Software Requirements Specification

for

GoHelp

Version 2.0 approved

Prepared by team Kryptonights

A V S ADITYAVARHDAN, DHANUSH RH, VINAY YADDANAPUDI, KANDULA VENKATESWAR REDDY, PEDADA VENKATA HARSHA

Indian Institute of Information Technology Kottayam

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Revision History

| Name | Date | Reason For Changes | Version |
|--|------------|---|---------|
| Software Requirements Specification for GoHelp, An Interaction Platform | 27-10-2020 | Initial SRS Document | 1.0 |
| Revised Todo list | 5-10-2020 | Added Worker Reports, Customer Reports, added twilio OTP services as dependency | 1.1 |
| Revised Other Requirements | 10-10-2020 | Other Requirements are added keeping in view of deployment constraints | 2.0 |

1.Introduction

1.1.Purpose

This is the Software Requirements Specification (SRS) document (Version 1.0) for GoHelp, A Customer Worker Interaction platform. This document is intended to communicate the requirements (functional, nonfunctional and others) of GoHelp to the readers.

This document provides:

- a) An overview of GoHelp platform.
- b) A definition for GoHelp's External Interface Requirements.
- c) A specification of salient features of GoHelp's platform. It covers functional, non functional and other requirements

1.2.Document Conventions

- We underlined some of the salient features of our platform.
- In this documents User refers both workers and Customers.
- Worker is the person who has ability to do the work for the customer and Customer is the person who hires workers for a work with wages.
- The priorities of higher level requirements are assumed to be inherited by the detailed requirements.
- Every Requirement provided has its own significance in the platform.
- Requirements which are yet to be determined are represented with the Abbrevation TBD in brackets.

1.3.Intended Audience and Reading Suggestions

This document is intended for the Stakeholders under System Architects, Client Managers, Architect Developers, Software Developers, Marketing Staff, Users, Testers, Quality Assurance Teams. This document was created by holding the view of different stakeholders of this platform at different sections assuring the world's best-in-class experience for end-users.

Section 1 is the metadata of GoHelp's Software Requirements Specification which grants an overview of specific sections invoked in this SRS Document, scope, and references utilized in preparing the document.

Section 2 of SRS provides a brief overview of the GoHelp platform. It includes product description, user classes, and its characteristics, the operating environment, design overview, and implementation constraints, user assumptions, and the dependencies of our platform. This section is intended for stakeholders like Client Managers, System end users, Client Engineers, System Architects.

Section 3 explains the External Interface requirements of the GoHelp Platform. This includes interaction of different interfaces like user interface, system interface, hardware interface, software interface, communication interface.... This section is intended for System End Users, Client Engineers, System Architects, Software Developers.

Section 4 provides information on System features and functional requirements. Section 5 gives a brief idea on all non-functional requirements regarding safety, security, quality and business attributes of the platform. Other requirements of the GoHelp platform are provided in the section 6.

1.4.Product Scope

GoHelp software is mainly introduced to maintain a chain of workers residing in Rural and Semi Urban Areas in India. These workers are efficient in providing quality work but they don't have a right hands to join. They usually work under contractors and get less working wages. The main agenda of this platform is to eliminate the middlemen contractors and make a communication between the customer and worker directly.

GoHelp software helps users in electing best worker to work for relatively lower amounts. Many skilled workers can interact with new customers and can improve their working abilities earning more income than usual. This helps us to maintain a chain of workers, providing job opportunity with a fixed wages per hour work.

1.5.References

No References.

2.Overall Description

2.1.Product Perspective

GoHelp is an interactive platform introducing workers to interact directly with the customers. This product is completely new in the market. We interacted with many workers before years and came to know that the contractors will provide a meagre amounts for the huge work done by the workers. In-fact their ratio will be 40 - 50% of the total amount paid by the customer. These workers are paid once in a month. In some cases the contractors won't respond properly if workers demand more for the work.

Keeping all these working situations of workers in mind, our team kryptonights wished to bring the new working style of the workers invoking a <u>direct communication</u> between the worker and the customers eliminating the involvement of third parties like contractors, mediators, brokers. Context level diagram of the project is given in the figure 1.

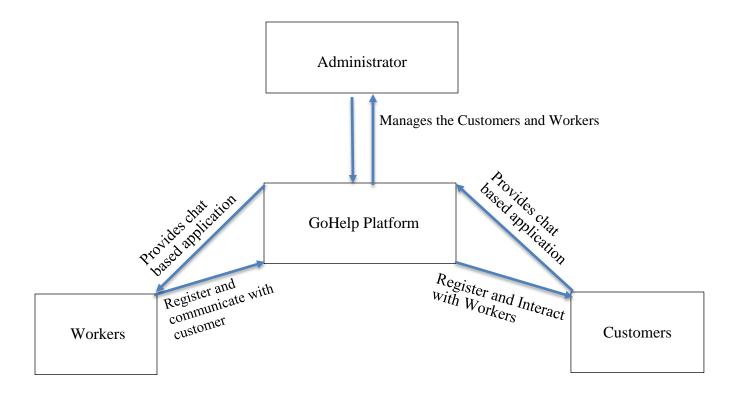


Fig 1: Context Level Diagram of GoHelp

2.2.Product Functions

We gathered a list of functionalities that our platform possess.

