Helping Hand

~Submitted By

Group no:03

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Problem:

In our daily domestic life, we face various kind of problems like sometimes our kitchen sink develops a serious leak. Therefore, water overflows all over the kitchen floor or gas leaks can occur from faulty gas appliances or pipework or sometimes we break kitchen, bathroom or electrical appliances. Or electrical surge. Sometimes we need locksmith to make a copy of our key or technician for our electronic devices like TV, smartphone, computer.

But at the time of our serious need most of the time we can't reach them easily. We have to face this type of crisis due to various reason,

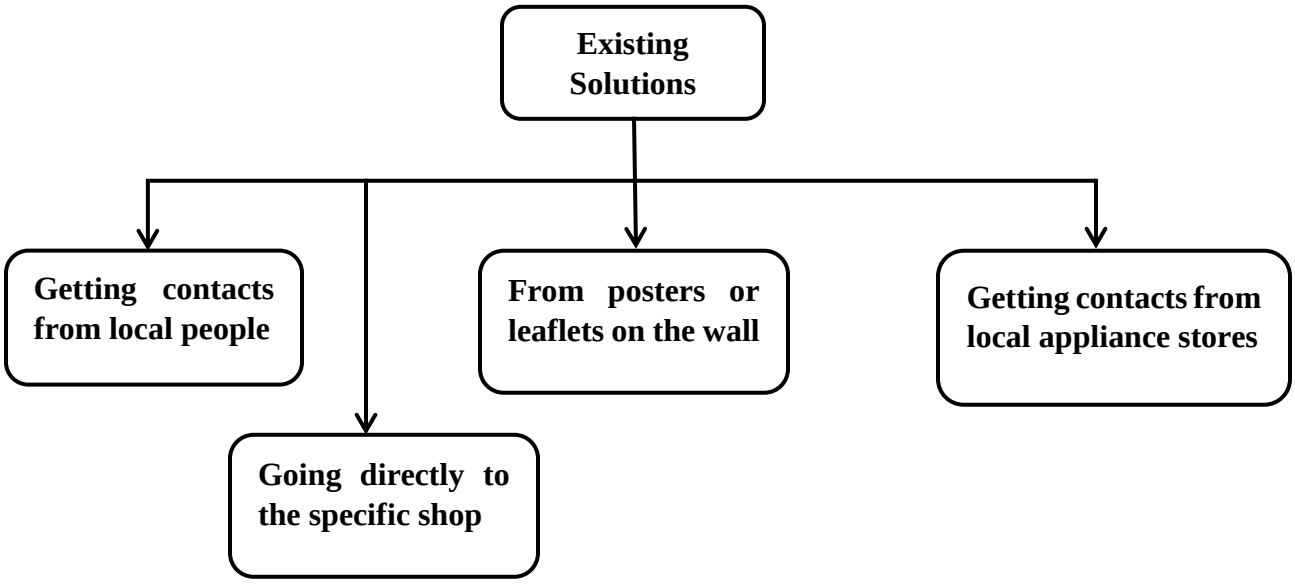
- For being new in the locality one may not find them or he may not know where to look for them.
- Sometimes this type of workers does not have any specific place or shop. As a result, it decreases the chance of finding a suitable worker.
- In some residential areas these type of workers are hard to find. Usually these workers do not have a high income source. So they can not maintain the lifestyle in a residential area. They rather move to rural areas and other crowded areas where they find more customers.
- Sometimes customers have to go through unnecessary price bargaining due to high price demand of the workers. A customer even may not have any idea about the right amount of wage required for the job.
- Most of the time customers feel lack of security when they hire workers. So, they bother to stay on high alert for security purposes which is quite irritating as well as very troublesome.

Existing solution:

To deal with our required problem there are some process by which we can solve the problems but the existing solution of the problem is very poor. Sometimes, we suffer a lot to find them and convince them to work in a fair wages. We face difficulty to reach these workers like,

