

Software Requirements Specification

(SRS) Document

Handy Hive

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Version 1

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1. Project General Description

The goal of Handy Hive is to connect homeowners with professional industry providers, such as electricians, plumbers, HVAC technicians, and other home repair specialists. Our platform will help facilitate browsing, booking, and reviewing service providers, ensuring an easy customer and provider experience. The system will include features for customers to find and engage reliable professionals, for providers to showcase their expertise and manage their services, and for administrators to oversee platform operations, moderate content, and analyze service trends.

2. Product Features

Handy Hive is designed to simplify home maintenance and repair service management for both customers and service providers. The key features for the application will be:

Customer Features:

Customer Profile Creation: A customer can create a profile on the platform, providing necessary information such as contact details and service preferences. Customers can also return to modify the profile at any time based on their needs or update contact information.

View Services: Customers can browse the available services on the platform, filtering options by service type (e.g., electrical work, plumbing, HVAC), price range, provider ratings, and location. Customers should be able to view profiles of providers, including previous customer reviews and service history and also check service availability based on provider schedules.

Subscription to Service: Once a customer finds a service or provider that meets their needs, they can book the service technician from a specific time slot. This will add the service to their list of upcoming or booked services.

Reviews: After a service is completed, the customer is prompted to write a review based on their experience, quality, and service. Reviews help future customers make informed decisions and help providers improve their services. Rate the provider on a scale of 1-5. Submit the review, making it available for other customers to view.

Provider Features:

Provider Profile Management: Service providers can create and manage their profiles, including details about their services, pricing, and availability. Profiles can be modified or removed as needed.

Service Listing: Providers can list the services they offer, including pricing, availability, and service descriptions.

Analytics Dashboard: Providers will be able to view an analytics dashboard where service engagement is shown and customer feedback. Also will be able to generate a generic report for business growth strategies.

Review Response: Providers can reply to customer reviews to address concerns and engage with their clientele.

Admin Features:

Admin account creation: The ability to simply create an administrative account that has higher level access to the website than customer or consumer accounts.

Managing customer, and provider accounts: For example banning or suspending accounts that have violated the terms of service. Suspending provider accounts that have invalid or expired licenses till they are recertified or renewed.

Service approval: The ability to manually approve new providers' services. This is important to maintain quality. It would not scale well to manually approve all new services being added everyday. So the manual approval process would only happen till some reputation/trust has been established by the provider following the rules, and providing quality services.

Managing Reviews: An admin will be able to remove any reviews that are nonuseful, hateful, falsified, or inappropriate. As well as the removal of any pictures that could be posted as proof of services rendered that are inappropriate.

Data: An admin will be able to view relevant data about hot services, revenue, user gain, and user loss over a 24 hour period in the form of a percentage. As well as use this data to generate a useful report that is easily human readable.

Customer Functional/Non-Functional Requirements:

FR1: Customers can create and update profiles.

FR2: Customers can browse available services with filters for type and rating.

FR3: Customers can subscribe to services and schedule appointments.

FR4: Customers can rate and review services they have used.

NFR1: Profile updates should reflect immediately in the system.

NFR2: Booking confirmation should be received within 30 seconds.

Customer Scenarios:

Actor: Customer

Description: Creating a profile

Scenario: Customer fills out personal information such as contact information(name, phone number, email address, and location). Fills out required service (electrician, HVAC, etc.). Once the profile is saved and created, the customer is sent to the home page to begin searching. If needed, the profile can be edited later.

Potential Issues: Incorrect information submitted

System State: The app collects the customer information and once finished allows the customer to search and edit profile to meet their needs.

Actor: Customer

Description: View Services

Scenario: Once logged in a customer can go to view services, and filter to the correct home service that is required for maintenance. The app will give a list of available technicians based on

the required service (electrician, HVAC, etc.). The customer will see the service details, location, time slots available, and written reviews.

Potential Issues: There may be no available technicians, incorrect information from the service provider, or possible missing filter based on customer needs.

System State: All the home services will be displayed and filtered services once the customer applies their needed home service.

Actor: Customer

Description: Subscription to Service

Scenario: Once the customer has found their service provider that meets their needs, they can view the profile and select to book the service tech based off of a time slot. The app will save the service request to upcoming appointments, and display the information that she requested.(Service, technician, time slot)

Potential Issues: No available technicians for service, overbooking for a specific service, or possible incorrect service requested.

System State: The system displays necessary information needed for acquiring a service request and then shows the information in upcoming appointments.

Actor: Customer

Description: Reviews

Scenario: Once the customers' needs are met a message is sent to leave a rating of 1-5(1 being lowest, 5 being highest, based on overall satisfaction of service. Then the customer can write a personalized message about service for other customers to see when booking.

Potential Issues: Customer's not responding to review messages or leaving reviews at all, or possible duplication of reviews.

System State: Once the customer writes the review it is displayed for other users to see.

Provider Functional/Non-Functional Requirements:

FR1: Providers can create, modify, and remove their profiles.