- Workers and Customers can Register into the site
- Workers and Customers can update their profile tab.
- Worker can update his skill tab
- Customer can search in the catalogue of works provided and initiate communication with workers displayed in the site.
- Worker and customer communicates in the platform and fix work timings and amount.
- Worker and customer can provide feedback in the system for the service.
- Worker / Customer can block other customer / worker with a necessary proof of evidence.
- Worker and Customers can check feedbacks provided.
- Admin can remove a worker or customer.
- Admin can monitor the chat between worker / customer.
- Admin verifies the proof document upload by worker / customer.
- Emails are send to worker when a customer start interaction.
- Customer, Admin and worker contains a dashboard to track their information.
- Workers, Customer can get their usage reports.
- Admin can generate the overall user statistics, workers statistics, Worker Rating reports.

2.3.User Classes and Characteristics

There are mainly three users in the application.

Administrator:

In this GoHelp platform, admin can able to add users and workers in the site. He can modify the details of user and workers. He can be able to restrict the activities of workers and users in the site. He can verify the documents uploaded for their proof. He can be able to read the chats between user and worker. He can announce information to all the users / workers or a specific user or worker.

Customers:

In this platform, customers can able to create accounts and upload necessary proof documents. He can check the work catalogue contains different workers and their skills and can initiate chat with the worker. He can chat with multiple workers and can fix the amount for the service done by worker. He can provide feedback for the worker. Customers can update their profile provided in the platform. He can block the worker.

Workers:

In the GoHelp platform, workers can able to create accounts and upload necessary proof documents. Worker can make his own profile to showcase to the customer. He can chat with multiple customers and can fix a timings. He can provide a feedback to a customer. He can block the customer.

All these three user classes mentioned are essential for the GoHelp Platform.

2.4.Operating Environment

GoHelp is a web based application. It works in Chrome, FireFox, Opera browsers. Some of the effective versions of web browsers are Google Chrome (Chrome 2018), Mozilla Firefox (version 59.0.1), and Internet Explorer (version 11). Users will be able to use the platform using desktop and laptop computers, and mobile devices.

2.5.Design and Implementation Constraints

Currently we are not invoking the payment system in this software. Users must pay to the customers only after the work is completed. Developers can skip the payment interface and it will be taken in a later stage.

Developers must use Django Framework with Postgresql Database with Frontend Bootstrap. They must use google SMTP server to trigger email notifications. Heroku cloud service provides first 10000 database rows for free.

2.6. User Documentation

User FAQ will be provided in the system and they can contact support.gohelp@gmail.com for more information.

2.7. Assumptions and Dependencies

We are using whitenoise (third party application) in Django at deployment which handles static pages in deployment. We will be using S3 buckets in amazon web services to store the user uploaded documents. We will be utilizing the Heroku cloud services for deploying the application. We use whitenoise and S3 buckets to serve the static files (images, stylesheets).

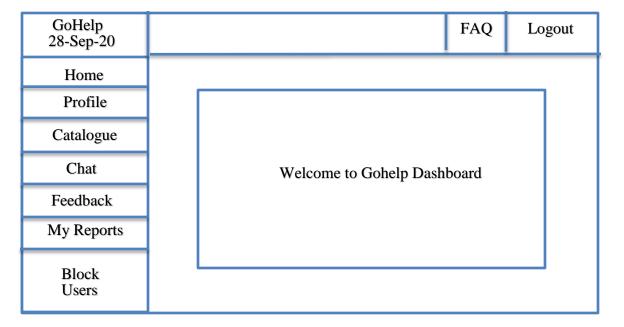
We use twilio service to deliver One Time Passwords to mobiles. We use the initial \$15 dollar credit from the twilio to serve the OTP.

3.External Interface Requirements

3.1.User Interfaces

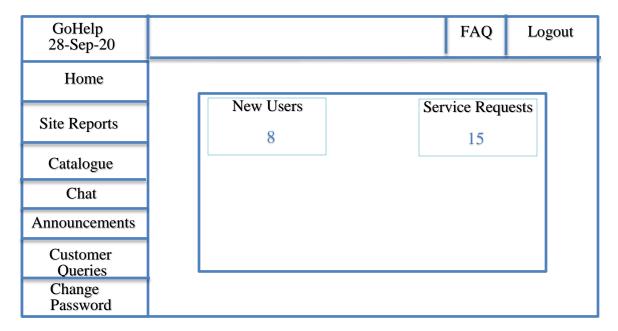
3.1.1 Customer / Worker Interface:

The customers and the workers are provided with their own <u>dashboard</u> as follows.



3.1.2 Administrator Interface:

The administrator is provided with a *dashboard* as follows. (TBD)



3.2. Hardware Interfaces

GoHelp platform is a web based application. Web / Mobile browsers are sufficient to access this platform. A printer is necessary to print the reports generated by Administrator.

