 **Proposal for Project\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Yes, our full team named “ONLINE WHOLESALE MARKET” can demonstrate a thorough understanding of our project. First of all the project we are working on is a very important and necessary for all the seller in this world. Especially for our small country. We have a large population and a small country and most of the seller buy the product from the physical market and it’s such kind a struggling for them to find good product and the good place daily. Some the reseller don’t know where they will find the wholesale market . For the reason the buyer does not satisfied. So we are working for those people who cannot find the good product for their local business and their buyer.

In this rural area many of farmers can not sell their product with good price and some of the crops are spoil due to the unhealthy selling system. For the reason most of them waste food. So our main target is to get product from those places who can not sell their product and who are not benefited by selling. Those who are interested buy the product from wholesale market with a reasonable price and sell it to the local market. So we will start our project from this and planning to go a long way and everything will be elaborated.

1. Yes, our main purpose is to ensure the good products with a good price that will be benefited for the wholesale seller and for the local buyer though we don’t have any specific platform for the wholesale . So that we are here to create a software to make our main target easy. Each and every members of our team are very excited and inspired to make a software like this and help our people and country.
2. So, there is a thought to try to solve this problem. Suppose, in the rural area have some product or crops or anything to sell or if a factory have no buyer to buy their product then they can add their product to the wholesale market. We are losing our big amount of product for good way of selling opportunity. The products are actually gets wasted. So, if the company can manage to send this products before being expired to those people who are really interested buy this product their business or own purpose , then everyone can be benefited.

Again, big amount of people in the rural area or any place in this world they are suffering to wholesale problem due to the selling guideline problem . So if these products can be delivered to the people who are in need and who cannot find to buy, this could be the perfect solution to meet their daily need .

1. Mainly, our purpose would be to propose a solution of this waste problem. If we can manage to have a good network and helping mentality, we hope that this image will be changed.

Also, there are many unemployed people in our country. If they participate in this project, they can find a way to earn and serve his/her family too. This initiate could eradicate unemployment from the society as much it could be possible through this project.

In the end, if we can finally execute this system of networking and sharing such a kind a big amount of product for the people , more people would know about this. That how if we can get more supportive hands this can become a large social platform determined to sell the big amount of product which are wasting in this world due to lack of the big amount of selling product selling system.

Proposal by,

Group – 4

|  |  |
| --- | --- |
| **Name** | **ID** |
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**FUNCTIONAL REQUIREMENTS :**

# **Registration**

**Functional Requirements**

**1.1** The software shall allow users to registration with their email id and phone number.

**1.2** After that Users information have to be compelled to be registered within the system thus on establish every of them unambiguously and do the required group action. One person needs to put his all the details properly and precisely as it will be helpful in identifying them and believing that he is the real person.

**1.3** Without registration, there are few options and pages one user can see which are landing on the home page and taking the features read but he won’t be allowed to use those. For use, he will have to register

# **System Login**

**Functional Requirements**

* 1. The software shall allow users to login with their given username and password.
  2. If the username and/or password has been inserted wrong for more than three times, the random verification code will be generated by the system to retry login.
  3. If the number of login attempt exceed its limit (5 times), the system shall block the user account login for one hour.

# **Forgot password:**

**Functional Requirements**

**3.1** There will be a module named as forgot the password and using this module user can recover their password in seconds. So here they need to only put their registered email Id click on enter.

**3.2** One confirmation email will go to the email where they have the option to reset the password. In seconds one can use this module and get rid of forgetting password problem.

# **Creating Profile:**

**Functional Requirement**

* 1. The software shall allow users to create a new profile in different module.
  2. If the name of the profile is same as any other profile the software will notify to the user.
  3. The user has to input a valid password for his/her profile, if the password is not valid the system will notify to the user.

# **Modules:**

**Functional Requirement**

**5.1** There will be a section consist of four different types of module. These modules are:

* Wholesale seller Module
* Agent Module
* Admin Module
* Buyer/Customer Module

**5.2** In admin module,

* Maintain details of all the agents and benefactor.
* Maintain details of workers and have the authority to assign them with specific task through software.
* After the product adding task is fully completed, admin sends the confirmation message to the benefactor or donator.