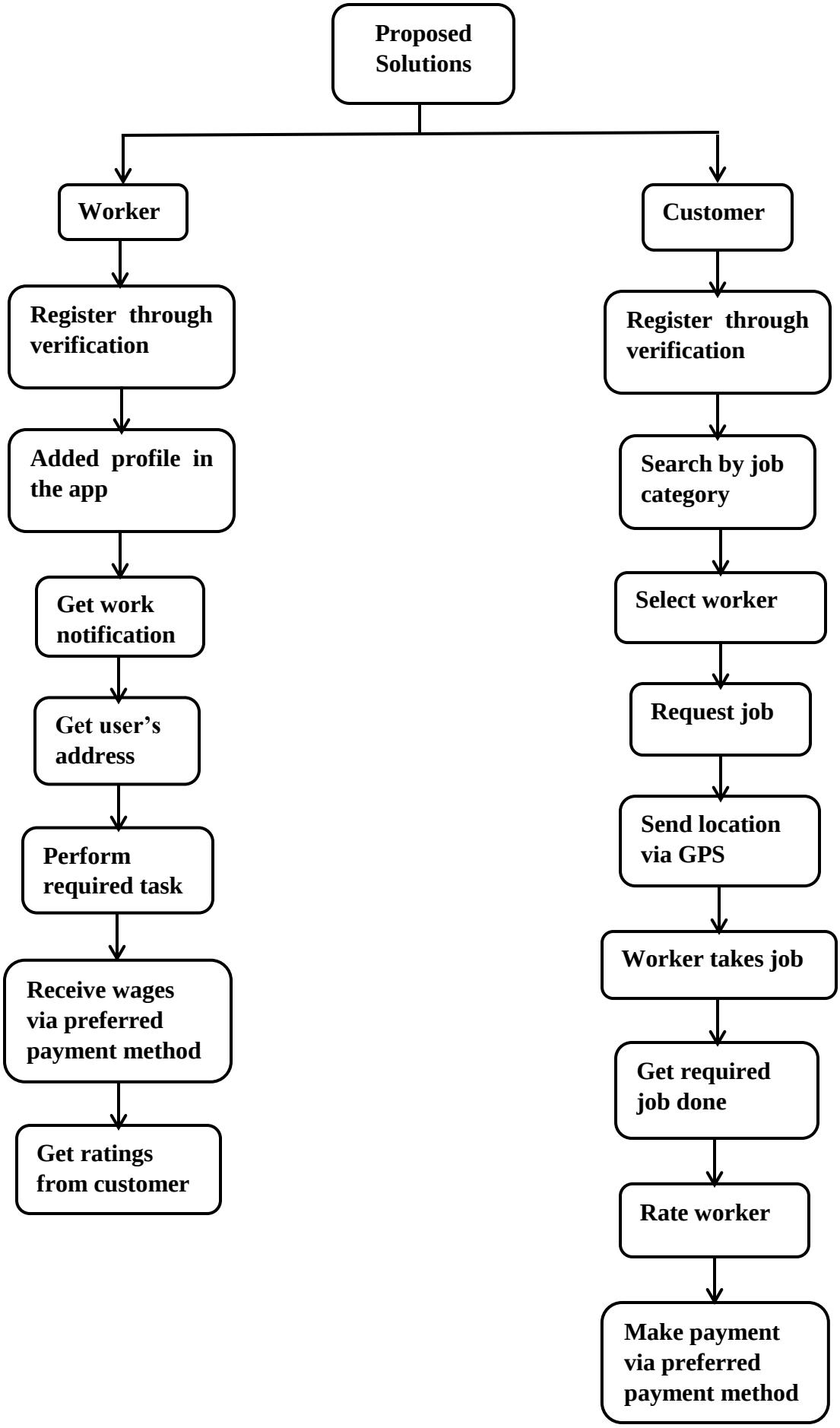
- One can hire workers by getting contacts from local people because local people have proper experience on that place and they know where workers are available.
- Some workers use advertisement poster on wall or leaflet to spread his services. So, one can collect their contacts from those posters and leaflets.
- Sometimes local appliance stores keep the contacts of some workers as they sell various appliances to the customers and the customers often need someone to install those appliances. So, the store manager provides them the contacts of a suitable worker.
- This is not quite available but, sometimes these type workers have a specific shop such as computer repair shop, car repair shop etc. So, consumers can go to those specific shops to get their required job done.

Maybe the existing solution is not that bad but to get our job done we have to spend our money, a lot of valuable time as well as energy. If we can stand to improve this existing process, it may help a man to solve life's one of the most troublesome problems without facing any other annoying situations.



Proposed Solution:

Our solution is to create an app that will consist profiles of various workers from different areas. For adding profile in our app workers need to go through a registration process for verification. For example, verifying his biodata, contacts and national ID card information etc. After completing registration his profile and working details will be added in our app. An user can use our app by creating their own profiles through phone number verification and by using GPS service in his phone his location can be tracked down. Then he can use the services provided by our app by choosing which worker he needs. In our app amount of payment will be specified for each type of services so that customer does not have to go through unnecessary bargaining. If any type of equipment is needed in that case the customer has to pay for the equipment according to their price. Customer can make the payment through our app by using bkash, debit card or credit card. After the services are done the worker will collect his wages from us through his preferred payment method. For every worker profile there will be a rating system where customer can rate a worker after performing his service. If a worker gets a low rating we will warn him about his performance and if he continues his performance the same way then his registration will be cancelled and his profile will be removed from our app. There will also be a supporting comment box for the users. If they have any complaints they can put them in the comment box and our helping desk will contact the user and solve the issues as soon as possible.