3.3.Software Interfaces

This application is connected to PostgreSQL Database (version 12) for storing the data. We use PgAdmin4 (version 4.23) is a Graphical User Interface used to connect to Postgresql. We use pillow module to serve the file and image uploads by the user. We use Amazon Simple Storage Service to store the user uploaded files. We use Heroku servers to launch our application where Heroku provides PostgreSOL database in the cloud. Frameworks will be used for web interfaces.

3.4.Communications Interfaces

GoHelp platform uses Google SMTP Server to send email notifications to the user. We use HTTP protocols in the entire platform to send responses to the user request. We adopt FTP to upload user documents in S3 buckets. User form data will be transferred using HTTP-POST method and search data will be transferred using HTTP-GET method. All user passwords are encrypted in the database.

4.System Features

All the necessary system features with a crisp explanations are given below.

4.1. User Registration

4.1.1 Description and Priority

Users must register into the platform to use the services offered. This is a high priority feature.

4.1.2 Stimulus/Response Sequences

Users are provided a registration form to fill the necessary details. Once their details are filled, these details are send to database and a One Time Password will be send to their emails and a confirmation message along with validation page is sent as a response.

4.1.3 Functional Requirements

4.1.3.1 Customer Registration

| GoHelp/SRS/4.1 User | Registration/ 4.1.3.1 Customer Registration |
|---------------------|--|
| Function | Registers User as a customer |
| Description | Allows user to register himself as a customer and joins in the platform as a <i>service requestor</i> |
| Inputs | First Name, Last Name, Age, Date of Birth, Address, Proof of Residence, Email Id, Phone Number, Alternate Contact Number, User Name, password, confirm password, photograph, checkbox containing Terms and Conditions. |
| Source | Inputs from field in customer registration form |
| Output | User Account created with unique identity. |
| Destination | Email Verification Page |
| Action | All Input fields are validated. If the user inputs are valid, create user account and the new user will be allowed to move to email verification page. If any input is invalid, alert message will be triggered. |
| Requirements | No Requirements. |
| Pre-Condition | Customer must possess age above 18 years. Email ID and mobile numbers, Address must be entered correctly. |
| Post-Condition | New User account with a unique id. |
| Side Effects | None |

4.1.3.2 Worker Registration

| GoHelp/SRS/4.1 User Registration/ 4.1.3.2 Worker Registration | | |
|---|---|--|
| Function | Registers User as a worker | |
| Description | Allows user to register himself as a worker and joins in the platform as a <i>service provider</i> | |
| Inputs | First Name, Last Name, Age, Date of Birth, Address, Proof of Residence, Email Id, Phone Number, Alternate Contact | |

| | Number, User Name, password, confirm password, photograph, checkbox containing Terms and Conditions. |
|----------------|--|
| Source | Inputs from field in worker registration form |
| Output | User Account created with unique identity. |
| Destination | Email Verification Page |
| Action | All Input fields are validated. If the user inputs are valid, create user account and the new user will be allowed to move to email verification page. If any input is invalid, alert message will be triggered. |
| Requirements | No requirements |
| Pre-Condition | Workers must possess age above 25 years. Email ID and mobile numbers, Address must be entered correctly. |
| Post-Condition | New User account with a unique id. This account is not yet verified. |
| Side Effects | None |

4.2. Email Verification

Description and Priority

Users must verify their email ID in the platform to use the services offered. This is a high priority feature.
4.2.2 Stimu

Stimulus/Response Sequences

Users are provided a validation form to fill the One Time Password received to their email. Once the OTP is correctly entered he will be successfully allowed to login into the system.

4.2.3 Functional Requirements

4.2.3.1 OTP Validation

| GoHelp/SRS/4.2 Email Verification/ 4.2.3.1 OTP Validation | | |
|---|---|--|
| Function | Validates the Email ID provided at the time of registration | |
| Description | Allows user to enter the One Time Password received to their email ID for verification. | |
| Inputs | OTP Number | |
| Source | Inputs from field in validation form | |
| Output | Verification status will be displayed. | |
| Destination | Home Page | |
| Action | If the OTP entered by the user and triggered by the system is same the verification status will be updated to verified otherwise he will be given a resend option to resend the OTP to his email again. | |
| Requirements | No Requirements. | |
| Pre-Condition | Email ID must be in working. | |
| Post-Condition | New User account with a unique id. | |
| Side Effects | Sometimes OTP might not be triggered due to high load in SMTP Servers. This can cause user to Resend the code and can make him to wait for some more time. | |

4.2.3.2 OTP Resend

| GoHelp/SRS/4.2 Em | ail Verification/ 4.2.3.2 OTP Resend |
|-------------------|--|
| Function | Resend the One Time Password |
| Description | User can get the Resend Login Code to login into the system |
| Inputs | No Inputs |
| Source | Email Verification Page |
| Output | OTP will be resend to his mail |
| Destination | Email Verification Page |
| Action | If the OTP re - entered by the user and triggered by the system is same the verification status will be updated to verified otherwise he will be given a resend option to resend the OTP to his email again. |
| Requirements | No Requirements. |
| Pre-Condition | Email ID must be in working. |
| Post-Condition | New User account with a unique id verified. |
| Side Effects | Sometimes OTP might not be triggered due to high load in SMTP Servers. This can cause user to Reuse the same functionality and user must wait for some more time. |

4.3. Login & Logout

4.3.1 Description and Priority

Users must login into the system to start requesting the services.