**5.3** In agent module,

* All the agents are associated with certain areas or district of the country.
* All of the seller tasks are automatically forwarded via admin module into the agent module and the software then tracks the agent who is in the selling zone and notify him.
* That agent will collects the product by assigning some field workers.

**5.4** In seller module,

* Seller selects the area from where he wants to make the product sell.
* Seller can add the product in the wholesale market.
* Request to collect the goods
* When the admin approves the task, he can see the details of the agent and have the facility to contact him.

**5.5** In customer module,

* Customer search for wholesale goods with affordable price.
* Add item in the cart
* While confirming the order gets to select the payment method.

# **Product category display:**

**6.1** After searching a product on main page, this user is navigated to this page where it displays all the main product categories like clothing, food, furniture, electronic devices, books and personal products from which a user can select any category and can proceed to buy the product of the selected category as many as they want in quantity.

# **Products selection screen:**

**7.1** The product must be provided to user selection to select the product based on name.

**7.2** On selecting any of the product shown the column for the quantity to be entered.

* 1. If we found the product it will show the product category.

# **.Product search result screen:**

* 1. The product under the search criteria.
  2. If we can not the product it will that “No product found in this category.
  3. If we found the product it will show the product category.

**9. Product description screen:**

**9.1** This screen will give the product description about the size color display of the product .

* 1. To view the product availability we need it.

# **View cart screen:**

* 1. The user can manage shopping cart which will include all the product he/she selected.
  2. The users can edit delete and update his shopping cart.
  3. Afte that user can see whole amount and the product which has been selected by him/her.

**11.Order details screen:**

* 1. The screen final products in the view cart**.**

**11.2** It gives product list quantity total amount of product arrival date etc.

**11.3** Among details, providing user complete information about his/her purchase.

**12.** **Payment screen:**

**12.1** This is the screen where the user to pay for the products the have to bought by paying. Payment options:

\*Credit card .

\*Debit card.

\*Mobile banking.

\*Cash on delivery. (C.O.D)

# **13. Order confirmation screen :**

* 1. This the screen where customer confirm the product.
  2. There is option where user can cancel the product.
  3. After the confirmation the user get the confirmation message.

# **Refund payment screen:**

**14.1** If any of the user paid the products amount mistakenly then they can cancel and take refund also

# **Request Making:**

**15.1** This is the interface first provided to the users they can put a request to give their product to the exact buyer who need it.

**15.2** After confirming all the details, one of the agents will be assigned with this product task who will make sure to collect the product in time and make the process smooth.

# **Data Control:**

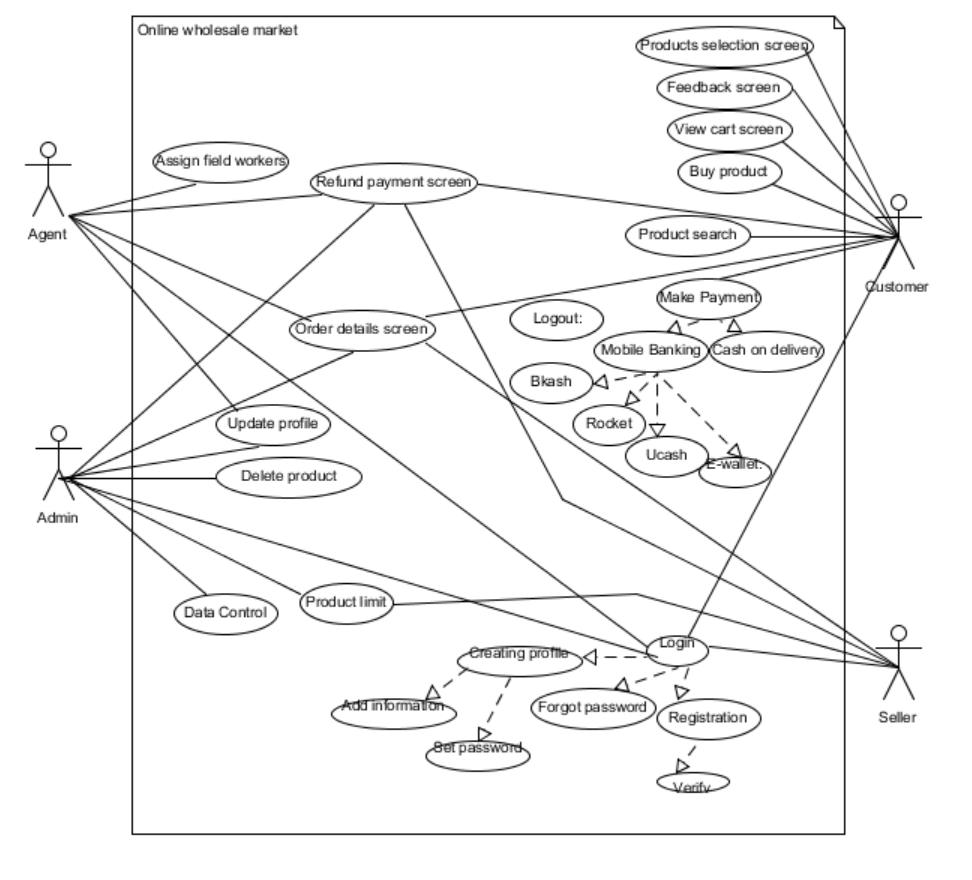
**16.1** This is the interface first provided to the admin. Admin has the official powers to control the flow of the data from one part of the system to the other. He has the power to manipulate the access of the users to the data.

