Urban Space Finder

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Designed for the "New Normal" The Living Space Finder Social Community App for the "New Normal" environment

Product

Urban Space Living Space Locator Name derivation: https://dictionary.cambridge.org/dictionary/english/urban

Background

Living space Locator is a high-end digital tool that focuses on hassle-free identification of spaces for shared and rental Apartments, PG's, Co-living spaces, Hostels etc., at the aspired locality.

Use Case & Scenario

Mr. X, is an employee of a IT Company. With the Lockdown easing out in many cities across the globe, people are starting to travel for work, business. Mr.X is one amoung such persona. Having hired and forced to relocate to a new city for a job engagement, Mr.X is left baffled with the challenges of hunting for a living space amidst the COVID19 guidelines and new normal restrictions and stereotype mindsets of landlords and PG Owners.

There are new guidelines and restrictions by landlords, PG Owners. Mr.X is also worried about his own safety and health concerns.

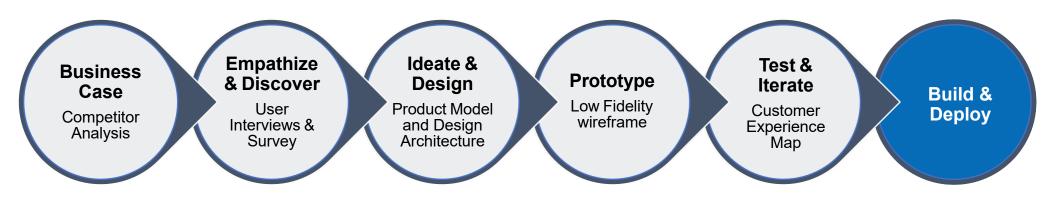
How does an AI Powered Urban Space Finder Digital System help him find a space to start living and join his new role, amidst the post COVID19 new normal lifestyle & environment.



How to get started? - Hypothesis

- There is always a proven **Human Science** and **Psychology** associated behind the success of a product design.
- And I believe in the statement, "Users are best Experience Designers" themselves. This means we need to take insights and research deep into customer problems to arrive at a solution. User's choose the best experience they want to make a service model successful.
- Assuming a vast community like India for this Business Use Case Scenario, the Urban Community and Social culture is a key differentiator to arrive at a best experience design. With COVID19 and the New Normal environment, the challenges are even bigger.
- **Study of our competitors** would let us know what are their positives and negatives. The positives can be leveraged, and the negatives can be mitigated into Innovations and Digital Solutions.
- Other different Design Models should be studied as well. Like For Eg. For this scenario I have studied the model of Hotel Booking apps like OYO Rooms, and AIR BNB. I have also studied and researched on the Urban Clap Design Model as well where Urban small scale business vendors are connected with customers. So these models are also important to be studied and understand the positives and negatives. Design Models of Social Apps were also studied, like Facebook, Tinder, LinkedIn. Because social networking design architecture models are very simple, accurate, intuitive, and easy to use with an instant hit with the Users.
- · The more we research the more we innovate and find solutions.





Approach / Methodology

Business Case – Competitor Analysis and Inferences from other Design Models

Positives

- 1. Accurate search filters and search categorization
- 2. Budget range
- 3. Owner / Broker accurate categorization
- 4. Detailed Property description
- 5. Leverage the Urban Socializing Indian Culture and Digital Social networking model

Negatives

- 1. Legacy Models that are a bit old school
- 2. No integration on information about COVID19 guidelines & containment zones
- 3. At times phone calls from Agencies become disturbing and irritating
- 4. Search results are not accurate
- 5. Search Filters does not cover the ideal Wishlist of customers. The search filters and results are very generic
- 6. Cluttered UI
- 7. Location is not accurate
- 8. Amenities listed are too generic
- 9. Cannot be compared as close as urban search through local contacts and helps
- 10. The Data Volume is high but the accuracy with customer expectation mapping is lacking.



Empathize

The idea was to empathize for teething problems faced by users and co-create involving the user through the product development life cycle. Hence a survey with a small user group of Technologist, Job Seekers, IT Professionals was initiated to kick start the user research based on the Use Case Scenario.

