Handyman App

Requirements Analysis Document

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Requirements Analysis Document

1. Introduction

Purpose: Convenience Incorporated is a world renowned business that wants to modernize basic labor via easy and quick access through our smart phones. The Chief Technology Officer, Chuck Super has requested us to construct an applicated for the two main operating systems on PMD's that will create a simple interface for people to request and perform tasks.

Goal: The system will provide a simple and quick way to find and utilize potential users that want to provide simple services. This system is going to utilize gps to find available workers nearby that can provide the user's desired task. With every potential worker for a wide array of jobs, it will be fast and easy to find people that wish to provide or receive jobs.

Scope of system: The system should provide a way for application users to find an agreeable handyman to perform their desired task.. The user and handyman can schedule an appointment for the time(s) and day(s) the task should be performed.. Interaction with the software is done using the GUI from a tablet or smartphone.

For a user, the system should provide a way to search for accessible and qualified handymen. Users should also be able to message these potential handymen, edit and cancel job requests, pay the handyman, and rate the handyman's performance.

Handymen should be able to send private messages to potential clients. They should also be able to timestamp the beginning and end of a performed task with the client's approval, search for client-placed requests, receive client payments, rate the client, and view profiles as an application-certified handyman.

Objectives and fulfillment criteria: The system requires functional and non-functional requirements be met and that the following are accurate and timely:

1. Create a new User Account.
2. Post a job/hire handyman
3. Leave feedback on the transaction
4. Update location and timestamps via gps
5. Maintain past-jobs/hires
6. Display all past ratings/reviews on person's profile

Synopsis: This document will include both functional and non-functional requirements as well as the proposed system both summarized and detailed. Also included will be potential scenarios, use cases and reports.

2. Current System

Contractors: In order to hire people to perform a task at your home one would typically go to a contractor. A contractor will set up formal documentation to establish essential things like time, place and funds. Contractors will obtain the needed persons to perform the desired task.

Door to Door: Poor college students or lower-class persons will often provide simple services door to door. These include house cleaning, painting and lawn-care. Often are short deals for a quick buck while others have a legitimate business set up.

3. Proposed System

Overview

1. The system will allow people to request jobs to be done for them.
2. The system should allow people to perform jobs for others.
3. The system should allow both types of users (users/ taskers) to review and rate those they serve with.

Functional Requirements

Creating a new User Account

a. All Users should be able to create a new User Account.
b. There should be only one user-account per email address.
c. The input name of the user should have a length greater than 0, so that blank entry is not a valid input. Also the name should not exceed 25 characters.
d. The input username of the user should have a length greater than 0, so that blank entry is not a valid input. Also the name should not exceed 20 characters.
e. The password must be at least 8 characters long and must have at least one character, one numeral and one special character (! @ $ # only).
f. The email address should not have been used before for creating any other user account.

Requesting Assistance

a. All users should be able to request assistance.
b. The input Task Title should not have a blank input and should not exceed 50 characters.
c. The input Description of Task should not have a blank input and should not exceed 250 characters.
d. The date of task must be filled and should be in the format MM/DD/YYYY. It should not allow the user to enter a date before the current date.
e. Any pictures attached must be from the phone's camera roll, and must not exceed 10 attachments.
f. The Price/Rate should follow the format of $XX.XX, with the options of choosing per hour or flat rate in a tab next to the input.

g. The System should display the list of potential taskers in proximity to the user

Sending a Private Message to a Potential Tasker

a. Clicking on the tasker name from the list will bring up the profile the tasker.
b. Next to the profile will contain a button titled “Send Message”, bringing up a chat dialogue between the use and tasker.
c. The input in the chat must not be blank and should not exceed 250 words.
d. The corresponding tasker should receive the message insider his(or her) inbox.
e. The user in notified by a small check symbol that the message was properly sent.

Cancelling the Request

a. The request to be cancelled must be a current request displayed in the request tab of the interface.
b. The cancel request button should present itself when selecting the task title.
c. The input for the “Reason for Cancellation” must be filled out, and no longer than 250 words.
d. The task will be removed from the current tasks tab from both the user and the tasker, and both will be notified through the app.
e. The tasker can dispute the cancellation if work had been performed. The “Dispute” field must be filled and cannot exceed 250 words.

Searching for requested placed by users

a. The location field should be filled using a valid address, or be filled in using the GPS estimated address by clicking the “GPS” arrow.
b. The “Request List” displays the available tasks in a 15 mile proximity.
c. A GPS Map displays dots of where the tasks are located and when clicked will link to the details of chosen task.
d. A button to message the user who posted the request is available next to the task title.

Non-functional Requirements

User interface

a. Login screen should be user friendly
b. Language options present on login screen.
c. “Forgot Username or Password” button present on Login screen.
d. The User and Tasker functionalities should be color coded and easily distinguished.
e. GPS Map should be easy to use and automatically show a map where the user is located.
f. The System should notify the user to connect to Wi-Fi to increase GPS accuracy.
g. Notifications regarding messages, tasks, and payment should be displayed upon login, and if the user gives permission, on the home screen of the phone.

h. Completed tasks will appear on the “Request History” tab in the settings menu.

Error handling

a. The System should notify user when entering invalid inputs into the forms.
b. System should the user and/or tasker if payment method is declined and require them to update credentials.
c. The System should notify user when GPS/Internet connection is lost

Hardware

a. The users phone should be equipped with at least 1GB of RAM.

Performance

a. Loading times between menus should instantaneous.
b. GPS map should be integrated seamlessly and optimized in a way to reduce battery consumption while app is active.

App Maintenance

a. Before logging in the system will check if its version number matches the most recently deployed software version number and will not allow the user to login until they have downloaded the most recent update.

Security

a. All passwords should be kept a secret even from corporate.
b. Credit Card information, must be secure and can not be seen from outside viewers.