**16.2** The main purpose of this account is to make the user data relevant and then giving the inputs to the other interface module and make it work optimistically and get the timetable according to the wish we want to create for a particular type of inputs. Hence all the data will be reflected with clean and well data in the interfaces.

**17.Logout:**

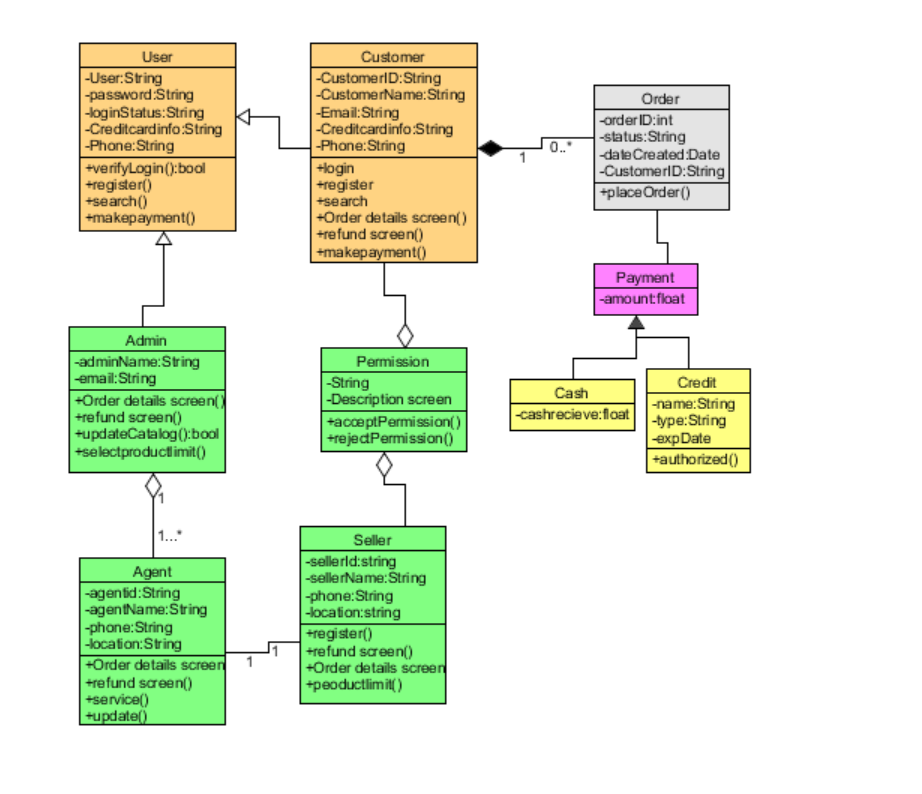
**17.1** After the payment the pr surfing the product customer will logged out.