User Survey (Questionnaire)

- 1. Name?
- 2. Gender?
- 3. Single or Married?
- 4. Children?
- 5. Profession?
- 6. What are your choices of a living space Shared / Rental Apartment / PG / Co-Living Spaces / Hostels.
- 7. What is the challenge seen amidst the New Normal COVID19 situation, to find a living space.
- 8. Preferred mode of transport?
- 9. Food (Non Veg/Veg)?
- 10. Can you please tell me a little about you and what do you prefer as a Living Space before and after work hours.?
- 11. Can you list me the issues you face as user, in using some of the apps that are currently available.?
- 12. Please pick any 3 existing Living Space finder app, and list 3 best features for each of the 3 apps.
- 13. If you would want a one stop app, what are the Wishlist features you would like on it, as a user.
- 14. We have identified a list of features. Can you please sort/priorities and re-order based on your persona.
 - Safety & Security
 - Familiarization of the neighbourhood.
 - Convenience of Stay Companion
 - Personality bias, Habitual and Lingual restraints
 - Budget,
 - Amenities,
 - Transit,
 - Brokerage, etc.,
 - Testimonials/reviews and User Feedback and Ratings.
- 15. From your past experience, Please tell which was more successful for you in finding an accommodation:
 - Finding through an App (or)
 - Finding through an Urban/Local Help (or)
 - Finding through a Broker

User responses for the Questionnaire

User 1

- 1. Gender? Male
- 2. Single or Married? Married
- 3. Children? One
- 4. Profession? Salaried IT Employee UI Designer
- What are your choices of a living space Shared / Rental Apartment / PG / Co-Living Spaces / Hostels. - Rental
- 6. Preferred mode of transport? Own Car
- What is the challenge seen amidst the New Normal COVID19 situation, to find a living space.- PG Owners/Landlords would have stereotyped preferences and mindset, being reluctant to other state travelers specially from COVID19 hotspots.
- 8. Food (Non Veg/Veg)? Non -Veg
- Can you please tell me a little about you and what do you prefer as a Living Space before and after work hours.? Quiet and peaceful community with access of all daily needs.
- Please pick any 3 existing Living space finder app, and list 3 best features for each of the 3 apps. - Magic bricks - Huge range of properties, Best filtering options, Location finder | Nest Away - Small Space Rental, Sharing space, No Brokerage | 99 Acres - Verified Properties List, Best Market Properties, Communication Mode
- 11. If you would want a one stop app, what are the Wishlist features you would like on it, as a user. Verified property list(Own property and broker owned), | Video to watch the space/ Virtual walkthrough | Descried list of Amenities and Security Features
- 12. We have identified a list of features. Can you please sort/priorities and reorder based on your persona.
 - Amenities,
 - Safety & Security
 - Transit,
 - Budget,
 - Familiarization of the neighborhood.
 - Convenience of Stay Companion
 - Personality bias, Habitual and Lingual restraints
 - Testimonials/reviews and User Feedback and Ratings.
 - Brokerage, etc.,
- 13. From your past experience, Please tell which was more successful for you in finding an accommodation:
 - Finding through an App (or)
 - Finding through an Urban/Local Help (or)
 - Finding through a Broker
- 14. Can you list me the issues you face as user, in using some of the apps that are currently available.? Correct Information of the property, | Communication information, | Multiple Ads of single property, | Transparent Feedback

User 2

- 1. Gender? Male
- 2. Single or Married? Married
- 3. Children? 1
- 4. Profession? IT Profession
- What are your choices of a living space Shared / Rental Apartment / PG / Co-Living Spaces / Hostels.
- 6. Preferred mode of transport? car and Bike
- 7. Food (Non Veg/Veg)? Both
- 8. Can you please tell me a little about you and what do you prefer as a Living Space before and after work hours.? I am in to IT profession and I wish to live in a peaceful place (less traffic, wider roads, schools, essential commodities) is a good option. Since My office is located close to the Outer Ring Road any areas in the south of Bangalore which are closer to the ring road are your best bet.
- 9. Can you list me the issues you face as user, in using some of the apps that are currently available.? I would like to list some apps which is am using and facing some issues recently. OLX (The OLX marketplace is a platform for buying and selling services and goods such as electronics, fashion items, furniture, household goods, cars and bike). I am facing lot of issue while using OLX app especially when I am searching with keywords and I am not getting related search result which is very strange and app performance loading issue and data is not accurate.
- 10. Please pick any 3 existing Living Space finder app, and list 3 best features for each of the 3 apps. MagicBricks, OLX, 99Acres
- 11. If you would want a one stop app, what are the Wishlist features you would like on it, as a user. Olx performance and not data result is not accurate
- 12. We have identified a list of features. Can you please sort/priorities and re-order based on your persona.
 - 1. Budget,
 - 2. Brokerage, etc.,
 - 3. Testimonials/reviews and User Feedback and Ratings.
 - 4. Safety & Security
 - 5. Familiarization of the neighbourhood.
 - 6. Convenience of Stay Companion
 - 7. Personality bias, Habitual and Lingual restraints
 - 8. Amenities,
 - 9. Transit,
- 13. From your past experience, Please tell which was more successful for you in finding an accommodation:
 - 1. Finding through an App (or)
 - 2. Finding through an Urban/Local Help (or)
 - 3. Finding through a Broker