4.3.2 Stimulus/Response Sequences

Users will enter a username and password. These passwords are encrypted and checked with the database. Once user loggedin, he will be redirected to his / her dashboard based on his type (worker, customer, admin).

4.3.3 Functional Requirements

4.3.3.1 Login System

| GoHelp/SRS/4.3 Login & Logout/ 4.3.3.1 Login System | | |
|---|---|--|
| Function | User will be logged in to the system | |
| Description | User must enter userid and Password to access their dashboard | |
| Inputs | Username, Password | |
| Source | Inputs from field in login form | |
| Output | Login status will be displayed. | |
| Destination | Dashboard | |
| Action | Username, Password entered by the user will be validated. If login credentials are valid, he will be directed to dashboard otherwise he will be requested to login again to the application | |
| Requirements | No Requirements. | |
| Pre-Condition | Must be registered before login in | |
| Post-Condition | User will be logged in | |
| Side Effects | No Side effects | |

4.3.3.2 Forgot Password

| GoHelp/SRS/4.3 Login & Logout/ 4.3.3.2 Forgot Password | | |
|--|---|--|
| Function | User can change his password | |
| Description | User can change his password by providing the new password to his account | |
| Inputs | New Password, Confirm New Password | |
| Source | Inputs from field in forgot password form | |
| Output | Password Change status will be displayed | |
| Destination | Login Page | |
| Action | User OTP send to the email will be validated before changing the password. Once OTP Verification, he can enter the new password and the confirm password. | |
| Requirements | New password must be at least 8 character length, should contain a symbol, one uppercase and lower case letters. | |
| Pre-Condition | Must complete 4.2.3.1 OTP Validation before performing this functionality. | |
| Post-Condition | User password will be changed and user will be logged out if logged in already. | |
| Side Effects | No side effects. | |

4.3.3.3 Remember Username

| GoHelp/SRS/4.3 Login & Logout/ 4.3.3.3 Remember Username | | |
|--|---|--|
| Function | Remember username | |
| Description | User can allow application to remember user's username so that he can enter the password directly without entering username | |
| Inputs | Checkbox | |
| Source | Inputs from Login Form | |
| Output | Login Status will be displayed | |
| Destination | Dashboard | |
| Action | A cookie will be stored in the user browser containing username which has a validity time of 7days. | |
| Requirements | User must accept cookies in the browser. | |
| Pre-Condition | User must be registered in the platform | |
| Post-Condition | User logged into the system | |
| Side Effects | No Side Effects | |

4.3.3.4 Logout

| GoHelp/SRS/4.3 I | Login & Logout/ 4.3.3.4 Logout |
|------------------|---|
| Function | Logout the user |
| Description | This functionality helps to logout the user from the platform |
| Inputs | Button |
| Source | Dashboard |
| Output | Logout Status will be displayed |
| Destination | Home Page |
| Action | All Sessions will be disabled and user will be logged out |
| | from the system |
| Requirements | No Requirements |

| Pre-Condition | User must logged into the system |
|----------------|----------------------------------|
| Post-Condition | User Logged out from the system |
| Side Effects | No Side Effects |

4.4. Profile

4.4.1 Description and Priority

User can update his profile to keep his detail up to date in the platform. It is a high functional requirement for customer and users to avoid issues to workers while reaching customers.

4.4.2 Stimulus/Response Sequences

User will be provided with details like address, phone number, email address to which are already filled with old data provided by the user.

4.4.3 Functional Requirements

4.4.3.1 User Profile Update

| GoHelp/SRS/4.4 Pro | ofile/ 4.4.3.1 Login System |
|--------------------|---|
| Function | User can update his / her profile |
| Description | User will be provided a form where all his user profile data saved will be shown. He can change them and click submit to update the fields. This can be done by both worker and the customer |
| Inputs | Address, Mobile Number, Email ID |
| Source | Inputs from field in profile form |
| Output | Profile Updation status will be displayed |
| Destination | Dashboard |
| Action | Address will be directly updated into the system. Email / Mobile number will be validated before updating into the system. |
| Requirements | Address, Mobile Number and email Should be working / valid. |
| Pre-Condition | Must logged into the system |
| Post-Condition | If email / mobile is validated users must redirect to GoHelp / SRS/ 4.1 Email Verification/ 4.2.3.1 OTP Validation. |
| Side Effects | No Side effects. |

4.4.3.2 Skills Addition

| GoHelp/SRS/4.4 Profile/ 4.4.3.2 Skill Addtion | |
|---|---|
| Function | Worker can add his skills |
| Description | Workers logged into the system are provided with some skillsets which are commonly handled by many users in the platform. They must choose their primary, secondary skills to add their information in the catalogue |
| Inputs | Primary Skills, Secondary Skills, Additional Skills, Past work experience per skill, Testimonials (TBD), Charges per skill per hour. |

| Source | Inputs from skill addition form |
|----------------|---|
| Output | Skill Addition status will be shown. |
| Destination | Dashboard |
| Action | Once skills are entered, they will be uploaded to the database. Worker can't update their ratings as they are |
| | provided by customer. |
| Requirements | No Requirements |
| Pre-Condition | Must login into the system and email must be verified. |
| Post-Condition | No Post Conditions |
| Side Effects | No side effects. |