Scenarios

Actors:

User: Users include all the people who are in search of assistance in different field. The users are responsible for the following actions: -

1. Requesting for assistance.
2. Messaging the Tasker.
3. Updating/Cancelling the service.
4. Tipping the Tasker if desired.
5. Leaving a feedback.
6. Rating the Tasker.
7. Managing / viewing profile

Expert(Tasker/Handyman): Handymen are the experts hired by the company who are available to help the users based on their request. They can perform the following actions: -

1. Accepting/Rejecting a request.
2. Marking the start of the work.
3. Marking the work as complete, incomplete or pending.
4. Making a report of the work performed.
5. Rating the user.
6. Managing / viewing profile

System:

1. Generate unique ID for the task/transaction.
2. Generate Tasker profile
3. Generate User profile
4. Process Deposit / Withdraw Payment

User:

1. Requesting for Assistance

Scenario Number	1 a
Scenario Name	Requesting for Assistance
Actor	Sam Lee (Customer)

Flow of Control	a. Sam searches for babysitters around him. b. Sam ensures that the GPS on his device is turned on. c. Based on the search result, Sam selects the Ashley as the babysitter. d. Sam requests for the service on Tuesday from 5:00pm - 8:00pm e. Finally, Sam confirms the request.

Scenario Number	1 b
Scenario Name	Requesting for Assistance
Actor	Elizabeth Smith (Customer)
Flow of Control	a. Elizabeth looks for gardener around her. b. She selects Chelsea based on her rating. i. Can view Chelsea's profile c. Elizabeth wants the assistance from 8:00am - 12:00pm on Saturday and request for the service d. Elizabeth briefly describes the status of her garden and sends a picture of it. e. Finally, Elizabeth confirms the request.

2. Messaging the Handyman

Scenario Number	2
Scenario Name	Messaging the Handyman
Actor	Sam Lee (Customer)
Flow of Control	a. Sam(Customer) wants Ashley(Handyman) to know the name of his kids. b. So, he decides to send her a message through the app. c. He sends her a message saying, "Hi, Ashley. I have two kids. Their names are Jack and Daniel."

3. Updating/Cancelling the request

Scenario Number	3 a
Scenario Name	Updating a Request
Actor	Sam Lee (Customer)
Flow of Control	a. Sam checks his request log. b. Sam finds his request for Ashley as a babysitter. c. Sam edits the request time as 6:00pm-8:00pm d. He confirms the changes.

Scenario Number	3 b
Scenario Name	Cancelling a Reservation
Actor	Elizabeth Smith (Customer)
Flow of Control	a. Elizabeth does not need gardening service from Chelsea(Handyman) anymore. b. She searches for her request for Chelsea. c. As Elizabeth is cancelling the request 6 hours prior to the reservation, she will be charged 15% of the actual cost. d. Elizabeth accepts the charges and cancels the request. e. She confirms the cancellation and leaves her reason for cancelling the request.

4. Tipping the Tasker

Scenario Number	4
Scenario Name	Tipping the Tasker
Actor	Sam Lee (Customer)
Flow of Control	a. Sam was happy with Ashley's assistance. b. After the service was provided, Sam tips Ashley with $20 for her work. c. Sam confirms the tip and the final charges.

5. Leaving a Feedback

Scenario Number	5
Scenario Name	Leaving a Feedback
Actor	Sam Lee (Customer)
Flow of Control	a. Satisfied with the service, Sam(Customer) wants to write a positive feedback about Ashley(Handyman) b. Sam writes, “Amazing service. My kids loved her.” c. Sam posts the feedback

6. Rating a Handyman

Scenario Number	6
Scenario Name	Rating a Handyman
Actor	Sam Lee (Customer)
Flow of Control	a. Sam(Customer) also wants to reward Ashley(Handyman) with a good ratings. b. Sam gives her a 5-star rating.

7. Managing / Viewing Profile

Scenario Number	7
Scenario Name	Managing / Viewing Profile
Actor	Sam Lee (User)
Flow of Control	a. A different tab will be pressed to deliver Sam to his profile b. (optional) picture of himself can be displayed / changed c. Housing Address will be displayed and can be changed d. History (past requests / tasks) can be displayed (can not edit) e. Reviews will be displayed including average rating f. Credit Card / Pay Pal can be edited (must not be shown) g. Notification / ping options can be edited

Expert(Tasker/Handyman):

1. Accepting/Rejecting a Request

Scenario Number	1a
Scenario Name	Accepting/Rejecting a Request
Actor	Ashley Nameson
Flow of Control	a. Ashley is notified of request b. Ashley looks over desired time and place c. Ashley selects the accept-option thus agreeing to Sam Lee's(User) desired location (e.g. housing location or specified location by user) and time of task. d. Ashley will receive (digitally) 50% of the money upfront post-acceptance.

Scenario Number	1b
Scenario Name	Accepting/Rejecting a Request
Actor	Ashley Nameson
Flow of Control	a. Ashley is notified of request b. Ashley looks over desired time and place c. Ashley selects the reject-option, rejecting Sam Lee's (User) desired task d. Sam Lee is immediately notified of the rejection, and is suggested to look for other possible taskers

2. Marking Start of Work

Scenario Number	2
Scenario Name	Marking Start of Work
Actor	Ashley Nameson
Flow of Control	a. Post-acceptance of job in cleaning a house, Ashley confirms the possible need for vacuums, dusters, mops, soaps, and other essentials to carry out the job. She supplies these tools herself, rather than using tools from the client unless specified otherwise. b. App updated (manually) with Ashley's beginning of job c. Time stamp in-app on both ends (Expert and Customer)

3. Marking Work as Complete, Incomplete, Pending

Scenario Number	3a
Scenario Name	Marking Work as Complete, Incomplete, Pending
Actor	Ashley Nameson
Flow of Control	a. On task-completion, Ashley will update app and time-stamp will be noted. b. Ashely will be payed the other half c. Ashley can review Sam Lee (User)

Scenario Number	3b
Scenario Name	Marking Work as Complete, Incomplete, Pending
Actor	Ashley Nameson
Flow of Control	a. For an incomplete task, Ashley will update app to notify user that the task was not finished b. The user gets refunded (digitally) the initial 50% payment

Scenario Number	3c
Scenario Name	Marking Work as Complete, Incomplete, Pending
Actor	Ashley Nameson
Flow of Control	a. Update app to mark work as pending b. Pending job means Ashley intends to complete but has yet to get started or a complication has come to light c. If Ashley takes longer than desired time, Sam (User) has option to suspend Ashley or renegotiate payment

4. Making Report of Work Performed

Scenario Number	4
Scenario Name	Making Report of Work Performed
Actor	Ashley Nameson

Flow of Control	a. Post-completion of job Ashley can now review Sam(User) i. SEE: Scenario 5 (below) b. Ashley must write a detailed summary of what she performed in cleaning the house and what tools she used such as, but not limited to, vacuums, soaps, and dusters. c. This will update her profile with the summary, location (Sam's housing address) and time-stamp