User 3

- 1. Gender: Female
- 2. Single or Married: Single
- 3. Children: No
- 4. Profession: Data Analyst
- 5. What are your choices of a living space Rental Apartment
- 6. Preferred mode of transport? Metro (Public Transport), Own Vehicle
- 7. What is the challenge seen amidst the New Normal COVID19 situation, to find a living space- PG Owners/Landlords would have stereotyped preferences and mindset, being reluctant to other state travelers specially from COVID19 hotspots.
- 8. Food (Non Veg/Veg): Veg
- Can you please tell me a little about you and what do you prefer as a Living Space before and after work hours.: A peaceful place, with basic necessities, clean surroundings. Open space with greenery definitely not congested
- 10. Can you list me the issues you face as user, in using some of the apps that are currently available: No proper information about owner, hidden charges, wrong information about amenities, wrong listing with wrong images, incorrect location.
- 11. Please pick any 3 existing Living Space finder app, and list 3 best features for each of the 3 apps.:Housing.com: UI, multiple information on single page, Option availability No Broker: UI (listing as per priority), No brokerage obviously, Easy Contact number availability.
- 12. If you would want a one stop app, what are the Wishlist features you would like on it, as a user.: Pictures of every room/area (video would be better), No hidden charges, Transparency about issues as well, correct info (no lie in detail, amenities), Immediate Status update
- 13. We have identified a list of features. Can you please sort/priorities and reorder based on your persona.
 - 1. Transit
 - 2. Safety & Security
 - 3. Amenities
 - 4. Familiarization of the neighbourhood.
 - 5. Convenience of Stay Companion
 - 6. Testimonials/reviews and User Feedback and Ratings.
 - 7. Budget,
 - 8. Personality bias, Habitual and Lingual restraints
 - 9. Brokerage, etc.,
- 14. From your past experience, Please tell which was more successful for you in finding an accommodation:
 - 1. Finding through an App (or)
 - 2. Finding through an Urban/Local Help (or)
 - 3. Finding through a Broker

User 4

- 1. Gender? Male
- 2. Single or Married? Married
- 3. Children? one daughter
- 4. Profession? Software engineer UI developer
- What are your choices of living space Shared / Rental Apartment / PG / Co-Living Spaces / Hostels.
- What is the challenge seen amidst the New Normal COVID19 situation, to find a living space.- PG Owners/Landlords would have stereotyped preferences and mindset, being reluctant to other state travelers specially from COVID19 hotspots.
- 7. Preferred mode of transport? Bike
- 8. Food (Non-Veg/Veg)? Veg
- 9. Can you please tell me a little about you and what do you prefer as a Living Space before and after work hours.? Yoga and Homework
- 10. Can you list me the issues you face as user, in using some of the apps that are currently available.? NA
- 11. Please pick any 3 existing Living Space finder app, and list 3 best features for each of the 3 apps. Suleka, 99 acres, Magic bricks and No Broker
- 12. If you would want a one-stop app, what are the Wishlist features you would like on it, as a user? Budget and Safety & Security
- We have identified a list of features. Can you please sort/priorities and reorder based on your persona.
 - 1. Safety & Security
 - 2. Budget
 - 3. The convenience of Stay Companion
 - 4. Familiarization of the neighbourhood.
 - 5. Amenities,
 - 6. Personality bias, Habitual and Lingual restraints
 - 7. Transit,
 - 8. Brokerage, etc.,
 - 9. Testimonials/reviews and User Feedback and Ratings.
- 14. From your past experience, Please tell which was more successful for you in finding an accommodation:
 - 1. Finding through an App (or)
 - 2. Finding through an Urban/Local Help (or)
 - 3. Finding through a Broker