4.4.3.3 Skills Updation

| GoHelp/SRS/4.4 Profile/ 4.4.3.3 Skill Updation | |
|--|--|
| Function | Worker can update his skills |
| Description | Workers are shown with the past skills present in the platform. They can change their primary, secondary skills to udpate their information in the catalogue |
| Inputs | Primary Skills, Secondary Skills, Additional Skills, Past work experience per skill, Testimonials (TBD), Charges per skill per hour. |
| Source | Inputs from skill update form |
| Output | Skill Update status will be shown. |
| Destination | Dashboard |
| Action | Once skills are entered, they will be updated to the database. Worker can't update their ratings as they are provided by customer. |
| Requirements | No Requirements |
| Pre-Condition | Must login into the system and email must be verified. |
| Post-Condition | No Post Conditions |
| Side Effects | No side effects. |

4.5. Catalogue

4.5.1 Description and Priority

Customers can check the catalogue to know no of workers mapped to the workers skills, wages requested by workers, past testimonials given by the people. This is a high priority functional requirement to be implemented in the platform.

4.5.2 Stimulus/Response Sequences

User can check the catalogue, filters are provided to check the workers to work with a given price range, skills, having more testimonials, ratings...,

4.5.3 Functional Requirements

4.5.3.1 Display Catalogue

| GoHelp/SRS/4.5 Catalogue/ 4.5.3.1 Display Catalogue | |
|---|---|
| Function | Display skills catalogue |
| Description | User can check the catalogue containing workers skills, testimonials, ratings, work experience, cost. |
| Inputs | Checkboxes containing Filters and click to contact button to start chatting |
| Source | Inputs from field in Catalogue |
| Output | Updated Catalogue with selected filters will be shown. |
| Destination | Chat / Catalogue |
| Action | Once the inputs are taken from the user, they have to be extracted and database should be queried to get the correct results. |
| Requirements | No Requirements |
| Pre-Condition | User must logged into the system and verified his email Id. |
| Post-Condition | User will be redirected to same functionality if filters are selected and will be redirected to GoHelp / SRS / 4.6 Chat / 4.6.3.1 Chatting Window functionality |
| Side Effects | No Side Effects |

4.5.3.2 Wage Filter

| GoHelp/SRS/4.5 Catalogue/ 4.5.3.2 Wage Filter | |
|---|---|
| Function | Display skills catalogue with Wages filtered |
| Description | User can use wage filter to extract the workers who can complete their work within the range provided. |
| Inputs | Wages range will be given along with Increasing / Decreasing order to display the workers. |
| Source | Inputs from filter menu |
| Output | Updated Catalogue with selected filters will be shown |
| Destination | Catalogue |
| Action | Once the filter inputs are taken from the user, the database is queried to get the correct results. |
| Requirements | Workers with verified emails are displayed. |
| Pre-Condition | User must logged into the system and verified his email Id. |
| Post-Condition | User will be redirected to same functionality if filters are selected and will be redirected to GoHelp / SRS / 4.6 Chat / 4.6.3.1 Chatting Window functionality |
| Side Effects | No Side Effects |

4.5.3.3 Skills Filter

| GoHelp/SRS/4.5 Catalogue/ 4.5.3.3 Skills Filter | |
|---|--|
| Function | Display skills catalogue with Skills filtered |
| Description | User can use skill filter to extract the workers containing primary / secondary skill as per the filter input. |
| Inputs | A checkbox of skills are provided. |

| Source | Inputs from filter menu |
|----------------|--|
| Output | Updated Catalogue with selected filters will be shown. The filter works by selecting workers having primary skills as selected filters first then secondary skills and additional skills. Internally the workers with higher ratings are shown in each of the sub-section. |
| Destination | Catalogue |
| Action | Once the filter inputs are taken from the user, the database is queried to get the correct results. |
| Requirements | No Requirements |
| Pre-Condition | User must logged into the system and verified his email Id. |
| Post-Condition | User will be redirected to same functionality if filters are selected and will be redirected to GoHelp / SRS / 4.6 Chat / 4.6.3.1 Chatting Window functionality |
| Side Effects | No Side Effects |

4.5.3.4 Ratings Filter

| GoHelp/SRS/4.5 Catalogue/ 4.5.3.4 Ratings Filter | |
|--|---|
| Function | Display skills catalogue filtered on ratings |
| Description | User can use ratings filter to extract the workers with the rating score provided. |
| Inputs | Radio Buttons 1, 2, 3, 3.5, 4, 4.5, 5 |
| Source | Inputs from filter menu |
| Output | Updated Catalogue with selected filters will be shown. Workers with high experience and rating are shown followed by rest. |
| Destination | Catalogue |
| Action | Once the filter inputs are taken from the user, the database is queried to get the workers having ratings greater than or equal to the provided input. |
| Requirements | No Requirements |
| Pre-Condition | User must logged into the system and verified his email Id. |
| Post-Condition | User will be redirected to same functionality if filters are selected and will be redirected to GoHelp / SRS / 4.6 Chat / 4.6.3.1 Chatting Window functionality |
| Side Effects | No Side Effects |

4.6. Chat Window

4.6.1 Description and Priority

Customers once after checking the catalogue can contact the worker selected. The worker can communicate with the customer through chat. This page should work dynamically. This is a very high priority functional requirement to be implemented in the platform.