5. Rating the User

Scenario Number	5
Scenario Name	Rating the User
Actor	Ashley Nameson
Flow of Control	a. (Rating can be completely optional) b. Ashley can give Sam(User) between 1 and 5 stars, 5 meaning excellent 1 meaning terrible c. Ashley can write a short summary of her experience with Sam(User) d. Both the 1-5*rating and the summary will go on Sam's profile

6. Managing / Viewing Profile

Scenario Number	6
Scenario Name	Managing / Viewing Profile
Actor	Ashley Nameson
Flow of Control	a. A different tab will be pressed to deliver Ashley to his profile b. (optional) picture of herself can be displayed / changed c. Location and willing-radius for work can be viewed / edited d. History (past requests / tasks) can be displayed (can not edit) e. Reviews will be displayed including average rating f. Credit Card / Pay Pal can be edited (must not be shown) g. Notification / ping options can be edited

System:

1. Generate Transaction ID

Scenario Number	1
Scenario Name	Generate Transaction ID
Actor	System
Flow of Control	a. The system detects a submitted transaction between the user and the tasker b. The system creates a unique transaction ID and attaches it to the transaction

2. Generate Tasker Profile

Scenario Number	2
Scenario Name	Generate Tasker Profile
Actor	System
Flow of Control	a. Update reviews and ratings after Tasker receives a new review. b. Update GPS with Tasker location (not current location but Tasker's desired work-radius). c. Update Tasker availability d. Display Tasker's work history

3. Generate User Profile

Scenario Number	3
Scenario Name	Generate User Profile
Actor	System
Flow of Control	a. Update reviews and ratings after User receives a new review. b. Update GPS with User location (e.g. the client's home address) c. Display current job requests that are in-process or still pending d. Display User's request history

4. Process Deposit / Withdraw Payment

Scenario Number	4a
Scenario Name	Process Deposit / Withdraw Payment
Actor	System
Flow of Control	a. Upon Tasker receiving payment b. Bill User digitally and direct funds to the Tasker c. Receipts can be generated / emailed if desired

Scenario Number	4b
Scenario Name	Process Deposit / Withdraw Payment
Actor	System
Flow of Control	a. Upon User / Tasker agreement on job, User is billed 50% of job-fees b. Upon Completion of job, User is billed the other 50% of fees c. Receipts can be generated / emailed if desired.

Use Cases

Users:

1. Signing into the App

Use-case Name:	Signing into the App
Actor:	User, Tasker
Pre-Conditions:	1. Internet connection. 2. Smartphone with in-built GPS feature and HandyMan application installed. 3. Verified HandyMan Account.
Flow of Control:	1. The user attempts to access his or her account with a login ID and password combination. 2. The system verifies that the login ID and password. combination is valid with a pre-existing account 3. The system checks whether the account is associated with a tasker or

	a user
Post-Conditions:	1. The user is given access to the app. 2. A connection to the server is established
Error-Conditions:	1. Login ID and Password combination is incorrect. Access to the app is denied. 2. The tasker/user account is suspended after 3 incorrect attempts. Access to the app is temporarily denied.
Non-Functional Requirements:	1. The application should be platform compatible 2. The connection with the server must be secure 3. The application must be in the preferred language chosen by the user (chosen upon first launch), or default English

2. Searching for a Tasker

Use-case Name:	Requesting Assistance
Actor:	User
Pre-Conditions:	1. Internet connection 2. Smartphone with in-built GPS feature and HandyMan Application installed 3. User is logged into the application. 4. User has a verified payment method
Flow of Control:	1. User selects the “Request Assistance” Menu Tab. 2. User selects the category of the task they need assistance in from the menu. 3. The user will fill out the task form, filling in the required information to property detail the task a. Task Title b. Description of Task c. Date of task d. Pictures e. Price/Rate 4. The User posts the request by pressing the submit. 5. The System displays a list of potential taskers,from which the user will choose the desired handyman.
Post-Conditions:	1. The handyman is notified by the system that he has been selected.

Errors:	1. No handyman is available within the GPS radius.
Non-Functional Requirements:	1. The application should be platform compatible 2. The connection with the server must be secure 3. The GPS feature should be turned on so that the server can display the nearby potential handyman.

3. Messaging Potential Taskers

Use-case Name:	Sending a Private Message to a Potential Tasker
Actor:	User
Pre-Conditions:	1. The user is already logged into the application 2. The user has searched for a tasker and can see a list of suggested taskers for the desired job.
Flow of Control:	1. The user selects the profile of the tasker that's to be messaged 2. On the profile, there exists a button called "Send Message." The user clicks this. 3. The user can now type the desired message to be sent to the tasker, and confirm the send. 4. The system filters the message to ensure it is safe to send, and sends the message to the tasker, or rejects the act of sending.
Post-Conditions:	1. The tasker received the message inside his or her inbox 2. The user is notified (by a small check symbol) that the message was properly sent.
Error-Conditions:	1. The user is notified of the reason why the message failed to send 2. Multiple offenses lead to a chat restriction
Non-Functional Requirements:	1. The connection with the server must be secure

4. Editing request

Use-case Name:	Editing a request
Actor:	User
Pre-Conditions:	1. Internet connection. 2. Smartphone with in-built GPS feature and HandyMan Application installed. 3. User is logged into the application. 4. User needs to have at least one request on his “Request Tab”.
Flow of Control:	1. User selects the “Request” button on the menu tab. 2. User selects the request that he wants to change. 3. The user will edit either of the following information: a. Task Title b. Description of Task c. Date of task d. Pictures e. Price/Rate 4. The user confirms the changes.
Post-Conditions:	1. The system updates the old request with new information and post the request. 2. Any taskers, who were interested in the request prior to the changes, are notified of the changes.
Errors:	1. The user leaves the required fields empty. 2. The date of task is a date before the current date. 3. The price is set equal to 0.
Non-Functional Requirements:	1. Some conditions should be set on user inputs so that it matches the criteria. 2. The date of the task and price is a required field.

5. Cancelling the request

Use-case Name:	Cancelling a request
Actor:	User
Pre-Conditions:	1. Internet connection. 2. Smartphone with in-built GPS feature and HandyMan Application installed. 3. User is logged into the application. 4. User needs to have at least one request on his “Request Tab”.