- 1. Gender? Male
- 2. Single or Married? Married
- 3. Children? 2
- 4. Profession? Financial Analyst
- What are your choices of a living space Shared / Rental Apartment / PG / Co-Living Spaces / Hostels.
- 6. Preferred mode of transport? Two Wheeler
- 7. Food (Non Veg/Veg)? Non Veg
- What is the challenge seen amidst the New Normal COVID19 situation, to find a living space.- PG Owners/Landlords would have stereotyped preferences and mindset, being reluctant to other state travelers specially from COVID19 hotspots.
- 9. Can you please tell me a little about you and what do you prefer as a Living Space before and after work hours.?
 - I like Cleanliness of the apartment like clean toilet, 24hrs water, service lift to bring in furniture, big balcony, there should not be any draining clogging in the building common drainage or inside in the toilet/kitchen.
- 10. Can you list me the issues you face as user, in using some of the apps that are currently available.?
 - · Lack of wide range of search filter options for
 - o Cleanliness,
 - Age of property,
 - Water source,
 - Garbage disposal,
 - Common walls (Yes/No) between apartments,
 - Nailing restricted by Owner (Yes/No),
 - Clean toilets
 - Clean walls
- 11. Please pick any 3 existing Living Space finder app, and list 3 best features for each of the 3 apps.
- 12. If you would want a one stop app, what are the Wishlist features you would like on it, as a user.
 - Search Simulator to draw the picture of what i have in my mind.
- 13. We have identified a list of features. Can you please sort/priorities and reorder based on your persona.
 - Safety & Security
 - Familiarization of the neighbourhood.
 - Convenience of Stay Companion
 - Personality bias, Habitual and Lingual restraints
 - Budget,
 - Amenities,
 - Transit,
 - Brokerage, etc.,
 - Testimonials/reviews and User Feedback and Ratings.

14. From your past experience, Please tell which was more successful for you in finding an accommodation:

- Finding through an App (or)
- Finding through an Urban/Local Help (or)

Finding through a Broker



Deep Dive into the Problems, through research and PET Analysis

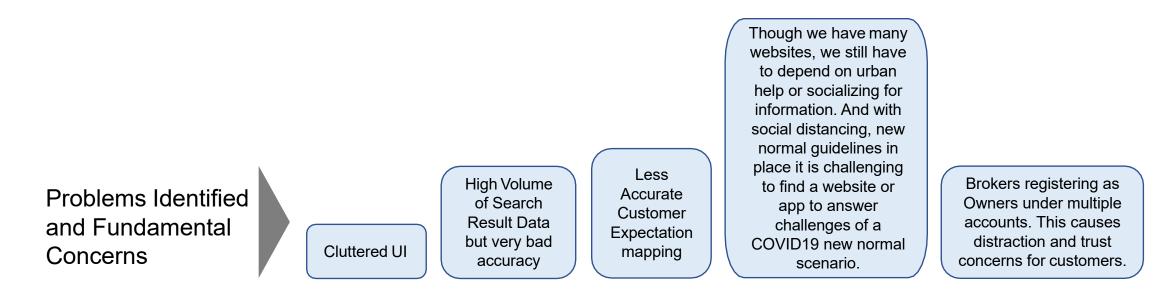
The ideation was to talk to the sample user group, house owners, and understand their realistic problems going through the Post COVID19 Pandemic situation. Problems like hotspot zones and containment zones are critical. Additionally a good market study and competitor analysis is also important along with studying Different design models.

Persuasion, Emotion & Trust (PET)

User Experience is about designing for persuasion, emotion, and trust. You still need good usability, but it's often not enough to design a website that is easy to understand, navigate, and interact. Just because people can do something does not guarantee that they will — they must be motivated and persuaded to make decisions that lead to conversion. PET Design is rooted in social psychology.

There were several common problems identified, from the Questionnaires, and research.

Having gathered the data from competitor study inferences and user questionnaires, PET Concept, the take away was there were a set of **Problems** identified and Fundamental concerns.



