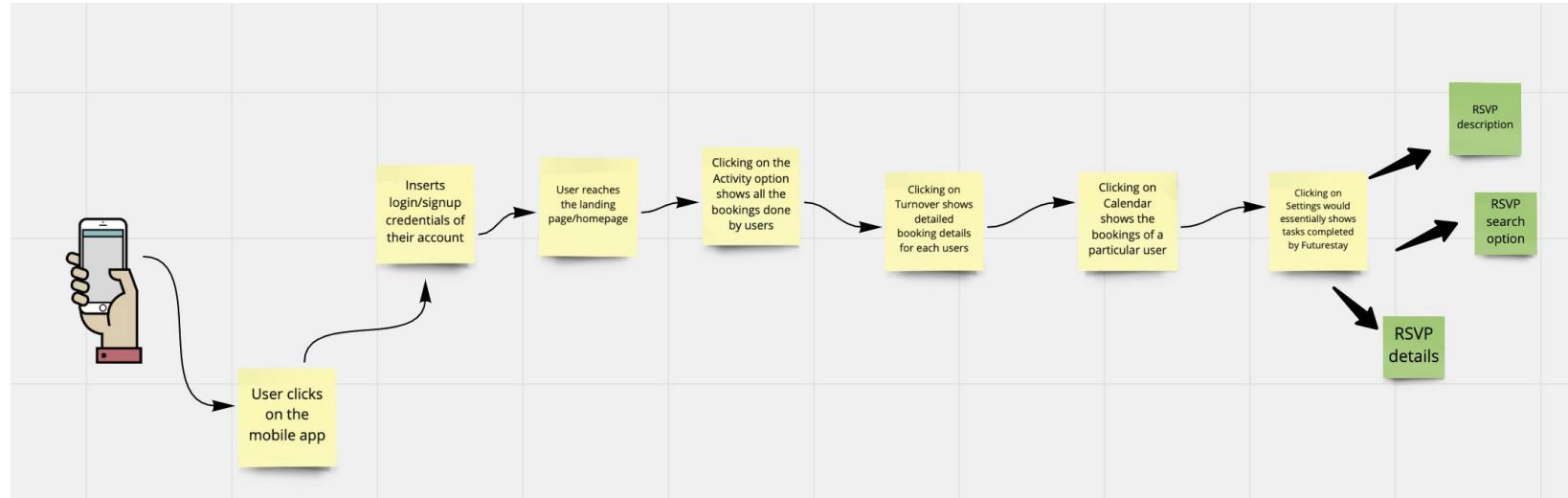


Mobile development

- To help the startup in their initial phase of mobile app development, I created the usability test plan to conduct usability studies.
- Mockup:

https://www.figma.com/file/5ULiljVo6MzoSjpFpfCKMw/FS_app_concept_1.1?node-id=0%3A1

- The user flow while using the mobile app can be explained as follows:





Mobile interface design: Test plan

- Pre-task

- Have you ever used a VR system?

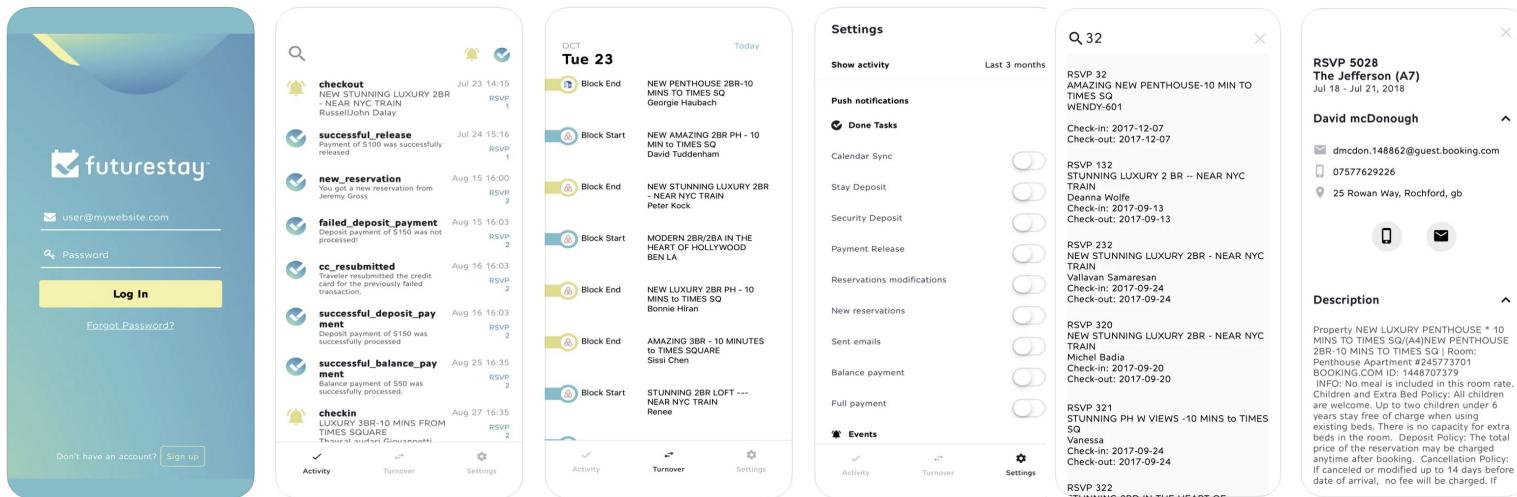
- Task scenarios:

Imagine yourself as a property manager, your guest is planning a vacation to NYC from March 10-19. They have booked a property using Airbnb. You need make sure FS is able to reflect their bookings for the specific dates, payment details, etc. on its mobile app

- Task : Check if the property chosen by your guest shows up on their interface

- Follow-up

- Rate you experience in FS mobile app
 - Were you disappointed with any feature?