Flow of Control:	1. User selects the “Request” button on the menu tab. 2. User selects the request that he wants to cancel. 3. The user will cancel the request and provides the reason for cancelling the request.
Post-Conditions:	1. The system checks if any tasker has been assigned to the request or not. 2. The system cancels the request if a tasker has not been assigned to the request without any charges. 3. If a tasker is assigned, the system checks when the agreement was made and how late before the agreed date was the request cancelled. Finally,the system notifies the user of the charges for cancelling the request. 4. The charge amount is deducted from user’s bank account or paypal account. 5. The request is removed from the user’s list of request 6. The request is also removed from the database. 7. The user is notified of the cancellation.
Errors:	1. The connection to the server is lost.
Non-Functional Requirements:	1. The connection with the server must be secure.

6. Paying and rating the tasker

Use-case Name:	Paying the Tasker and rating the performance
Actor:	User
Pre-Conditions:	1. Internet connection. 2. Smartphone with in-built GPS feature and HandyMan Application installed. 3. User is logged into the application. 4. User needs to have at least one tasks on his “Current Tasks Tab” 5. User needs to be in agreement with some tasker with at least one of the current tasks. 6. Both user and tasker need to agree on the completion of task.
Flow of Control:	1. Both party, user and tasker, confirm the completion of task and sign on the timestamp. 2. The user decides to give some tip to the tasker. 3. The system charges the user for the service and displays it to the user following this procedure

	a. Initiation of Processing:The user initiates payment authorization request to their payment processor(Paypal,Visa, etc). b. Verification of Available Funds: The payment authorization request is successful and the payment processor sends a response to the system acknowledging that the funds are now held until the user finalizes the payment. c. Authorization of Transfer:the System sends a message back to the payment processor to finalize the payment. d. Completion of Transfer: The funds are immediately deducted from the users line of credit. The funds take 3 days to be transferred to the taskers bank account. 4. The user rates the tasker based on his performance and leaves a feedback.
Post-Conditions:	1. The system marks the request as completed and removes it from the database and user's request list. 2. The system adds the service charge with the tip and sends the bank the final amount. 3. The system pays tasker 90% of the total amount paid by the user and keeps the 10% for the company.
Error-Conditions:	1. User payment method is declined(Insufficient funds) 2. Tasker payment is invalid(Expired information) 3. Internet connection was lost while attempting to post review
Non-Functional Requirements:	1. The rating should be a 5-star system 2. Tip calculator with recommended percentages is integrated

Taskers:

1. Messaging a User as a Tasker

Use-case Name:	Sending a Private Message to a User
Actors:	Tasker
Pre-Conditions:	1. The tasker is already logged into the application 2. The tasker can see a list of suggested users requesting a task related to the tasker
Flow of Control:	1. The tasker selects the user's profile that is to be messaged 2. On the profile, there exists a button called "Send Message." The tasker clicks this.

	3. The tasker can now type the desired message to be sent to the tasker, and confirm the send. 4. The system filters the message to ensure it is safe to send, and sends the message to the user, or rejects the act of sending.
Post-Conditions:	1. The user received the message inside his or her inbox 2. The tasker is notified (by a small check symbol) that the message was properly sent.
Error-Conditions:	1. The tasker is notified of the reason why the message failed to send 2. Multiple offenses may lead to either a chat restriction or a full qualification background check on the tasker
Non-Functional Requirements:	1. The connection with the server must be secure 2. Option to call recipient on the phone is available when viewing the message

2. Timestamping Jobs

Use-case Name:	(2a) Initiating the Beginning of the Task
Actors:	Tasker, User
Pre-Conditions:	1. The tasker and user have already agreed on the task to be performed 2. The tasker and user are present at the location the task is to be performed 3. The tasker and user are both logged into the application
Flow of Control:	1. The tasker selects the confirmed task on his or her list of tasks 2. After selecting the task, the tasker requests for the beginning of the task (by timestamp) and waits for user's confirmation. 3. The system pushes this request notification over to the user, who should be present with the tasker 4. The user confirms that he or she is okay with initializing the timestamp for the task
Post-Conditions:	1. The system reads that the user agreed on allowing the task to be initialized, and starts the timestamp accordingly.
Error-Conditions:	1. The system reads that the user did not agree on allowing the task to be initialized, and does not start the timestamp 2. The system sends a message to the tasker stating that the user did not agree with initializing the task, signaling miscommunication between user and tasker, or some other issue.
Non-Functional	1. The connection to the server must be secure

Requirements:	2. The timestamp must be visible and clear to both the user and tasker

Use-case Name:	(2b) Ending the Timestamp for the Task
Actors:	Tasker, User
Pre-Conditions:	1. The tasker and user have already agreed on the task to be performed 2. The tasker and user are both logged into the application 3. The timestamp for the task needs to already be initialized and ongoing
Flow of Control:	1. The Tasker submits a request to place an endtime timestamp on the task 2. The system reads the request and pushes a notification over to the user stating the finalization of the task 3. The user may do nothing (accept that the task was finalized) or dispute the endtime timestamp if any issues occur 4. Under the condition that the user decides to dispute the finalization timestamp, the system notifies the tasker of this event
Post-Conditions:	1. The endtime timestamp signals the finishing of the task, so the system displays the total time it took to complete the task
Error-Conditions:	1. A user dispute was placed, marking the completion of the task as questionable
Non-Functional Requirements:	1. The connection to the server must be secure 2. The timestamp must be visible and clear to both the user and tasker

Use-case Name:	(2c) Timestamp GPS confirmation
Actors:	Tasker
Pre-Conditions:	1. Tasker and User agreed on job 2. Tasker has internet connection. 3. Tasker and User are logged in. 4. Tasker submits a time-stamp at start of job
Flow of Control:	1. System determines if Tasker is at GPS location of requested job 2. Timestamp initiation is completed (2a)
Post-Conditions:	1. User will know whether Tasker showed up at desired location. 2. Guarantees Tasker was at work-site based on GPS

Error-Conditions:	1. Could not connect to GPS thus can not find location 2. Tasker does not have internet connection
Non-Functional Requirements:	1. Show history of time stamps if previous task has been completed in same location in the past.