Roles Identified

Customer

Searching for a Living Space

User Group: An IT professional, relocated to a new city. Could be bachelor or family man, from any community background, Well versed using apps and websites, but still is inclined more to take emotional decisions based on COVID19 hotspots, containment zones, locality, travel convenience, trust, known community, like mindedness.

What is common between them?

- Need to find someone trustworthy and honest about COVID19 health history or containment zones
- Would be great if from Preferably Same office location,
- Amicable habits,
- A known person is good,
- Having a common known person is good to seek some past references,

Contributor

Adding Living Spaces for share, rent, PG, Co-Living

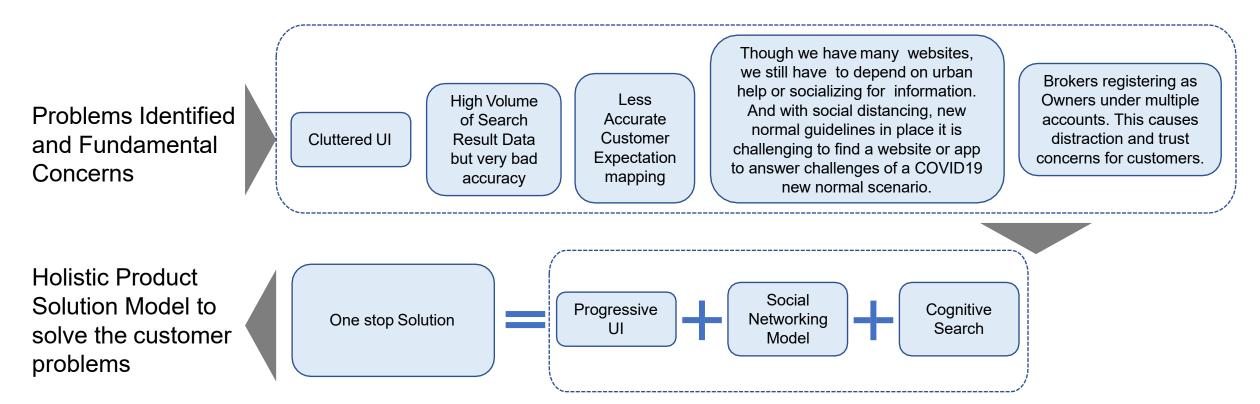
User Group: House owners, existing renters ready to share their living space with like minded people, known friends, Community based PG business groups and specifically not from a COVID19 Hotspot zone

The Digital Solution

Key Value Differentiators or Features that could be ideated for a successful solution model:

- 1. One of the key finding was, though customers are tech savvy but still depend on genuine local help or **socializing from the urban community** like people who could provide them accurate information on an ideal space available for rent based on their enquiry and choice. With Social Distancing norms and guidelines it is challenging to move around at ground level and find a living space.
- 2. The Design needs to be a combination model of Social Networking App and a Property/Hotel Search app.
- 3. We need to bring **contributors** from the **Urban Community** into the service model and consume their information as Core Data Source. These contributors can be Existing renters looking to share their apartment, property owners, urban community people with local information on properties and urban living spaces. With Social networking design model, **the preferences could match** and **customer trust** quotient is high.
- 4. Customers need to see a closeness or accuracy to their expectations and COVID19 free zones, health history etc. This could be achieved with **Cognitive Search** and **Al Machine Learning**. Both these features are very important for very accurate search experience.

With all this inferences and philosophy, I then came up with a Product Model and a Design Flow.



Product Model

The idea was to bring to life all the analysis and inferences from the Market & Product Research, User Responses into a Digital Enabled & Technology driven solution to reduce errors and improve accuracy.

Design Rationale for the Search feature

The belief and understanding from analysis is that too many feature checklist and search categorization upfront broadens the user's confusion and delay decision making.

Hence the first step into the search feature, is to provide the User with a narrowed search categorization and data feed and the system should act intuitively at the back end, running an algorithm and give the user with further more search categorization/grouping and suggestions according to his selections to narrow down the catalogue and help user with quick decision making. A system powered by Cognitive Intelligence.

Design Rationale for the Upload Feature

The registered Spaces, to be Rendered and TAG categorized Automatically by technology driven AI data processing like for eg. Image Processing and Machine Learning.



