PROJECT PROPOSAL
Hubba

Version 1.3
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Version History

Version	Overview	Date
v1.0	Initial Hubba RFP	September 23, 2022
v1.1	Changes made to the entire document to ensure scope of the product	September 27, 2022
v1.2	Reformat of Cover-Page, Revision of Features and Vision Section	September 27, 2022
v1.3	Polishing Features	September 28, 2022

Glossary

Term	Definition
Host	Authenticated users who create a listing available for renting.
Listing	A workspace created by Hosts that are discoverable and rentable.
CAPTCHA	A verification method to prevent non-human entities from accessing the service.
User	Anyone who is using the service.
Authenticated User	Any user who has registered an account, verified their email, and is currently logged into that account.
Banned user account	A user who is flagged and restricted from certain features of the service.
Event	Any type of actions within the service that may be logged.

Introduction

A majority of people have property that they do not use constantly. Some own private workshops, non-living spaces, large properties, etc. that go unused for days, weeks, or months, depending on the owner's other commitments. The time these properties sit unused is potential money and time wasted.

People who want to do woodworking, but don't have the money or space to buy and/or horse large woodworking machines; people who want to do electrical work, but don't have access to the equipment to assemble and test circuits, even people who just want to host private events need what they need only for short periods of time.

The ideal situation is to help those who need these spaces for short amounts of time to find those that have them. With this, those that have would be able to make some cash on the side renting out unused property, those that need can use the locations or whatever they need for as long as they need, and there less wasted time and money on both ends.

Project Description

Value

Hubba is intended to bring together hobbyists or professionals and people who want to rent out their workspaces that are currently not in use. These types of services are oftentimes currently mixed into classifieds, a sea of useless text and unknown sources. Our intent is to create a single place to list, find, contact, and rent out whatever workspaces are needed, whatever that may be on a convenient and trustworthy platform.

Project Scope[1]

Application Type

Hubba will be a Single-Page Web Application which allows for the majority of processing to be done on our servers rather than on a user's device, increasing accessibility. Hubba also aims to adapt to mobile device platforms, hence Single-Page Web Application provides the best flexibility in the future.

Supported Culture

Hubba's initial release will be in California for product testing and monitoring purposes to ease the product into the market. The localization of the application will be in US English and the Imperial System of measurement to fit within.

Supported Client

Hubba will support the Google Chrome browser (version 104.x (64 bit)) due to its majority share of popularity among internet browsers, currently 65.2% of the world's population (Turner, A. 2022[2]). This ensures the greatest amount of support in its initial implementation.

Target Audience

Our platform targets individuals who lack access to spaces they would otherwise be unable to procure on their own. From woodworking shops to auto-repair shops, it is available for rent from one user to another. This platform is intended to be based in California and restricts user age to 14 years of age or older. In the case of a minor, a guardian must be present to utilize our platform.

Product Scope

Hubba as a complete application will include the following features and their scope:

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[1] As recommended by Vong, along with alterations recommended by Vong.
[2] Turner, A. (2022). *How Many People Have Smartphones Worldwide?* BankMyCell

App Features

Scheduling System

The Scheduling System is to provide all users with a clear view of the availability of a particular listing. A calendar view will provide an unambiguous visual to users rather than any other view, such as a listview, displaying a mess of dates and times. From this feature, authenticated users will be able to rent and add a listing to their cart for the time and date they selected.

Scope
- Can configure calendar view
- Users can view all time periods for a listing
- Users can only set filters for valid time ranges
- Users can filter their calendar view
- Authenticated users can view the estimated rental price
- Authenticated users can select and rent an available time period for a listing

Discovery System

The Discovery System provides a unique interface for users to find and rent listings as well as view project showcases posted by other authenticated users. This feature includes a search function with the ability to add filters to modify a user's search query results. If the user is authenticated, the service will accumulate a user's past search data to provide targeted listings of their interest.

Scope
- Can configure filter/sorting of the list
- Can configure the view of listing
- Users can input text into the search bar
- Searches will return both listings and project showcases
- Users can filter/sort their search query
- Users are provided with a list of listings and projects relevant to their search query

Account System

The Accounts System allows users to unlock certain features within the app to allow the authenticated users to schedule, rent, create, modify, and remove listings. All users will be eligible to create an account with Hubba.