3. Searching for request placed by users

Use-case Name:	Searching for requests placed by users
Actor:	Tasker
Pre-Conditions:	1. Internet connection. 2. Smartphone with in-built GPS feature and HandyMan Application installed. 3. Tasker is logged into the application. 4. At least one request should be in the system.
Flow of Control:	1. Tasker selects the "Request List" from the menu tab. 2. Tasker narrows the search by entering his location, desired price, and date. 3. The system lists the applicable requests.
Post-Conditions:	1. After finding a desirable task, the tasker messages the user who made the request. 2. The system filters the message and notifies the user. 3. The user checks the message by the tasker. 4. The user messages the tasker to convey any additional information and possibly assign the tasker for the task. 5. The system notifies the tasker that he has been assigned of the task.
Errors:	1. The filters specified by taskers does not have any search hits.
Non-Functional Requirements:	1. The connection with the server must be secure 2. The GPS feature should be turned on so that the system can display the nearby requests. 3. There should be some validations set on the input by the tasker. For instance, he cannot search for past requests or completed requests. 4. Requests marked as completed should not appear on this list.

4. Receiving the payment and rating the user

Use-case Name:	Receiving the payment and rating the user

Actor:	Tasker
Pre-Conditions:	1. Internet connection. 2. Smartphone with in-built GPS feature and HandyMan Application installed. 3. Tasker is logged into the application. 4. Tasker needs to have at least one tasks on his “Current Tasks Tab” 5. Tasker needs to be in agreement with some user with at least one of the current tasks. 6. Both user and tasker need to agree on the completion of task.
Flow of Control:	1. Both party, user and tasker, confirm the completion of task and sign on the timestamp. 2. The system charges the user for the service and displays it to the user. 3. The tasker is notified of the charge on the user and the tip that the user gave. 4. The tasker rates the user and leaves a feedback.
Post-Conditions:	1. The system adds the service charge with the tip and sends the bank the final amount. 2. The system pays tasker 90% of the total amount paid by the user and keeps the 10% for the company.
Error-Conditions:	1. Tasker payment is invalid(Expired information) 2. Internet connection was lost while attempting to post review
Non-Functional Requirements:	1. Both, user and the tasker, need to have a valid bank account or a paypal account linked to their HandyMan app.

5. Viewing Profile as a Tasker

Use-case Name:	Viewing profile as a tasker
Actors:	Tasker
Pre-Condition:	1. Internet Connection 2. Logged into HandyMan application
Flow of Control:	1. Tasker presses the profile button 2. Bottom of profile menu will have reviews and ratings. a. Tasker can scroll through these but not edit them 3. Tasker can press ‘settings’ icon (a gear) to change personal information 4. Middle of profile will display recent work history.

Post-Condition:	1. If edits were made, profile will be updated 2. Update based on work-done / interactions with Users
Error-Conditions:	1. Not connected to internet 2. Failure to access credit card if entered incorrectly upon eidt 3. Photo resolution is too small when editing profile picture
Non-Functional Requirements:	1. Nothing will show for recent-history or reviews if Tasker has none 2. Tasker is officially registered as a Tasker

System:

1. Determining interface based on User / Tasker / Both

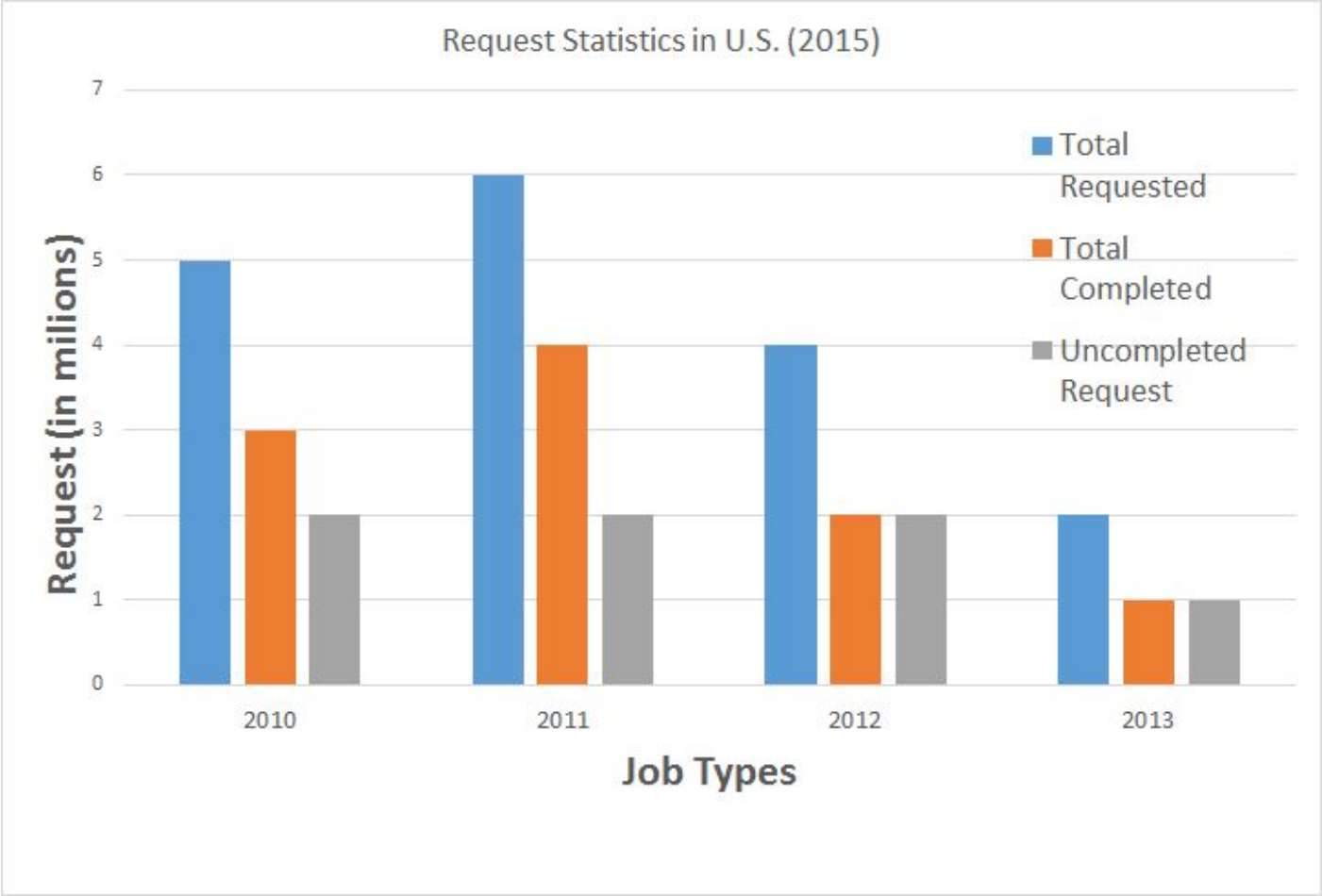
Use-case Name:	Determining interface based on User/Tasker/Both
Actor:	User, Tasker
Pre-Conditions:	1. Internet connection. 2. Smartphone with inbuilt GPS feature and HandyMan application installed. 3. Tasker and User are logged into the application
Flow of Control:	1. Following login, system checks database to see if the person logging in is registered as a Tasker or not. 2. The User (not-Tasker) logs in and will see a grayed out Tasker button. a. User presses grayed-out button and gets offered to register to become a Tasker i. App will be updated according if followed through 3. The Tasker will log in and the Tasker-menu button will be colorized and can be accessed normally.
Post-Conditions:	1. The Tasker-menu button will either work or not work according to runner of application. 2. Minor profile changes will happen: reviews / ratings displayed.
Error-Conditions:	1. Could not reach database to determine if User is also a Tasker 2. Internet connection drops during look-up. 3. User gets a working Tasker-menu button. 4. Tasker does not see Tasker-related profile information 5. Tasker is logged in only as a User.
Non-Functional Requirements:	1. Tasker needs to be registered as a Tasker before log-in.