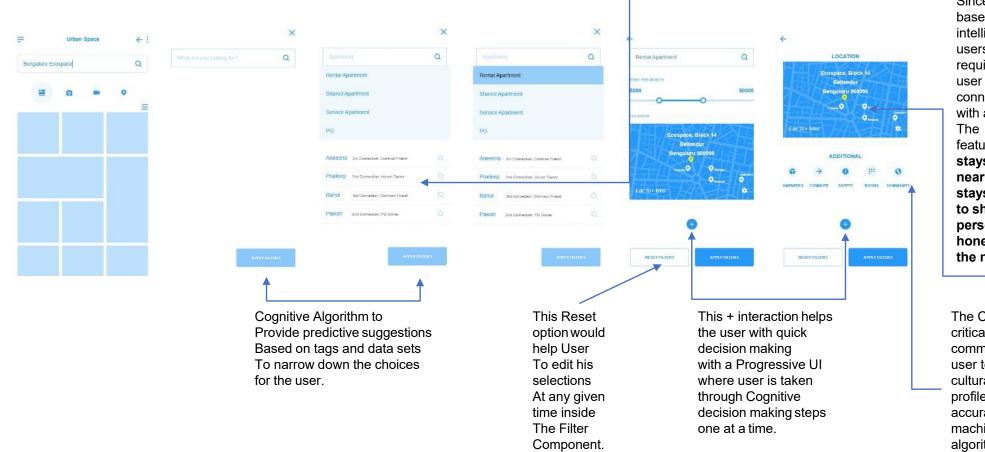
The UI (Wireframes): Machine Learning and AI, for Customer Access & Search

Customer User Journey to illustrate the Cognitive search experience with social networking model

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Role Based u	ser registration.			Algorithm to d User Role ess.	Data Feed Fe These Data F microservices feed in real ti on COVID19 hotspots, containment and trigger al user. These I feature would enable the us LIVE feed hi preferences system, to ma decision in fir space to Live	Feed s would ime data t zones lerts to the Data Feed d also ser to is social into this ake a wise nding a	Algorithi Keyword user Ba Social C As you s suggest Network Data Se	re Search m to provide d Suggestions to the sed on location and connection. see the search ive List shows Soci- ting based tts as predictive res when the user type ls.	d ial sults			

The UI (Wireframes): Progressive UI & More AI Search Filters to improve decision making

Customer User Journey to illustrate the Cognitive search tagged data sets would work for narrower filter options for User

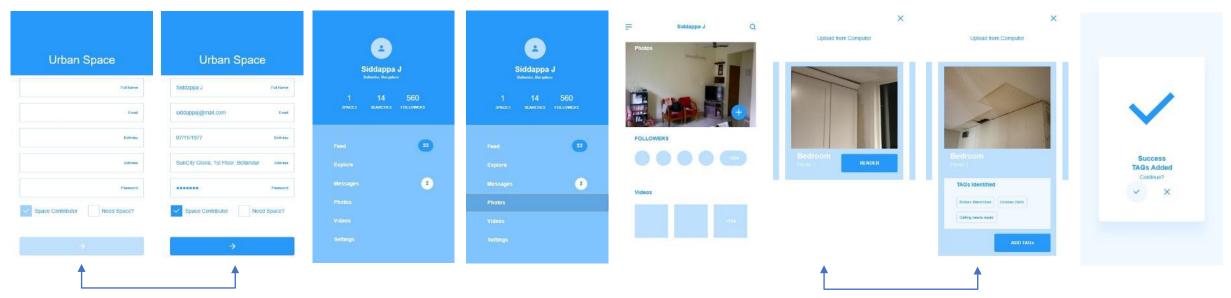


Since this is a Social Community networking based app, the system shows suggestive intelligence for the User to locate known users around, matching to his requirements. This becomes easier for the user to decide, make a choice and get connected. The fear of trust issues are solved with a technology assisted social connect. The experience felt by the user with thesefeatures are like "Wow! I know my cousin stays in this city and has a space to rent near my office location or "My friend stays close to my office and has a room to share". Or "Oh Great! I know this person and I am sure he is going to be honest about COVID19 health concerns in the neighborhood.