FR2: Providers can list services, including pricing and availability.

FR3: Providers can view customer statistics and analytics.

FR4: Providers can respond to customer reviews.

FR5: Providers can generate reports to analyze business growth.

NFR1: Services listings should be searchable in under ~2 seconds.

NFR2: Provider reports should be generated within 30 seconds.

NFR3: Customer interactions and reviews must be logged for future reference.

Provider Scenarios:

Actor: Provider

Description: Registering as a service provider.

Scenario: Provider enters business details, uploads license, and submits for admin approval. Admin verifies credentials before approving.

Potential Issues: Unverified providers attempting to list services. A verification process should prevent fake applications.

System State: Approved providers can create service listings that can demonstrate deals or promotions running for the company.

Actor: Provider

Description: Adding and updating service offerings.

Scenario: Provider lists a service with pricing, availability, and descriptions. Updates can be made at any time.

Potential Issues: Incomplete service descriptions could lead to customer confusion. Required fields should be implemented to ensure clarity.

System State: Customers can view and book listed services based on the contact information and availability.

Actor: Provider

Description: Engaging with customer feedback.

Scenario: Provider addresses customer concerns, acknowledges issues, or thanks customers for positive reviews.

Potential Issues: Negative reviews could impact reputation. Make sure there are restrictions and guidelines for responses to mitigate damage.

System State: Responses are publicly visible next to their customer reviews.

Admin Functional/Non-Functional Requirements:

FR0: The app will allow the creation of admin accounts

FR1: The app will allow for admins to ban/suspend user or provider accounts

FR2: The app will allow for admins to approve of services, and licenses of providers

FR3: The app will allow admins to remove inappropriate reviews or content

FR4: The app will allow admins access to site statistics

FR5: The app will allow for admins to use the gathered statistics to generate a report

NFR0: Reports should be able to be generated in less than 30 seconds

NFR1: Authentication of provider licenses in 24 hours or less

NFR2: The implementation of customer, and provider privacy. We will restrict any sensitive data to only being able to be viewed by the respective customer or provider.

Admin Scenarios:

Actor: Admin

Use Case: Admin account creation:

Description: The creation of an admin account

Assumption: Part of the dev team, and has higher level access to the websites inner-workings

Scenario: The admin will be able to create their account just like any other standard user. Once it's confirmed that it's their account. It can then be elevated to an admin account from our side.

What can go wrong?: Elevation of the wrong account is always a possibility, but should be just as easy to fix. Since no actual admin account exists and instead is more like a regular account with admin privileges. The privileges can just be revoked.

System State: After completion there should be a new account with administrative privileges.

Actor: Admin

Use Case: Manage customer, and provider accounts

Description: The moderation of all accounts on the site

Assumption: A moderator with admin privileges, that is logged in and is capable of navigating, removing, or suspending accounts.

Scenario: Admin's will be presented with options that only they can view with their administrative privileges when viewing customer or provider accounts. For providers they will be able to see license submissions that need approval. For customers they will have a few options to suspend, or remove accounts.

What can go wrong?: Accidental removal or suspension of a valid account, accidental disapproval of valid licenses. A good way to circumvent this is a second confirmation pop-up that restates the name of the account to make sure this is the right one to suspend or disapprove.

System State: Licenses should be approved, and they should display as such. Accounts that were removed or suspended should no longer be able to login to their account.

Actor: Admin

Use Case: Service approval

Description: The moderation of high risk providers

Assumption: A moderator with admin privileges, that is logged in and is capable of navigating approving or disapproving services.

Scenario: A new provider has submitted services that they would like to render to customers. Admin's should see a screen with a list of new providers, and the service they listed. Providers will only be able to submit these services if they have already gotten their license approved. Admin's should be able to quickly approve or disapprove any new services with a click of a button.

What could go wrong?: Accidentally approving a service that is inappropriate, inaccurate, or made up. The ability to rescind approvals would probably be necessary not only for new providers, but also for expired licenses.

System state: Providers should be able to visibly see that a service is now approved and publicly available for viewing on the web app.

Actor: Admin

Use Case: Managing Reviews

Description: The moderation of any and all content posted in a review

Assumption: A moderator with admin privileges, that is logged in and is capable of navigating, and removing problematic customer content.

Scenario: A comment was reported by a provider for being inappropriate or inaccurate. Upon review of the report an admin will either remove the contents of the comment, or leave it up as proof of work poorly rendered by a provider.

System state: After review the harmful comment will be gone from the web app or approved by an administrator.

Actor: Admin

Use Case: Data

Description: The collection of, and uses for our site wide data.

Assumption: An admin that is logged in and has access to the data being gathered from their account page.

Scenario: A report for the month needs to be generated, and reviewed by the team. Any administrator should be able to access this data and view it through the app. Either a tab based layout or a hamburger menu will give admins the option to view the data. From that page they will be able to print it out as a physical copy if needed.

System state: Nothing should noticeably change on the web app before or after a data report is generated.