2. Reviewing a User-Reported Issue

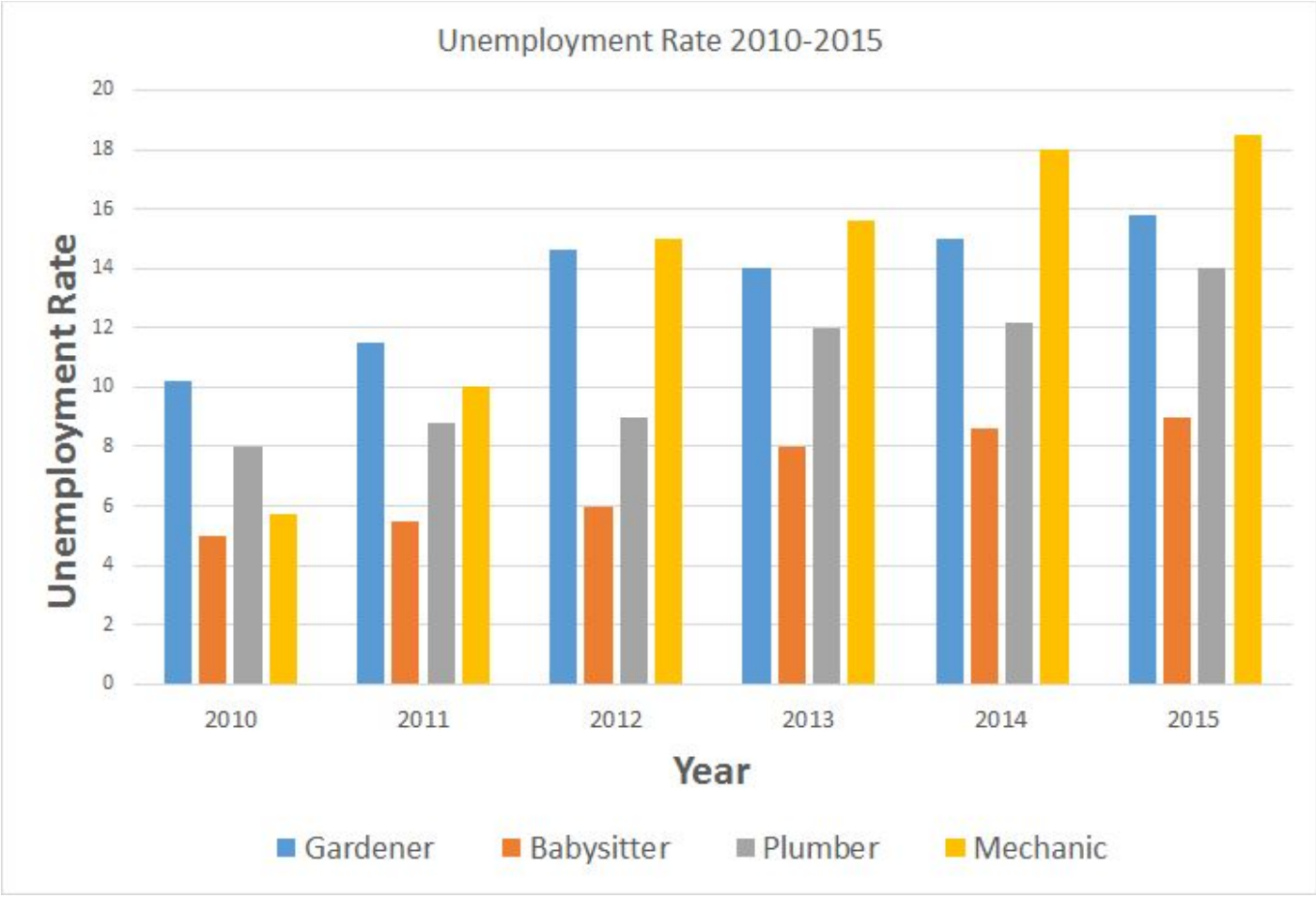
Use-case Name:	Reviewing a User-Reported Issue
Actors:	User
Pre-Conditions:	1. The user must have previously reported an issue in the form of a dispute 2. The user is logged into the application
Flow of Control:	1. The user selects from a drop-down list of options what the issue is, and submits this to the system 2. The system reviews the report, and flags the tasker for an offense related to the select issue option
Post-Conditions:	1. The tasker receives warnings on the first couple of valid disputes, with a possibility of removal from the app
Error-Conditions:	1. The user reporting sends too many reports, and the targeted tasker for the most part has a clean record. The user is flagged for disruptive activity and the tasker's warning is revoked
Non-Functional Requirements:	1. The connection to the server must be secure 2. List of issue options must contain the most likely issue options, and an "Other" option for custom typed issues not on the list