The Community search filter is very critical as well, because this gives a community based search option for the user to find a living space matching to his cultural background or matching to his profile preference and social feeds. The accuracy of this filter is achieved through machine learning. The search crawl algorithm should get trained to widen the pattern as per the user's profile.

The UI (Wireframes): Contributor, Visual Intelligence to evaluate the quality of property, age, brokenness & damages. This helps the Customer to search living space without actually visiting the property amidst COVID19 Social Distancing Guidelines.

Space Contributor User Journey to illustrate the error notification using image processing photo validation and approval.



Role Based user registration.

The uploaded photo Is rendered by an Image Processor inbuilt AI tool, To automatically TAG properties to the photo. This will enable the Customer to understand the pros and cons of the Living Space like Quality of rooms, wall etc. The TAGs would be enabled and made intuitive with AI Machine Learning.

Customer Experience Map

User 1 UI Designer and Photographer

The User was asked to map his experience travelling through the UI Screens.

Stage	Research	Searching Properties through Urban Space	Search	Search Accuracy	Connecting with Owners / Contributors	Finalizing a Space	After
Goal	Finding an easy way to locate a rental space	Finding a proper space meeting my requirements	Find space at location which I prefer to move to	Location and Amenities	Managing the communications modes in efficient way	Finalizing the space finding process.	Evaluating the process and outcome.
Thinking	It is time to get find space but which App should I use?	Based on my research this is the best option for me, I hope this stays true.	I hope this saves time. I hope to get an overview of how to search for what I am looking	I need to keep track of things I should consider. I need to see various parameters.	I need to able to talk to them with just single initiative	I hope that I am able to find space I desire. I should communicate properly	I'm glad that I was able to find the space. And I'm happy with it.
Feeling	How daunting. How on earth am I going to choose the best one out of hundreds of Finding my rental space?	I feel excited and motivated. I'm also curious about how it would feel to use this app.	I feel also organized and in control.	I feel a bit uncertain, as I have to get used to how Urban Space functions.	I feel a bit exhausted.	I feel a bit exhausted. I feel it very professional.	I feel relieved and also satisfied that we're able to achieve this excellent outcome.
Doing	Search on the app store or Google. Reading of reviews. Recommendation of colleagues & friends.	I fill out the required information and I start the app.	I search my preferences of location, amenities, security, features, budget.	I revise my preferences and expect the outputs according to it.	I revise my preferences and connect with people if they match.	I check the finalization of the parameters I have checked it for in searching the space	I finalize on sort of the list of search results I receive
Touch Points	 People I know Blogs / Communities Company websites Social media 	 The website of Urban Space Urban Space Mobile application 	 Urban Space web application Notifications of new spaces available 	 Urban Space web application Notifications of matching results 	 Notification of any communication Mode of communicating Easy and common methods 	 Making decision of selection Selection and Finalization method 	Urban Space web applicationNotifications
Pain Points	I'm not sure what reviews to believe. I don't want to pay too much for a broker	I hope I fill out the correct information. I hope I understand the conditions correctly.	I need to find my way in this app, everything is new here. How to do this efficiently?	I hope we don't get too many (irrelevant) search results and we get confused.	Hope the communication is easy, quick and accurate in common way.	I hope I understand of what should be selected and how we should finalize it.	I hope my space is found with all my requirements/needs.
Opportunities	Building strong user communities that create positive reviews.	Allow users to change or preferences of searching spaces without any cost charged.	The design should be intuitive. Instructions should be visible & easily retrievable. Offer a clear help section and (personal) assistance.	Personal assistance can be provided in finding accuracy in search preferences.	No restrictions in communication has to be created.	Offer options to easily search and filter content based on user criteria. Providing an overview based on summarized data.	Options for archiving relevant content and giving feedback regarding experiences that could be useful to other users.

Product Vision

The vision is to help business travelers and job seekers travel with a technology assistant to overcome fear on post COVID19 challenges.

The Urban Space Finder App can help provide the technology assistance to overcome the above challenges.

With the Prototype Wireframes and the Customer Experience Journey feedbacks collected, the next step is to further iterate and move into building this.

An Agile Iterative process is required to build such large social service apps to:

Involve User Feedbacks through the Product Development Life Cycle Reduce Effort and Cut down on cost, by avoid misguided product development. This is possible with iteration, with a User First approach and collecting feedbacks through tests.