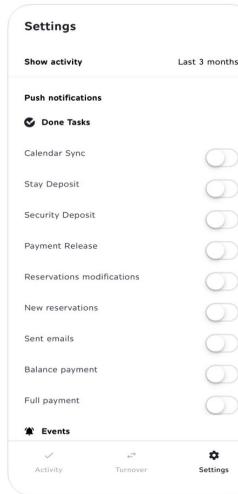
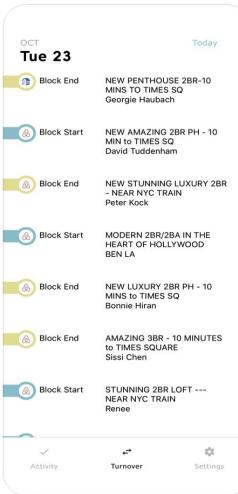
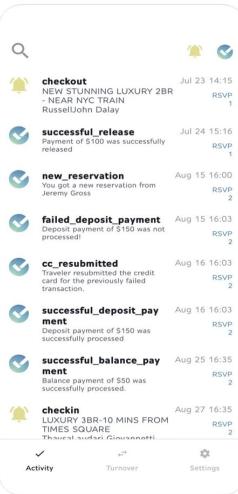


The image displays the Futurestay mobile application interface across five screens:

- Landing:** Shows a login form with fields for email (user@mywebsite.com) and password, and links for "Forgot Password?" and "Sign up".
- Home page/Activity:** Shows a feed of activity items. Examples include:
 - checkout:** NEW STUNNING LUXURY 2BR - NEAR NYC TRAIN (Jul 23 14:15) by RussellJohn Daly (RSVP 1)
 - successful_release:** Payment of \$100 was successfully released (Jul 24 15:16) by Jeremy Gross (RSVP 1)
 - new_reservation:** You got a new reservation from Jeremy Gross (Aug 15 16:00) (RSVP 2)
 - failed_deposit_payment:** Deposit payment of \$150 was not processed! (Aug 15 16:03) (RSVP 2)
 - cc_resubmitted:** Traveler resubmitted the credit card for the previously failed transaction. (Aug 16 16:03) (RSVP 2)
 - successful_deposit_pay_ment:** Deposit payment of \$150 was successfully processed. (Aug 16 16:03) (RSVP 2)
 - successful_balance_pay_ment:** Balance payment of \$50 was successfully processed. (Aug 25 16:35) (RSVP 2)
 - checkin:** LUXURY 2BR-10 MINS FROM TIMES SQUARE (Aug 27 16:35) (RSVP 2)
- Turnover:** Shows a calendar for Tuesday, Oct 23, with several "Block Start" and "Block End" events listed. Examples include:
 - Block End: NEW PENTHOUSE 2BR-10 MINS TO TIMES SQ by Georgie Haubach
 - Block Start: NEW AMAZING 2BR PH - 10 MIN TO TIMES SQ by David Tuddenham
 - Block End: NEW STUNNING LUXURY 2BR - NEAR NYC TRAIN by Peter Kock
 - Block Start: MODERN 2BR/2BA IN THE HEART OF HOLLYWOOD BEN LA by Bonnie Hirai
 - Block End: NEW LUXURY 2BR PH - 10 MINS TO TIMES SQ by Sissi Chen
 - Block Start: AMAZING 2BR - 10 MINUTES TO TIMES SQUARE by Renes
- Settings:** Shows settings for activity, push notifications, calendar sync, stay deposit, security deposit, payment release, reservations modifications, new reservations, sent emails, balance payment, and full payment.
- RSVP for a user:** Shows an RSVP for user "David mcdonough" (Jul 18 - Jul 21, 2017). It includes details about the reservation, contact information (dmcdon.148862@guest.booking.com, 07577629226), and a description of the property (NEW LUXURY PENTHOUSE * 10 MINS TO TIMES SQ (A NEW PENTHOUSE 2BR-10 MINS TO TIMES SQ)). The description also includes terms and conditions such as meal inclusion, children and extra beds, and cancellation policies.

Mobile interface design

Mobile Application can be accessed at <https://apps.apple.com/us/app/futurestay/id1439964341>



Landing

Home
page/Activity

Turnover

Settings

RSVP for a user



Challenges faced during internship:

- Recruiting users of the software was difficult, therefore sometimes inferring results of a study was a bit cumbersome
- Carrying out varied research studies was challenging along with administering and writing up the results
- Working for a growing startup could be highly fulfilling, however there was a budget constraint on recruiting more participants



Outcome of my work post internship:

- The amount of time spent in listing the property on the site has reduced by several minutes [Redesigning the settings page]
- User pain-points used to further reiterate and the designs leading to increasing the client base
- Application features were well-received by the customers and was planned to scale the app for a mass market version



Learnings:

- Identified users' pain-points using varied user-study methods
- To work in a fast-paced environment using multiple data sources
- Working closely with designers to work on design decisions impacting several property managers and users of the rental management software