**3. Specific Requirements** 12

3.1. ExternalInterfaces 12

3.1.1. UserInterfaces 12

3.1.2. Hardware Interfaces 15

3.1.3. Software Interfaces 15

3.1.4. CommunicationalInterfaces 17

3.2. Functions 17

3.3. PerformanceRequirements 21

3.4. Software SystemAttributes 21

3.4.1. Reliability 22

3.4.2. Availability 22

3.4.3. Usability 22

3.4.4. Security 22

3.4.5. Maintainability 23

3.4.6. Portability 23

3.5. OrganizingSpecificRequirements 23

3.5.1. UserClass 23

3.6. Additional Comments 24

**Functional requirements**

3.1. External Interfaces :

3.1.2 Hardware Interfaces: The Urban Services system is a web based system hence the hardware interfaces used along with system are internet enabled. Its means the hardware contains internet facilities , wifi facilities and LAN facilities. The hardwares must be internet framework enabled. Altogether we can say the hardwares used is this system must internet efficient. The hardware must contain wireless ethernet facilities.

3.1.3 Softwrae interfaces:

Since the Wheeler Insurance System is a web based system we use some scripting language to develop the software interface.

A.

|  |  |
| --- | --- |
| Language | HTML |
| Initial release | 1993 |
| Last release till date | 5.3 (28 January 2021) |
| Website | www.w3.org/html/ |

B.

|  |  |
| --- | --- |
| Language | JavaScript |
| Initial release | December 4, 1995 |
| Last release till date | ECMAScript 2021 |
| Website | https://developer.mozilla.org/en -US/docs/Web/JavaScript |

C.

|  |  |
| --- | --- |
| Language | Cascading Style Sheet |
| Initial release | December 17, 1996 |
| Last release till date | 13 September, 2018 |
| Website | https://www.w3.org/TR/REC-C SS1/ |

D.

|  |  |
| --- | --- |
| Language | PHP |
| Initial release | 1995 |
| Last release till date | 7.2.10 / September 13, 2018 |
| Website | https://secure.php.net/ |

E.

|  |  |
| --- | --- |
| Language | MySQL |
| Initial release | 23 May 1995 |
| Last release till date | 8.0.12 / 27 July 2018 |
| Website | https://www.mysql.com/ |

F.

|  |  |
| --- | --- |
| Host | Firebase |
| Initial release | April 2012 |
| Website | https://firebase.google.com/ |

3.1.4 Communicational Interfaces:

CI-1: The security of a user must be consistent through the use of passwords.

CI-2: The Urban Services System will communicate to the database through a wireless Ethernet system.

❖Browse: In this functionality customers can access all the premium services as per their requirement they can browse through multiple service and access offers. Customer and service provider both can find a option to register or log in to the system.

❖ Login: This functionality enables a user to access user's own account in this system. By using an email and password which are set at the time of registration, users can log in into the system. Both service providers and customers can log in individually.

❖ Registration: By this functionality a new user can register in this system. For the registration the users have to give his/her details as per company requirement. After a successful registration user can log in into the system and access all types of service.

❖ Update Profile: This functionality enables the customer to add and update their personal details. This functionality provides a user interface to update, edit and delete permissible user details

❖ Book a service: This functionality provides an interface to the customer to book the desired service at doorstep. Customers can set their location and contact details at the time of booking.

❖View order status: Customer can view their ordered services whether it is accepted by the service provider or not.

❖Cancel request: This functionality provides the service provider an interface by which they can cancel services which are requested by the customer.

❖Call for a tender: Customers can call for a tender, which can be viewed by the service providers and they can bid for those.

❖View pending services: This is the interface where service providers can check their pending services, which they have accepted.

❖View/bid tender list : Service provider can check the entire offered tender, which is called by the customer. They can go for bidding the tender if they want.

❖View bid list: Customer can view bid list for his/her tender and accept a bid from that list.

❖Log out: This functionality enables a logged in customer and the service provider to logout form the system.

❖Payment: The user can pay the amount of the service through this functionality. A bill is generated if the payment is successful. The user can pay through net banking/debit card/credit card/Phone pay/UPI through this functionality.

❖GetPayment: Service provider get paid by the admin for the completed service.

❖Add services: Admin can add new services which can be viewd and booked by the customer.

3.3 Performance Requirements: There is no performance requirement in this system because the server request and response is depended on the end user internet connection.