Proposed Solutions
Worker
Register through verification
Added profile in the app
Get work notification
Get user's address
Perform required task
Receive wages via preferred payment method
Get ratings from customer
Customer
Register through verification
Search by job category
Select worker
Request job
Send location via GPS
Worker takes job
Get required job done
Rate worker
Make payment via preferred payment method

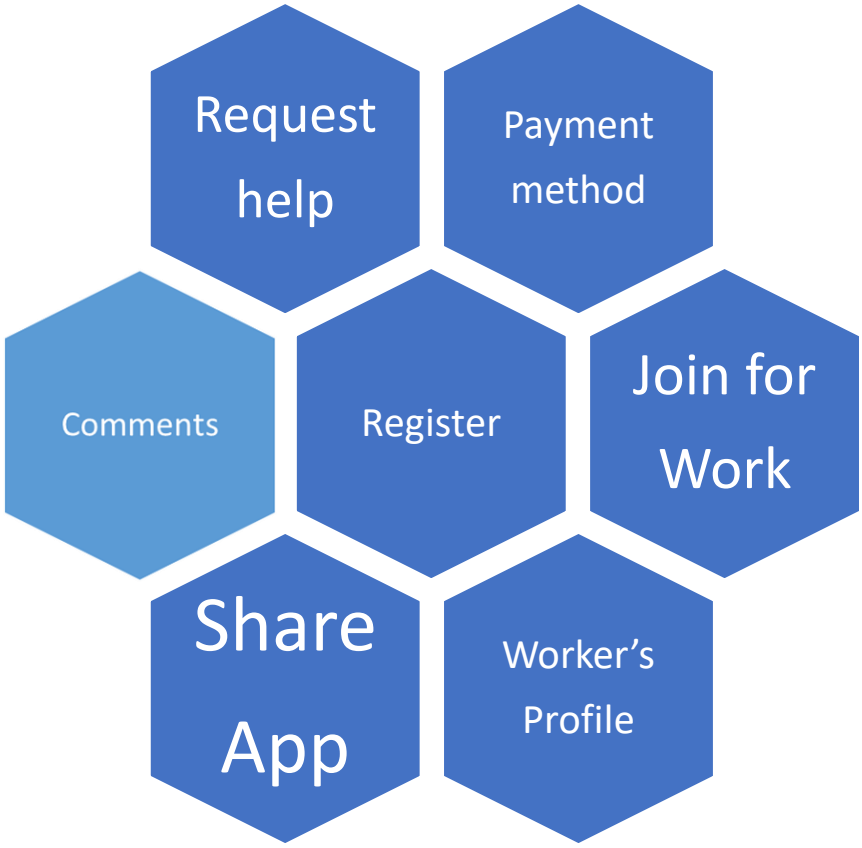
Unique Selling Point:

"The most important part of our business is that it must solve a real need or a real problem"

Feature:

Here some of customer can find worker and worker may do his job according to customer demand.

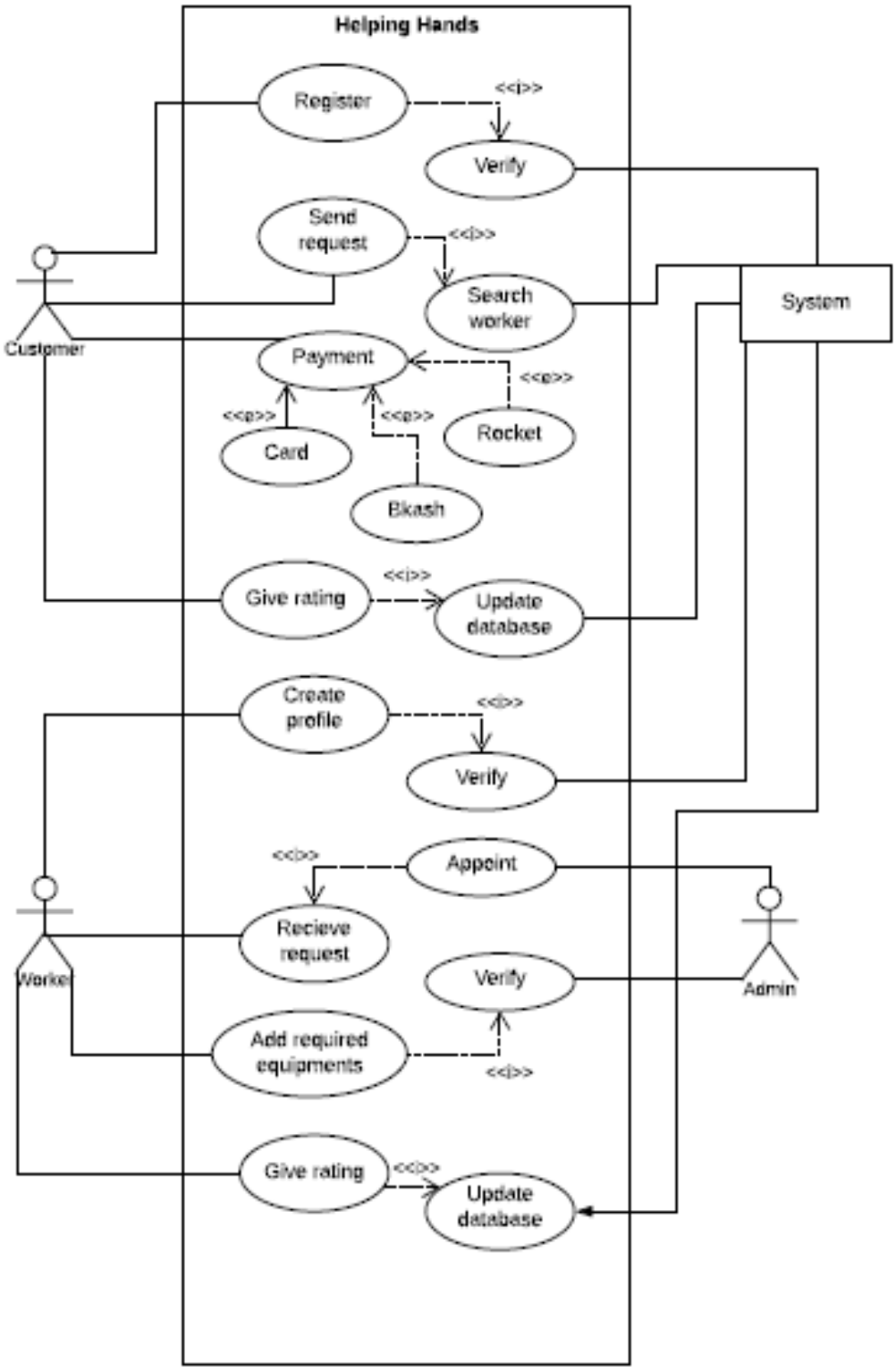
- Customer use apps with smartphone or laptop.
- Customer can search worker and can find registered workers.
- Customer can contact worker.
- Workers receive request and can send reply to customer.
- Customer paya money through bkash or credit card.
- Customer gives ratings to worker based on worker's performance.
- Customer can share apps.