4.6.2 Stimulus/Response Sequences

User can check the catalogue, filters are provided to check the workers to work with a given price range, skills, having more testimonials, ratings...,

4.6.3 Functional Requirements

4.6.3.1 Display Chat

| GoHelp/SRS/4.6 Chat Window/ 4.6.3.1 Display Chat | |
|--|---|
| Function | Display the Chat window |
| Description | User can open the previous chat created in the channels application |
| Inputs | A Textbox |
| Source | Inputs from chat box |
| Output | Time of Delivery will be displayed |
| Destination | Chat |
| Action | Once the inputs are taken from the user, they are send to the room created in the application and an email is triggered when customer just started the chat with the worker. The users will must be notified when the message is not delivered in the chat. |
| Requirements | Room must be created in channels |
| Pre-Condition | Customer must click to chat button from the catalogue. |
| Post-Condition | Chat should be delivered to the customer |
| Side Effects | Improper internet connection leads to failure in message delivery. |

4.6.3.2 Close Chat

| GoHelp/SRS/4.6 Chat Window / 4.6.3.2 Close Chat | |
|---|---|
| Function | Close the Chat window |
| Description | User can close the previous chat created in the channels application |
| Inputs | Once the End chat button is clicked Comments are taken. |
| Source | Input from options in chat window |
| Output | Chat closing message will be shown |
| Destination | Dashboard |
| Action | Once the chat is closed, both the customer and the worker will get the mail notification along with the comments mentioned. |
| Requirements | Chat window must be active |
| Pre-Condition | No preconditions |
| Post-Condition | Email Should be received by the customer and the user. |
| Side Effects | No Side effects. |

4.6.3.3 Fix Appointment

| GoHelp/SRS/4.6 Chat Window / 4.6.3.3 Fix Appointment | |
|--|--|
| Function | Customer can fix the appointment with the worker |
| Description | After discussing in the chat, customer can fix the appointment with the worker |
| Inputs | Amount Fixed, Working Hours Settled, Appointment Date and Time |

| Source | Input from fix appointment form |
|----------------|--|
| Output | Appointment will be created |
| Destination | Dashboard |
| Action | Once the appointment is fixed, both the customer and the worker will get the mail notification regarding the working hours, amount fixed, date and time. |
| Requirements | Chat window must be active |
| Pre-Condition | No preconditions |
| Post-Condition | Email Should be received by the customer and the user. |
| Side Effects | No Side effects. |

4.6.3.4 Change Appointment Timings

| GoHelp/SRS/4.6 Chat | Window / 4.6.3.4 Change Appointment Timings |
|-----------------------------|--|
| Function | Customer can change the appointment timings with the worker |
| Description | After discussing in the chat, customer can change the appointment with the worker |
| Inputs | Once the change Appointment Button is clicked Customer can update, Amount Fixed Working Hours Settled Appointment Date and Time |
| Source | Input from fix appointment form |
| Output | Appointment will be created |
| Destination | Dashboard |
| Action | Once the appointment is changed, both the customer and the worker will get the mail notification regarding the working hours, amount fixed, date and time. |
| Requirements | Chat window must be active |
| Pre-Condition Pre-Condition | Appointment must be fixed already |
| Post-Condition | Email Should be received by the customer and the user. |
| Side Effects | No Side effects. |

4.7. Feedback

4.7.1 Description and Priority

Customer can provide feedback for the service provided by the worker and worker can provide a feedback to the customer behavior.

4.7.2 Stimulus/Response Sequences

Customer can provide the feedback once the service is done. His feedback will be successfully stored and can be updated in the catalogue as a testimonial for workers (TBD).

4.7.3 Functional Requirements

4.7.3.1 Customer Feedback

| GoHelp/SRS/4.7 Feed | back/ 4.7.3.1 Customer Feedback |
|---------------------|---|
| Function | Customer can provide feedback for the service |
| Description | Once the worker completes the work, customer can provide a feedback for the worker. |
| Inputs | Work Feedback: Quality (Slider 1 - 5) Work Completed within time Polite in speaking Overall Rating Testimonial (Yes / No) If yes Testimonials |
| Source | Input from Customer feedback form |
| Output | Feedback will be saved and success message will be shown |
| Destination | Dashboard |
| Action | Once the feedback is provided, data must be uploaded to the feedback table and the ratings must be updated to the worker |
| Requirements | Appointment must be fixed. |
| Pre-Condition | User must logged into the system |
| Post-Condition | No Post Conditions |
| Side Effects | No Side effects. |