* + - 1. **UML Design**

All the admin, agents and seller or customer must create an account to have access to all the features. Admin manages details of all the agents and benefactor. Admin can also assign workers with specific task. A confirmation message can also be sent by the admin when the donation is completed. There are district-based agents all over the country who can assign field workers to collect the donation. Both admin and agent have the authority to delete and update any product or details from the database. Donator can make request for donating. He can also search for desired information. Customer can buy the product by searching them. Customer can use Bkash, Rocket, U cash or cash

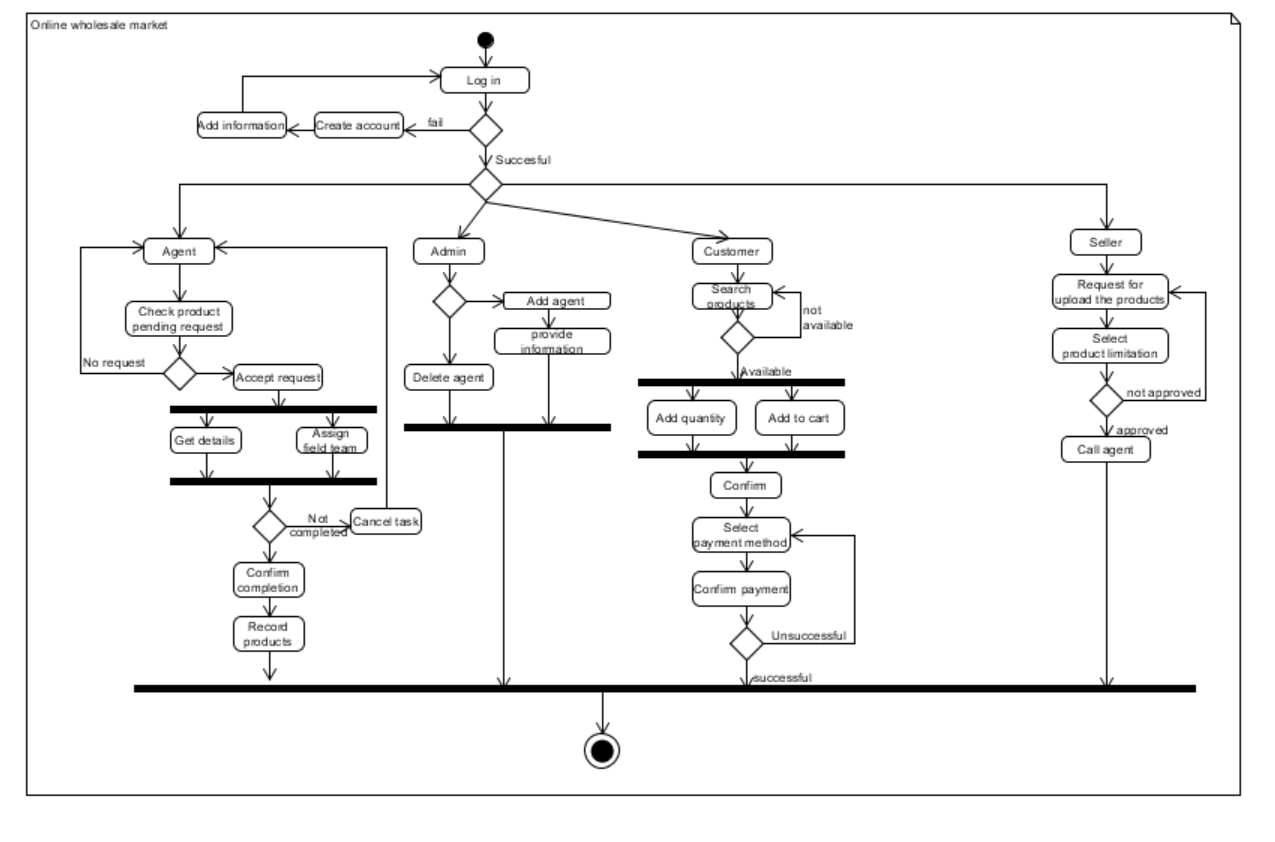
**Class Diagram:**

The online wholesale management system is Every class has set methods and get methods. A system can have many customers but an admin can be only one in a system. In a system one customer can order zero or many product as much as he/she likes but order can be made by one customer. Admin can manage one or many agent for collecting the food form the seller. Each agent can maintain only one seller in this system.