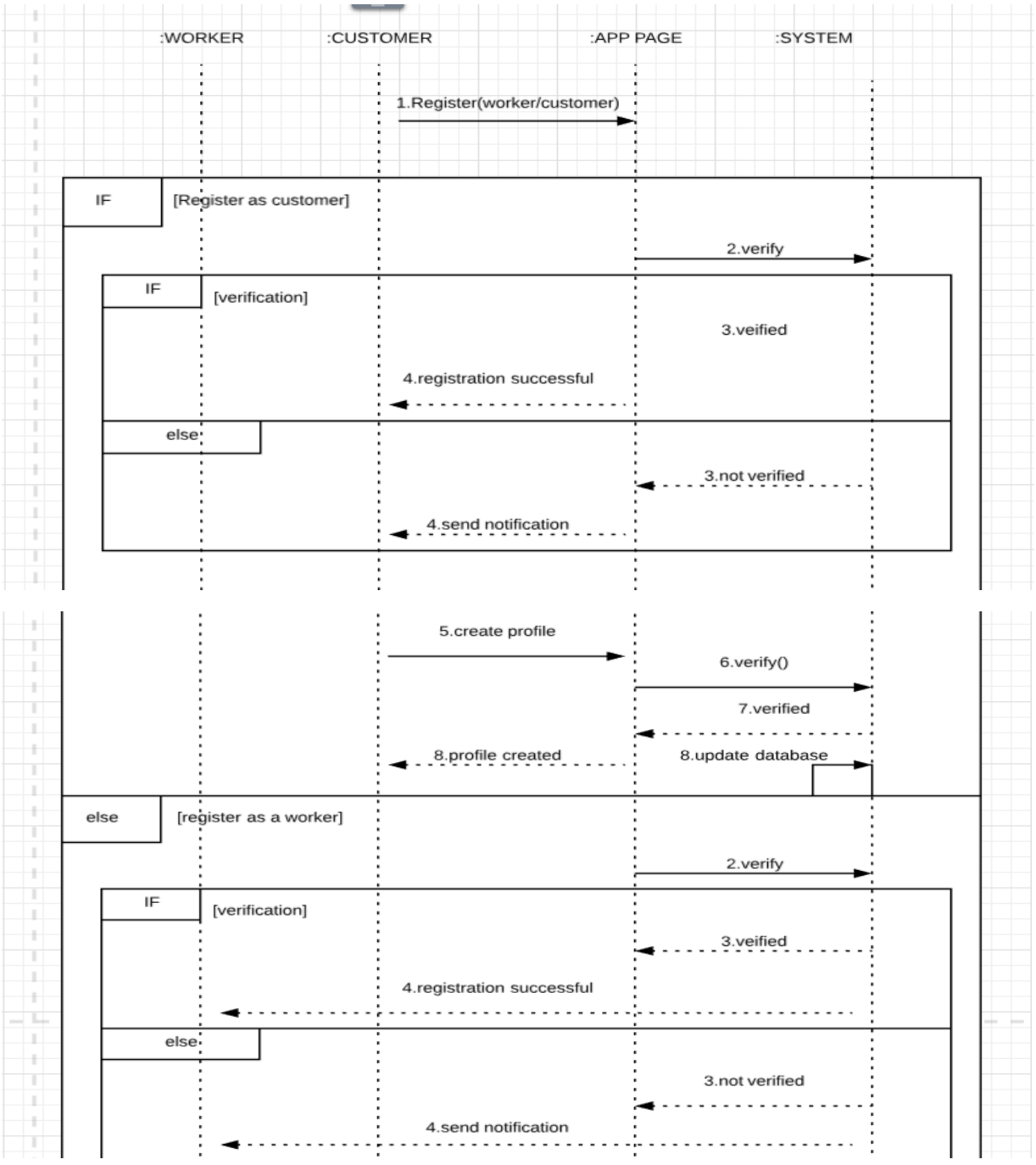
Scope:

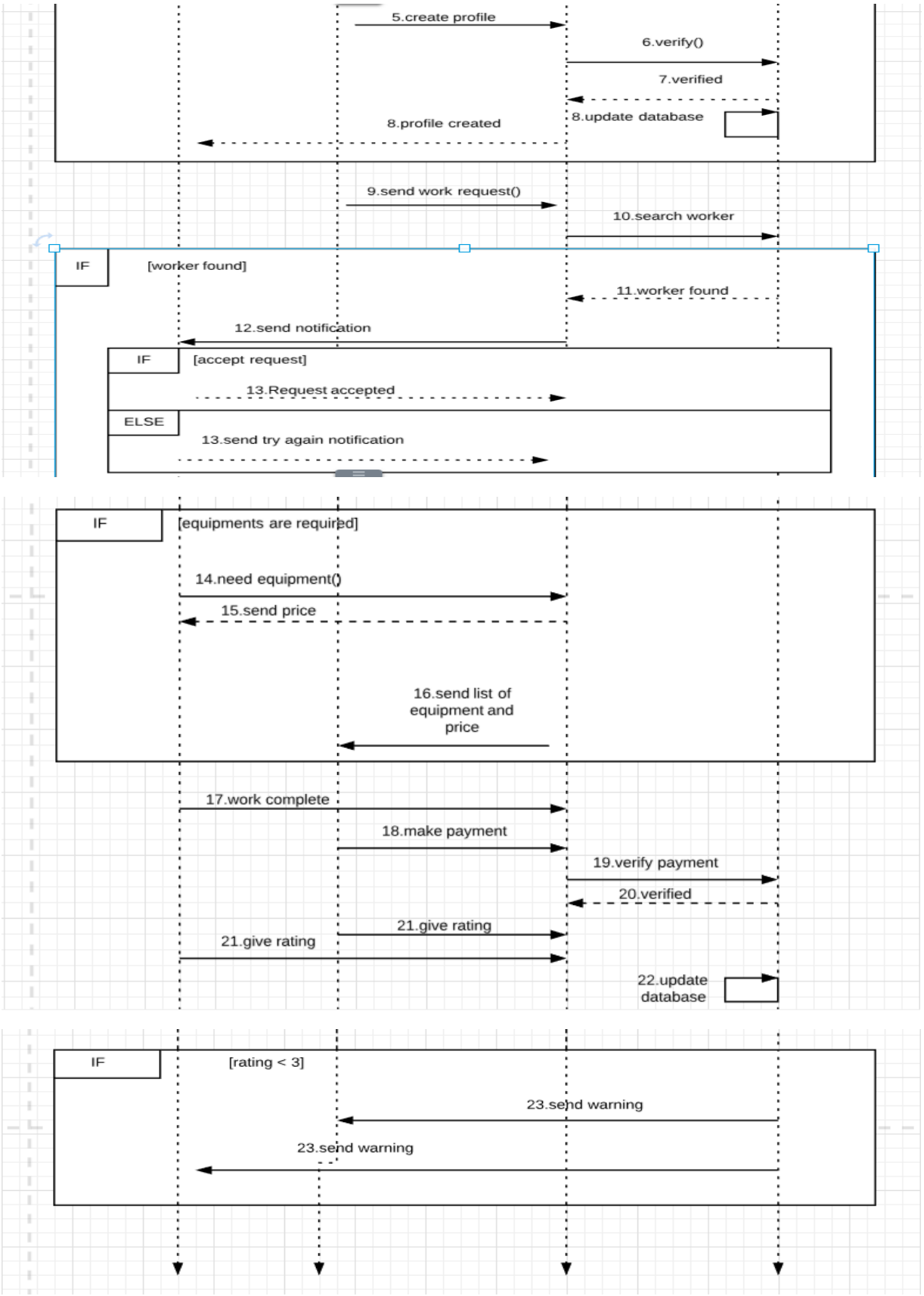
- Workers have to register on the specific server to run the project.
- Registered workers can log in to the server with their id and password.
- So worker will be able to see & collect user's contact number, location can be tracked down by using GPS system.
- Customers have to register on the specific server to run the project.
- Registered customer can log in to the server with their id and password.
- So, Customer will be able to see & collect worker's contact number, address location can be tracked down by using GPS system.
- When a customer would request for a help and then select type of the work, the app will automatically track down his/her location and show nearby free workers relevant to the user requested work.
- If any type of equipment is needed in that case the customer will have to pay for the equipment according to their price.
- Customer can make the payment through the app by using bkash, debit card or credit card.
- Customer may rate a worker after performing his service.
- Customer can complain in comment box.
- So it will be an easy process for both.