4.7.3.2 Worker Feedback

| GoHelp/SRS/4.7 Feed | lback/ 4.7.3.2 Worker Feedback |
|---------------------|--|
| Function | Worker can provide feedback on Customer |
| Description | Once the worker completes the worker, worker can provide a feedback on customer. |
| Inputs | Work Feedback: (Slider Range 1 - 5) Customer Response) Customer Behaviour Customer Support Overall Rating |
| Source | Input from Worker feedback form |
| Output | Feedback will be saved and success message will be shown |
| Destination | Dashboard |
| Action | Once the feedback is provided, data must be uploaded to the feedback table and the ratings must be updated to the customer |
| Requirements | Appointment must be fixed. |
| Pre-Condition | User must logged into the system |
| Post-Condition | No Post Conditions |
| Side Effects | No Side effects. |

4.8. Blocking

4.8.1 Description and Priority

Customer can block worker if he is not responding properly and worker can block customer if he is not giving correct information

4.8.2 Stimulus/Response Sequences

Customer and worker can both fill a form and can block the other user with a prior proof of statement. Chat Screenshots are preferred

4.8.3 Functional Requirements

4.8.3.1 Block User

| GoHelp/SRS/4.8 Bloc | king/ 4.8.3.1 Block User |
|---------------------|---|
| Function | Customer / worker can block another customer / worker |
| Description | A customer or a worker can block another worker or customer if they are not polite in their conversations |
| Inputs | Block Form: |
| - | Customer / Worker Username |
| | Reason to Block |
| | Proof of Evidence |
| Source | Input from Block form |
| Output | Blocking requests are saved in the database |
| Destination | Dashboard |
| Action | Once the block request is provided by the customer / worker the message will be passed to admin dashboard to review and take necessary actions. |
| Requirements | No requirements |
| Pre-Condition | Worker / Customer must use the chat application. |
| Post-Condition | New Block request must be shown to the admin |
| Side Effects | No Side effects. |

4.8.3.2 Admin Review

| GoHelp/SRS/4.8 Bl | locking/ 4.8.3.2 Admin Review |
|-------------------|---|
| Function | Admin reviews the block requests |
| Description | Admin can review the block request provided by the workers / customers and can communicate with the worker on his block through email only. |
| Inputs | Confirm Block Form: |
| - | Reason to Block |
| Source | Input from Admin Review form |
| Output | User account will be blocked |
| Destination | Dashboard |
| Action | Once the block is confirmed user can no longer access to the services until the block is removed by the admin. A mail will be sent to the blocked user with a reason provided by admin in the form. |
| Requirements | Admin must check the block request thoroughly |

| Pre-Condition | Admin must receive a block request |
|----------------|--|
| Post-Condition | Email Notification must be shared to that blocked person |
| Side Effects | No Side effects. |

4.9. Report Generation (TBD)

4.9.1 Description and Priority

Admin can generate reports on Users, Services provided, Worker Ratings, Wages Generated...,

4.9.2

Stimulus/Response SequencesAdmin selects the report tab and select the different dropdown options provided to download the different reports provided in the system.

4.9.3 Functional Requirements

4.9.3.1 Customer Report

| GoHelp/SRS/4.9 Report Generation/ 4.9.3.1 Customer Report | |
|---|---|
| Function | Admin can download the customer report |
| Description | A customer report will be generated by the admin where he can get an overall statistics on no of new customers, accounts blocked, services requested, ratings provided, wages paid, appointments fixed, |
| Inputs | No Inputs |
| Source | Inputs from Database Tables |
| Output | A pdf file with company logo can be printed / downloaded for future scope. |
| Destination | Dashboard |
| Action | All customer statistics (new customers, accounts blocked, services requested, ratings provided, wages paid, appointments fixed) must be extracted from the database and can be incorporated into a single pdf document. |
| Requirements | No Requirements |
| Pre-Condition | No Preconditions |
| Post-Condition | Document must be downloaded |
| Side Effects | If printer is not available then the functionality might not work properly |

4.9.3.2 Worker Report

| GoHelp/SRS/4.9 Report Generation/ 4.9.3.2 Worker Report | |
|---|--|
| Function | Admin can download the worker report |
| Description | A user report will be generated by the admin where he can get an overall statistics on no of new workers, accounts blocked, services offered, ratings provided, wages received, appointments fixed, |

| Inputs | No Inputs |
|----------------|---|
| Source | Inputs from Database Tables |
| Output | A pdf file with company logo can be printed / downloaded for future scope. |
| Destination | Dashboard |
| Action | All user statistics (new users, accounts blocked, services requested, ratings provided, wages paid, appointments fixed) must be extracted from the database and can be incorporated into a single pdf document. |
| Requirements | No Requirements |
| Pre-Condition | No Preconditions |
| Post-Condition | Document must be downloaded |
| Side Effects | If printer is not available then the functionality might not work properly |

5.Other Nonfunctional Requirements

5.1.Performance Requirements

The application must be fast especially in the chat session provided in the application. The messages must be stored and admin must have access to them. The latency time must be less than 5 seconds in delivering the message in the chat application.