4. MOCKUP REPORTS

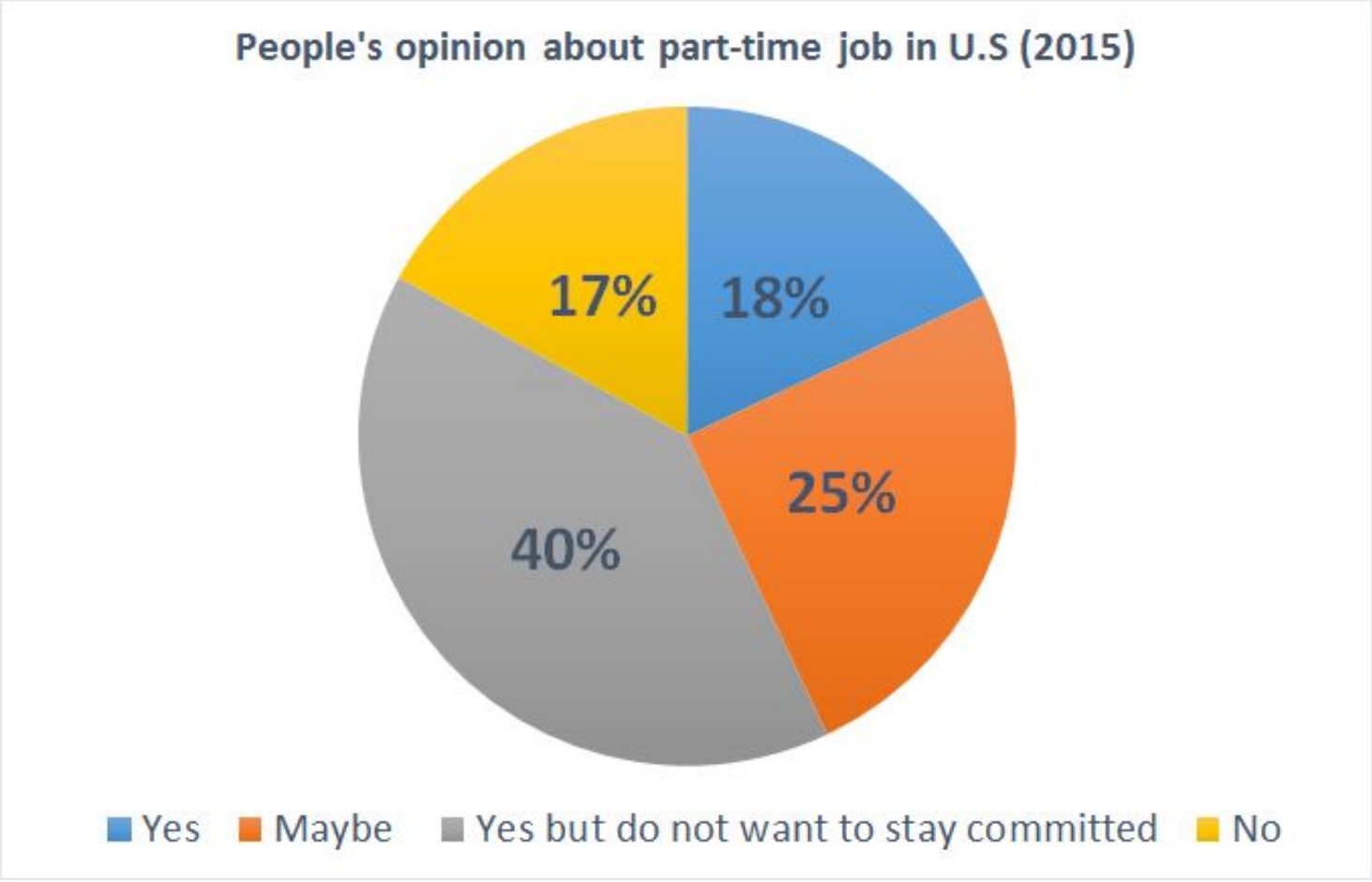
Report Statistics in United States (2014)



Unemployed Rate in United States



Survey of people regarding their opinion on part-time job

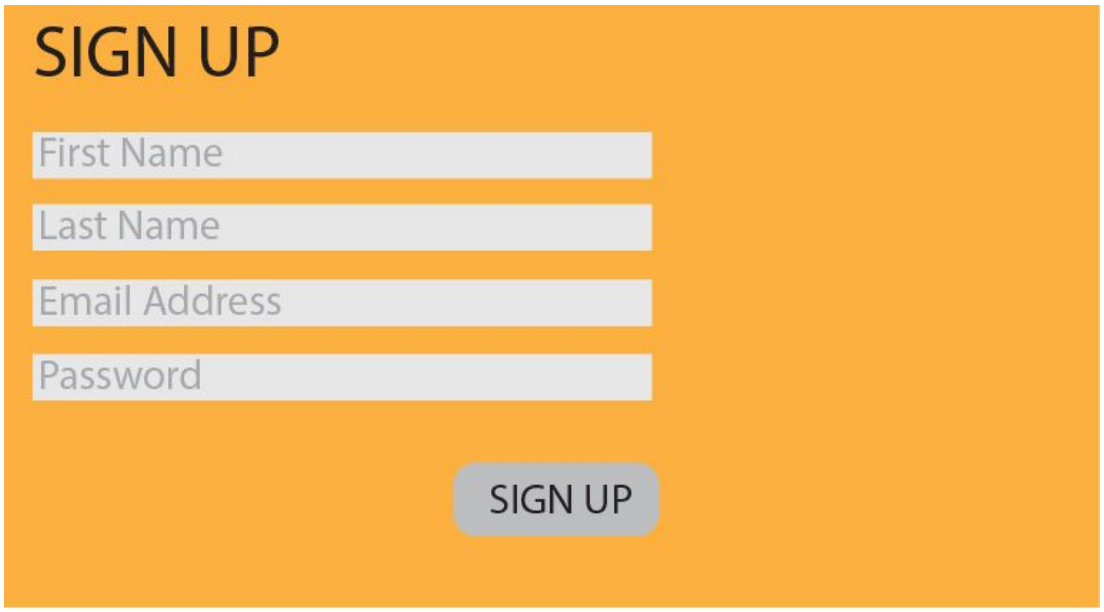


MOCKUP GUI

The following snapshots provides a detailed representation of the app's interface. These images were supplied to us from Convenience Incorporated as the applications required graphical user interface.