USE CASE Diagram:

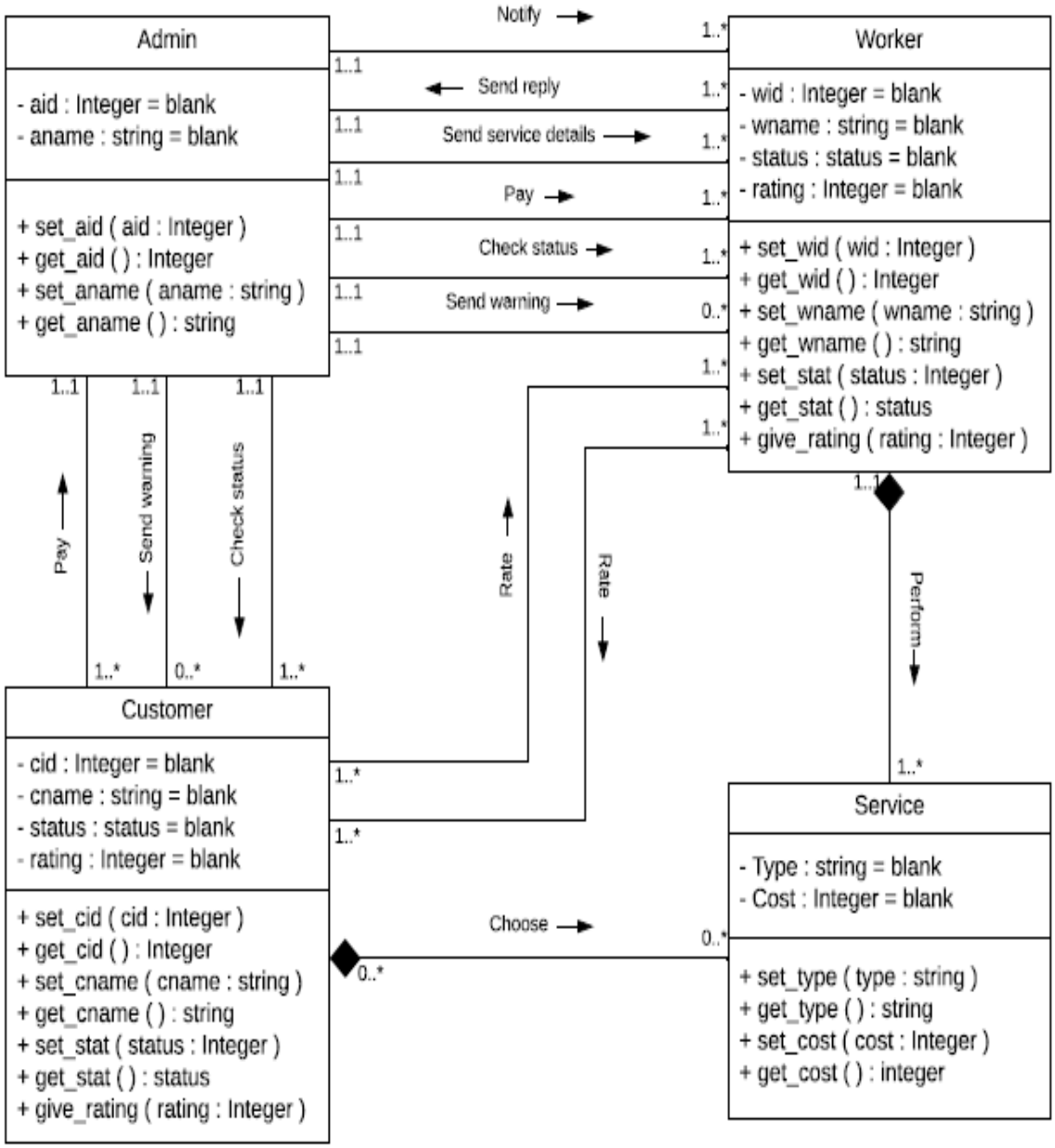


Sequence Diagram:

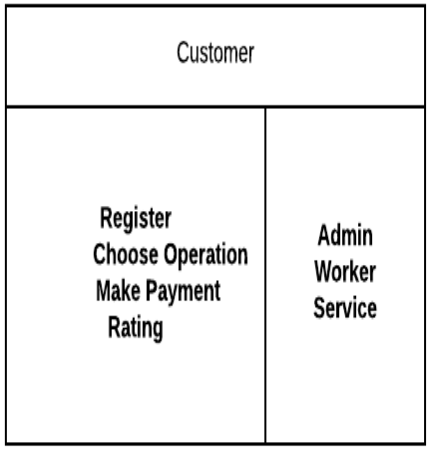


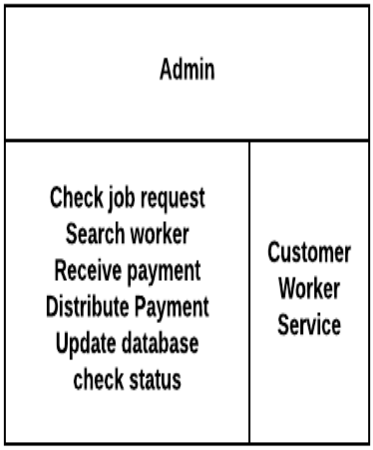

5.create profile
6.verify()
7.verified
8.update database
8.profile created
9.send work request()
10.search worker
IF
[worker found]
11.worker found
12.send notification
IF
[accept request]
13.Request accepted
ELSE
13.send try again notification
IF
[equipments are required]
14.need equipment()
15.send price
16.send list of equipment and price
17.work complete
18.make payment
19.verify payment
20.verified
21.give rating
21.give rating
22.update database
IF
[rating < 3]
23.send warning
23.send warning