Logs should be maintained for the database so that multiple users can't update database once. Sessions must be expired after some threshold time of inactivity. Server will be active based on the method. Maintenance updates must be communicated earlier in the portal.

5.2.Safety Requirements

User data must be loaded accurately in the database. User profile images must be encrypted before saving in the buckets. Customer details shouldn't be revealed to any worker (or) workers details shouldn't be revealed to any customer until customer fixes the appointment. The failure of software functions shall be detected, isolated, and recovered. Error file must be generated and stored. Exceptional Handling must be incorporated for smoother functioning. Software routines should not propagate errors across the platform.

5.3.Security Requirements

- 1. User Passwords must be encrypted first and encrypted data is stored in the database.
- 2. Databases must have a backup copy to retrieve information in-case of malfunctioning, theft, attacks.
- 3. User passwords must be changed at regular intervals for enhancing better security to their accounts.
- 4. Two factor authentication is incorporated where the user gets an email alert if an intruder access his account.

5.4.Software Quality Attributes

5.4.1.Usability

- 1. The Customer must be able to book the worker easily
- 2. Admin Dashboard should be user friendly.
- 3. An FAQ is provided for the users in the platform.
- 4. Application UI / UX must be responsive in mobiles as well as desktops.

5.4.2.Reliability

- 1. The GoHelp platform must be reliable.
- 2. User personal data is encrypted in the system.
- 3. Success message shown for adding / updating data in the database.
- 4. Database is reverted to past data incase of failure transactions.

5.4.3. Supportability:

GoHelp 1.0 primarily helps to provide an interactive chat application and future releases are considered to improve more features reducing the chat latency time. We take feedbacks from the users for a continuous feature updates.

5.5.Business Rules

- Users (Workers / Customers) are not allowed to receive / make payment advances, exchange phone numbers, email addresses to any user until worker finishes the work or work is accepted by the customer.
- GoHelp platform is not responsible for theft, fraudulent activities by workers.
- Admin can have access to customers / users chat window and can block your accounts with prior notice.
- Users must engage in a polite conversation with other users. Misbehaving leads to account blocking and a platform registers a police complaint with victim support.

6.Other Requirements

There are no other requirements.

Appendix A: Glossary

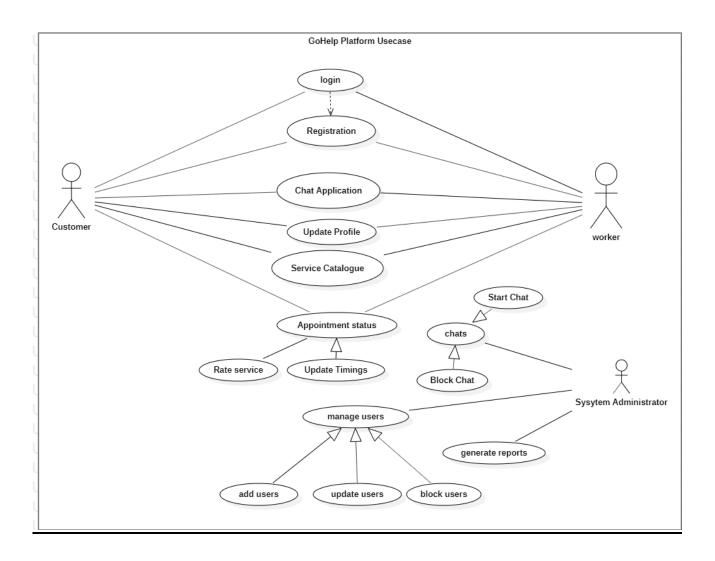
- 1. <u>SSL</u>: Secure Sockets Layer helps to establish an encrypted link between user and application
- 2. <u>S3</u>: Simple Storage Service is a file storage service provided by Amazon Web Services for storing user information.
- 3. <u>Heroku</u>: A cloud platform used to deploy web applications which support many frameworks and libraries.
- 4. <u>SMTP</u>: Simple Mail Transfer Protocol is used to transfer electronic mails which contains

messages in the internet.

- 5. <u>Diango</u>: A Python based web framework used for building web applications
- 6. <u>Cookies:</u> A small component which contains data stored at the client web browser.
- 7. <u>Session:</u> A session is an information stored for users logged into the system.
- 8. <u>OTP:</u> A One Time Password(OTP) is a 6 digit password provided to the users at the time of Email verification. User Email is verified when the code entered by the user and triggered by the system is same.
- 9. Twilio: Message service used to deliver one time password
- 10. <u>Heroku:</u> Cloud services used for the application deployment in realtime.

Appendix B: Analysis Models

Use Case Model for GoHelp Platform:



Appendix C: To Be Determined List

- 1. In the Chat Application, we just incorporated normal text chat currently. We need to check the implementations on sending Photographs for better understanding of the issue
- 2. We need to figure out some more business logics of the system where the users and customers must have a secured and sophisticated chatting.
- 3. Admin Dashboard Screens must require some more functionalities to be added for better experience in the platform.
- 4. SSL certificate, Domain Name must be decided for free of cost in deployment.
- 5. Analysis models must be constructed to provide crisp knowledge on system.