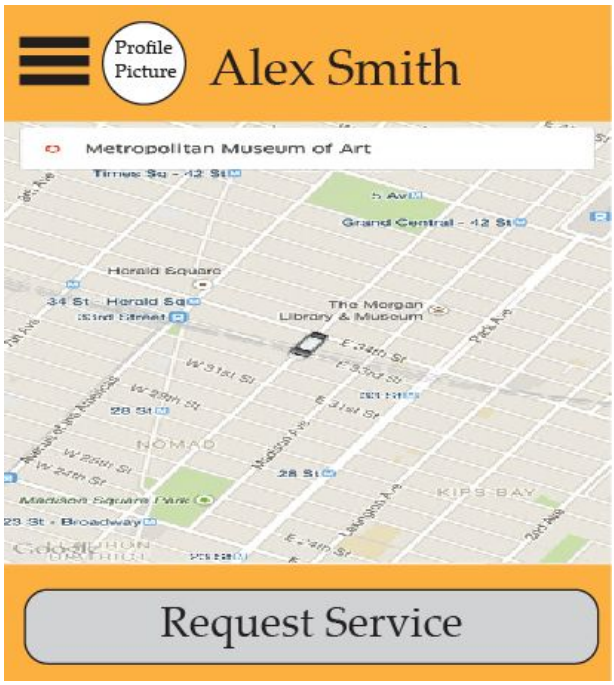
Log In/ Sign Up Form

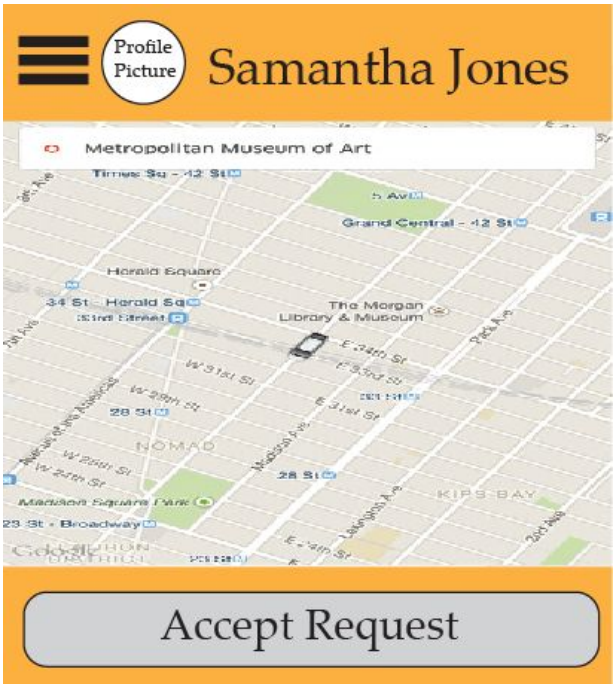
Before you get access to the application, you must first log in. If the user enters the password incorrectly or simply forgets the password, they can select "Forgot Your Password?" in order to reset it. If the user is new they can sign up for this service



User/Tasker Homepage

The triple-bar at the top left will select if the user wants to send messages, accept/request jobs or view profile. If a service is requested, you can view the location of the service and whether or not you wish to accept it.





Search Tasker

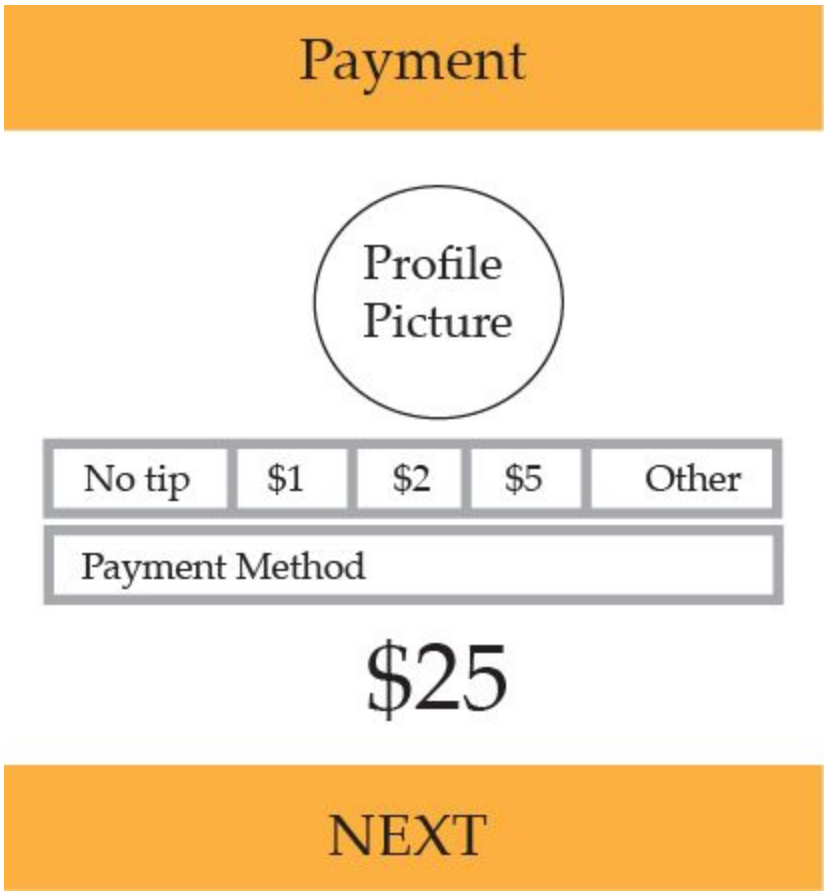
When looking for a tasker, there are 5 text boxes that need filling out. First you need to input the job you are looking for, ie. gardening, baby sitting, etc. Second is the range of money you are willing to pay for the service. Third, when you need the job to be done. Fourth, the location of the job. Fifth, the search radius, the search radius will use gps to look for anyone within that specified (miles) that could potentially complete said task.

Rate the taskerthp

After job completion, both the Tasker and User can rate the other party. Selecting between 1 and 5 stars and/or a comment reflecting that person. This will help determine in the future whether it is good to work with this person.

Inform User about the charge for the service

After job completion, finalizing the payment will be necessary. An option to tip the Tasker is available and can be specified at any amount or selected from a few presets. Payment method will determine credit card, pre-paid VISA, or Pay Pal.



Message User/Tasker

Being able to direct message the other party will permit the two involved to deciding on specifics or negotiating a price. This is completely optional for both Taskers and Users. The title of the job being performed is at the top of the message to remind those what specifically they are to discuss.