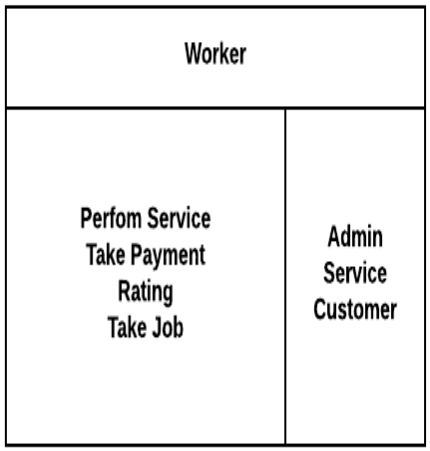
Class Diagram:

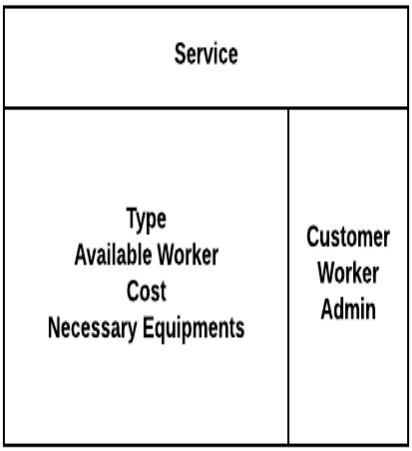


CRC diagram:

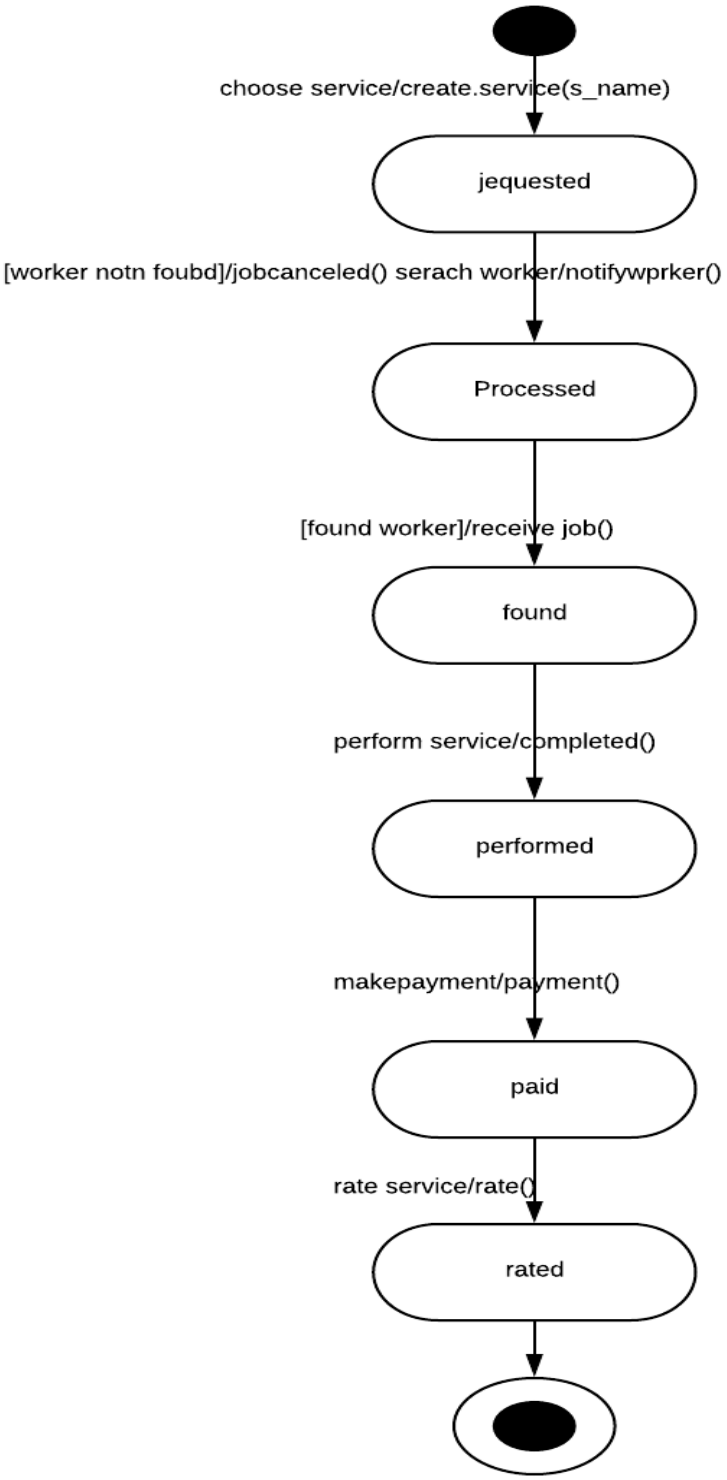

Customer
Register
Choose Operation
Make Payment
Rating
Admin
Worker
Service


Admin
Check job request
Search worker
Receive payment
Distribute Payment
Update database
check status
Customer
Worker
Service