**Activity Diagram:**

A user attempt to login into the system. If the login is successful then the system decides if the account is for admin or agent or seller or customer. If the login is failed the system checks whether it is for wrong input or there is no one in the system. So, the system wants the user to re check the information or create a new account and add necessary information. If the user is admin then he adds agent by providing necessary information. the user is agent, he/she checks the pending requests. Then he/she gets to accept the donation request one at a time. After accepting the donation request, he/she gets all the details and gets to assign field team to collect the product and after that, when the donation is received, he/she confirms it and then record all the product in the database. If the donation could not be completed for any difficulties then he/she can cancel the task and look for another pending request. If the user is seller, then he requests to sell the products. After his/her selling request gets approved he/she can call the agent. If the user is customer, then he/she can search for food and add them on the cart. After adding all the products he/she can confirm it and select payment method. If the payment confirmation is unsuccessful, he/she needs to do the selecting payment process again.



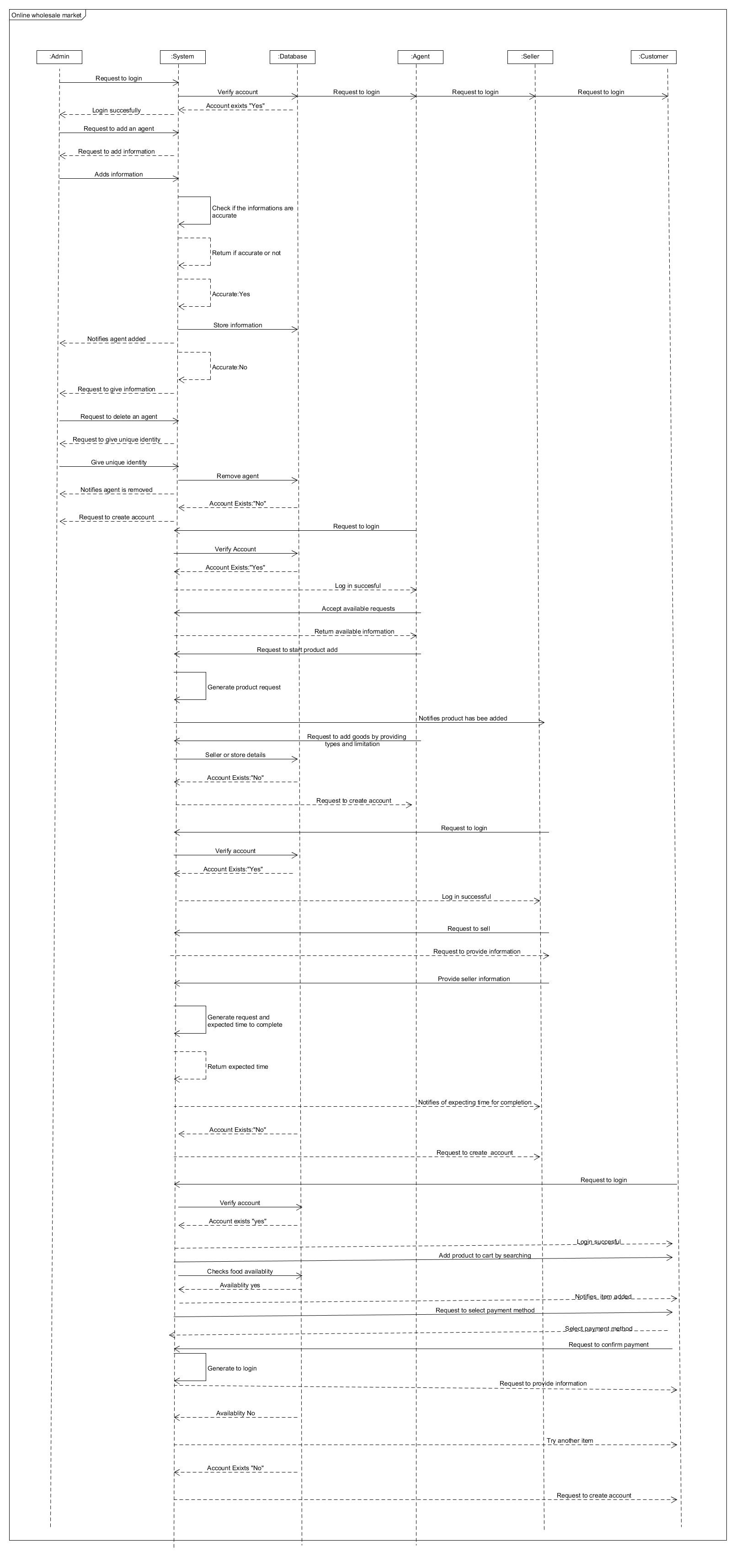
**Sequence Diagram:**

An admin request to log in into the system after verifying his/her identity. System confirms if the account exists or not. If the account is available system notifies the admin and after that admin gets option of adding agent and removing agent from system. If the login verification is unsuccessful, the system notifies that no account found and request to try again. If the admin chose to add an agent then he requests to add agent and then adds information about the agent which get stored into the system. If all the information is accurate then system notifies that the agent is added in the database. On the other hand, if he chooses to remove an agent, then he requests to remove an agent by providing unique identity so that the system can check into the database and identify him. If the system finds the requested agent, then the system replies with the confirmation that the agent has been found and removed from the database. In case of not finding, the system notifies the admin and request to enter information again.

An agent, a Seller and a customer do the same thing for logging into the system. By verifying identity, they can log in to the system. If an agent logs in, he checks for available product requests and request to accept those requests one by one. The system then generates the available information related to that product request and sends all the information to that agent. Then request to start the adding products task and the system generates it and notifies the seller that the selling request is approved and the procedure of collecting the goods has started. After collecting the goods, the agent sends confirmation via the system that the task is completed. After collecting the goods, agent add them into the database through system.

A seller after logging in successfully request to make a donation and give all the necessary information. The system notifies him that the selling task is generated and the seller gets notified of an expected time of completing the selling task.