3.4 Software System Attributes: There are a number of attributes of software that can serve as requirements. It is important that required attributes be specified so that their achievement can be objectively verified.

**Subclauses**

3.4.1 Reliability The system provides storage of all databases on redundant computers with automatic switch over. The reliability of the overall program depends on the reliability of the separate components. The main pillar of reliability of the system is the backup of the database which is continuously maintained and updated to reflect the most recent changes. Thus the overall stability of the system depends on the stability of container and its underlying operating system.

3.4.2 Availability The system should be available at all times, meaning the user can access it using a web browser, only restricted by the down time of the server on which the system runs. In case of a of a hardware failure or database corruption, a replacement page will be shown. Also in case of a hardware failure or database corruption, backups of the database should be retrieved from the server and saved by the administrator. Then the service will be restarted. It means 24 X 7 availability.

3.4.3 Usability Prioritize the important functions of the system based on usage patterns. The system has to keep track of the usage of each function so that we can find the functions which are called most frequently. Frequently used functions should be tested for usability, as should complex and critical functions. Once modules are prioritised the system can run more efficiently .

3.4.4 Security System implemented on MVC architecture and maintains all the sessions for better security and performance. Online payment implements through payment gateways which used AES (Advanced Encryption Standard) .

3.4.5 Maintainability A commercial database is used for maintaining the database and the application server takes care of the site. In case of a failure, a re-initialization of the program will be done. Also the software design is being done with modularity in mind so that maintainability can be done efficiently.

3.4.6 Portability The application is HTML and scripting language based. So The end-user part is fully portable and any system using any web browser should be able to use the features of the system, including any hardware platform that is available or will be available in the future. An end-user is use this system on any OS; either it is Windows or Linux. The system shall run on PC, Laptops, and PDA etc.

* **Customer/ End user**

1.The system shall validate the customers through login/signup. For first time users, the system asks for his/her city and personal information like name, contactnumber/email, password, address and profile will be created with the input informations.

2.Customer can view all offers for his/her and can order a sevice.

3.The system asks the customer to select the name of the service. While the user is typing service name in the search pane, the system shall show suggestions for services.

4. The system shall allow the user to choose his/her desired service provider, which is basically a list of authorised service providers within the same city provided by the customer.

5. After customer selects service provider, the system ask customer to select date and time slot of that service provider in which customer want desired service .

6. Customer can call a tender and system ask customer to type service details briefly and to select last bid date and completion of service date.

7. After completion of bidding customer can choose one for his/her tender.

8.Then system will ask customer to select payment type (like: Credit card, Debit Card, UPI etc).

9. After successful payment , customer will get auto generated invoice.

10. Customer can view all past orders.

11. Customer can cancel the order before one day of serving.

12.Customer can update his/her profile.

13. The system allows user to contact with helpdesk for query resolution and/or grievance redress.

14. Customer can rate the service provider.

15.Customer can log out from the system.

* **Service Provider**

1. The system shall validate the service provider through login/signup. For first time users, the system asks for his/her city and personal information like name, contactnumber/email, password, address and profile will be created with the input informations.

2. The system shall ask the service provider to enter/update the details(qualification, experience, services that he/she can provide, bank account details) of the currently available services decided by system.

4. Service provider can check his/her schedule and he/she can cancel any order request.

5. He/she can update their profile.

6. Service provider can bid for a tender and then system will ask to give information about duration of doing the task and expected payment for these tender.

7. Service provider can check bidded tender status.

8. The system shall send a daily report to the service provider containing up to-date details of his providing service (name of service, quantity, payment details). Also system will payment each service provider in daily basic.

9. The system allows service provider to contact helpdesk for query resolution and/or grievance redress.

10. Service provider can log out from the system.

* **Admin**

1. The system shall ask for authentication of the admin panel.

2. The system shall allow the admin to generate a daily report on the order details . 3. Admin will pay the service provider in daily basic and refund money to customer for cancelling the order.

4. Admin can update service list.

5. Admin will produce total report about the system.

3.6 Additional Comments

● All the analysis and web information is latest till the date. The system analysis, cost analysis, market analysis, requirement analysis are valid to the date of this SRS document.

● This SRS document will help to create the web based Urban Services system.

● May be all the implementation details are not clearly stated here, that details will be clear during the time of implementation.

● THe SRS may be modified later based on implementation requirements or as per client’s requirement.

● The implementation of the system should follow this SRS document.

● After implementation it will go through α-testing, ß-testing and ४-testing.