Scope
- Can configure password encryption method
- Can configure user authentication login methods
- Users must make an account in order to rent a listing and list their own
- Users become authenticated users upon account verification and login
- Authenticated users can delete their account
- Users can log in to an account
- Authenticated users can log out of their account
- Authenticated users can reset their password

- Authenticated users can add and update their account information
- Authenticated users can filter/sort their search and rental history
- Authenticated users can view their search and rental history
- Authenticated users can view and update their project showcase
- Authenticated users can cancel their rental

Listing Profile System

The Listing Profile System provides relevant information for a particular listing. Hosts will be able to easily create a public listing for authenticated users to rent by providing information about a workspace, including uploading images and/or video file(s). All users will be able to verify the quality of the item listing through public ratings and comments on the listing Authenticated users will be able to provide their ratings and comments anonymously through a five-star system.

Scope
- Can configure valid image and video files type
- Can configure valid file upload size
- Can configure limit of files per listing
- Hosts can upload image and/or video file(s) when creating and editing a listing or listing draft
- Hosts can add, edit, and remove a listing
- Hosts can save a listing as a draft
- Hosts can modify or delete a listing draft
- Hosts have required fields when creating a listing:
    - Listing Title
    - Description
    - Address/location
    - Image and/or Video file(s)
    - Price
    - Availability
- Hosts can link an item listings to a workspace
- Users can view a listing
    - Listing Title
    - Description
    - Rating(s)
    - Distance
    - Price (based on next available time period)
    - Image and Video file(s)
    - Next available time period
- Authenticated users can create and share a listing
- Authenticated users can provide a comment along with their rating
- Authenticated users can be displayed as anonymous within their rating
- Users can filter/sort previous ratings and comments
- Users can view a breakdown chart of each rating
- Users can report a listing

Notification System

The Notifications System keeps authenticated users up-to-date with any relevant events. As the platform grows, more notifications are bound to flood the system. Authenticated users can avoid being spammed by disabling certain notifications as well as filter and sort in order to find relevant notifications.

Scope
- Can configure notification methods by email or phone
- Can configure notification types for each feature system
- Authenticated users can configure notification methods
- Authenticated users can configure notification types
- Authenticated users can filter/sort notifications by notification type
- Authenticated users should be able to read and clear a notification

Project Showcase System

The Project Showcase System provides users the ability to view previously created projects with the workspace linked. All users will be able to view and like a project showcased in order to bump up a project showcase in the Discovery System where projects and listings can be discovered. However, it is only the authenticated users who have rented the workspace that are able to showcase their project by posting completed images or videos of the project along with an optional description. A comment section will be provided for each project showcase where authenticated users are able to discuss the project being showcased.

Scope
- Can configure valid image and video file type
- Can configure valid file upload size
- Users can view project showcases posted by authenticated users
- Users can create and share a shareable link of a project showcase
- Authenticated users can only create a project showcase for a workspace that they have already rented out
- Authenticated users have required fields when creating a project showcase:
    - Project Title
    - Image and/or Video file(s)
    - Description
    - Associated Workspace
- Project showcase description will have text markdown support to detail project steps
- Authenticated users can create, edit, and remove a project showcase
- Authenticated users can preview and publish a project showcase
- Authenticated users can save a project showcase as a project showcase draft
- Authenticated users can modify or delete a project showcase draft
- Authenticated users can like and comment on a project showcase
- Authenticated users can upvote, downvote, and report a comment
- Authenticated users can report a project being showcased
- Hosts can unlink the project from the associated workspace rented

Competitors

There are few companies that could compete with Hubba in some aspects, but they fall short on features and aspects that we feel are necessary for the more fluid and integrated experience that we are capable of providing.

- **Sparetoolz[3]**

  Sparetoolz is a mobile-only tools renting app where users can rent only tools directly from the tools' owners, specifically focusing on handiwork. On the other hand, Hubba is intended to be a webapp with the possibility of becoming also mobile that is used to rent out a variety of workspaces. Along this, Hubba provides a training feature that allows the hosts to post additional information for the users.