A customer after logging in successfully, add products into the cart by searching for it. If the products is available system notifies him and sends confirmation that it has been added into the cart. After adding all the goods, he requests to confirm the purchase. Then the system requests him to provide payment method. Customer provides the payment method information and confirm it. System after that, generates expected delivery time and notifies the customer. If the requested goods is unavailable, the system notifies him and sends alternative options.



* 1. **Process Model**

Here, we would like to prefer the “Waterfall” Software Development Model for our system. It would be the best model for our software management system. Because waterfall relies on teams following a sequence of steps and never moving forward until the previous phase has been completed. So in our project we will have not to back. We will have not use the dynamic method in this project. We will make the software by static method. The project will be planned easily and finally it will not be change. Waterfall management system does not need big amount of group mate. We can make it by ourself easily. This model is only appropriate when the requirements are well- understood ..

* 1. **Method Selecting Reasons**

**Requirement Gathering and analysis** − All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification document.

**System Design** − The requirement specifications from first phase are studied in this phase and the system design is prepared. This system design helps in specifying hardware and system requirements and helps in defining the overall system architecture.

**Implementation** − With inputs from the system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality, which is referred to as Unit Testing.

**Integration and Testing** − All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.

**Deployment of system** − Once the functional and non-functional testing is done; the product is deployed in the customer environment or released into the market.

**Maintenance** − There are some issues which come up in the client environment. To fix those issues, patches are released. Also to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment.

* 1. **Roles and Responsibilities**

**Project manager**

1. Planning-Manager will plan the whole project.
2. Administrating-The manager can administrate the whole project
3. Communicating client- Manager will manage the client.
4. Risk management- If there is any management issue the manager will manage the risk.
5. Coding- The programmer how they will work the manager will say it.
6. Presentations- The presentation description will be directed by manager

**Analyzer and designer**

1. Gather requirements- Analyzer will analyzer the project requirements.
2. Design- After the analysis the analyzer will design whole.
3. Gather concepts- The concept will be provided by the analyzer and designer
4. Choosing preferred design- This is the thing the designer will have to
5. Finalizing- This the final design for the the project

**Developer**

1. Organizing developers- The developer will organizing the project
2. Manage data- The developer can manage and handle the data .
3. Documentation-The developer will make the documented the project documentation.
4. Integration- The developer will integrate the project.