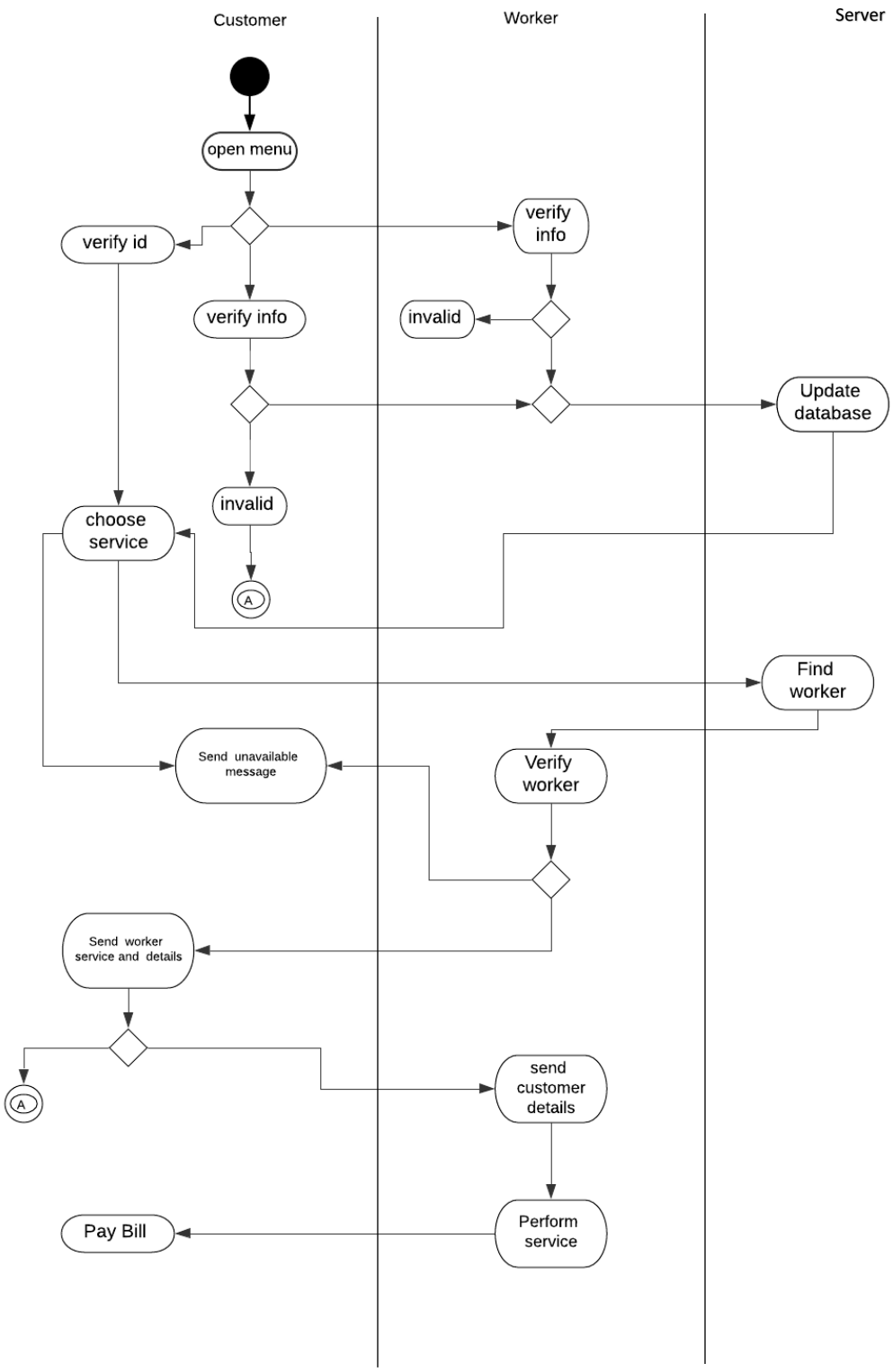

Worker
Perfom Service
Take Payment
Rating
Take Job
Admin
Service
Customer


Service
Type
Available Worker
Cost
Necessary Equipments
Customer
Worker
Admin

Statechart diagram:



Activity diagram:



User Stories:

Sl	As an	I want to	So that	Acceptance criteria
1.	As a customer	I want to send request for worker due to water leakage problem	So that I can	Get a plumber.
2.	As a customer	I want to get the worker whose identity are verified through company	So that I can	Feel secure .
3.	As a worker	I want to get more work request	So that I can	Work more and earn more for my family.