- **Neighbor[4]**

  Neighbor provides a platform to connect storage space's owners with renters. This is a peer-to-peer service that users can search for available storage space to rent. Storage spaces are offered by neighborhood owners who spare their own empty storage to earn extra money. While this service does allow users to rent out storage spaces, Hubba will allow users to rent out workspaces that include the tools within the space. Clients would use the discovery page to find a workshop of their choosing and rent out the entire space for usage.

- **Garagetime[5]**

  Garagetime's network connects home and commercial garages with auto enthusiasts. Users can rent out garage, lifts or auto tools by hours, days, or months to work on their cars from listed availability in their neighborhood. Currently, Garagetime is no longer an active web application.

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[3] *Tool rental app for your neighborhood: Rent tools*. Sparetoolz. (n.d.). Retrieved September 22, 2022, from https://sparetoolz.com/

[4] *Neighbor: The cheaper, closer & safer storage marketplace*. neighbor.com. (n.d.). Retrieved September 22, 2022, from https://www.neighbor.com/

[5] *Rent a DIY garage or lift: Work on your car or motorcycle*. Garagetime. (2021, November 8). Retrieved September 23, 2022, from https://bookgaragetime.com/

Delivery Timeline

Deliverables of the project timeline are as follows:

Registration, Logging	11/12/2022
Authentication, Authorization, Account Recovery	12/17/2022
Website Framework, Notification System, Accounts System	Q1 2023
Listing Profile System, Scheduling System, Discovery System, Project Showcase System	Q2 2023

Vision

Although geared towards small-business owners and individual users in its initial state, Hubba hopes to eventually expand its market both nationally and globally. In order to prepare the application for such an expansion, an increase in both resources and features will be required. It is to that goal that is planned to implement the following improvements listed below once a stable version of the product has been delivered.

Upscaling

On launch, Hubba will strictly be a single-page application. As the platform grows, so will the range of consumers. In today's age, 83.4% of people have smartphones, capable of browsing the web and downloading mobile apps (Turner, A., 2022[6]). As everyone can access our platform through the mobile web, there are those who prefer using mobile apps instead. Hubba aims to cater to this audience in the future as the platform expands.

In addition to a growing range of consumers, Hubba aims to be made available on more than Google Chrome in the future. With around 65.2% of people worldwide using Google Chrome, Hubba will be available to a large majority (Ivan, 2022[7]). However, this statistic was extremely different ten years ago, proving that the market is very susceptible to change. As Hubba plans to stay, we must be adaptable to any fluctuations in the current market.

As the platform traffic increases, Hubba will require more servers and languages available. Hubba will be based in California, meaning United States English will be our only language available on launch. However, as the platform potentially expands to a worldwide audience, we will need more servers allocated as well as languages local to the consumers.

Virtual Workspace Touring System

The Virtual Workspace Touring System provides authenticated users with a 3D digital view of the workspace in order to give these users a better perception of the space they are renting. Hosts are able to upload and link these panoramic images with the associated listing profile of the workspace.

Scope
- Can configure valid panoramic image file type
- Can configure valid panoramic image file upload size
- Hosts can upload and delete virtual workspace images
- Hosts can add, update, and delete digital waypoints to the virtual workspace images
- Hosts can add, update, and delete a description or functions to the digital waypoints
- Users can view the virtual workspace

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[6] Turner, A. (2022). *How Many People Have Smartphones Worldwide?* BankMyCell.

[7] Ivan. (2022, July 20). *Google Chrome Statistics*. TrueList.

Training System

The Training System provides the Host with a tool to upload files to display any necessary information, procedures, or training that is required before operating in the workspace. The authenticated users are able to view these files prior to the scheduled workspace time.

Scope

- Can configure valid image or video file types
- Can configure valid file upload size
- Hosts can upload and delete files
- Hosts can create, update, or delete descriptions associated with the uploaded files
- Hosts can configure whether authenticated users are required to view the uploaded files
- Authenticated users can view the Host's uploaded files and descriptions

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