**Tester**

1. Unit testing- The tester will test the program unit.
2. System testing- The tester can manage the system of the testing .
3. Security testing- The tester can secure the testing system.
4. Accessibility testing- The tester will manage the accessibility of the software.
5. Performance testing- The performance will also tested by the tester.
6. Recovery testing- If there is any problem the tester will recover the project.

**Developer**

1. Check errors- After that the developer will check the error and solve the error.
2. Correction- The correction will be corrected by developer.
3. Final release-Finally the developer will release the whole project.

**UL & UX Design:**

**1ST PAGE:**

Graphical user interface, text, application, chat or text message

Description automatically generated

**2ND PAGE:**

Graphical user interface

Description automatically generated

**3RD PAGE:**

Graphical user interface

Description automatically generated

**4TH PAGE:**

Graphical user interface, text, application

Description automatically generated

**5TH PAGE:**

Graphical user interface, text, application, chat or text message

Description automatically generated

**Test Cases:**

**Black Box Testing**

**Black Box Testing** is a software testing method in which the functionalities of software applications are tested without having knowledge of internal code structure, implementation details and internal paths. Black Box Testing mainly focuses on input and output of software applications and it is entirely based on software requirements and specifications. It is also known as Behavioral.

## **White Box Testing**

**White Box Testing** is software testing technique in which internal structure, design and coding of software are tested to verify flow of input-output and to improve design, usability and security. In white box testing, code is visible to testers so it is also called Clear box testing, Open box testing, Transparent box testing, Code-based testing and Glass box testing.

**In this here we will test both of the testing**

**TESTING-1**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Project Name: ONLINE WHOLESALE MARKET | | | Test Designed by:  NAZMUN ARA SULTANA | | |
| Test Case ID: 1 | | | Test Designed date:  03.23.2021 | | |
| Test Priority (Low, Medium, High): Medium. | | | Test Executed by: Nazmun ara sultana | | |
| Module Name: View the login button is working. | | | Test Execution date: 03.23.2021 | | |
| Test Title: Verify the apps is logging in. | | | | | |
| Description: Test to view of after the logging screen. | | | | | |
| Precondition (If any): User must have valid username and password | | | | | |
| Test Steps | Test Data | Expected Results | | Actual  Results | Status  (Pass/Fail) |
| 1. Open the apps. 2. Go to navigation panel. 3. Click the username   And password | Username: IHP123  Password:  \*\*\*\*\*\* | User should be able to view the log in screen. | | As expected | Pass |
| Post Condition: User can successfully view apps product screen the next screen off log in. | | | | | |

**TESTING-2**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Project Name: ONLINE WHOLESALE MARKET | | | Test Designed by:  MR. ISMAIL HOSSAIN | | |
| Test Case ID: 2 | | | Test Designed date:  03.23.2021 | | |
| Test Priority (Low, Medium, High): Medium. | | | Test Executed by: MR. ISMAIL HOSSAIN | | |
| Module Name: Forgot Password Session | | | Test Execution date: 03.23.2021 | | |
| Test Title: Provide user with new password. | | | | | |
| Description: Test website forgot password feature. | | | | | |
| Precondition (If any): User must have valid email id or phone number. | | | | | |
| Test Steps | Test Data | Expected Results | | Actual  Results | Status  (Pass/Fail) |
| 1. Open the apps account login page. 2. Click Forgot Password. 3. Enter Email id or Phone number. 4. Enter Confirmation Code. 5. Enter New Password. 6. Click Submit. | E-Mail:  gfx@gmail.com  Code:  1456  New Password:  987652 | User should login into the apps. | | As expected | Pass |
| Post Condition: User can successfully login to his/her account. | | | | | |

**TESTING-3**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Project Name: ONLINE WHOLESALE MARKET | | | Test Designed by:  MR. ISMAIL HOSSAIN | | |
| Test Case ID: 3 | | | Test Designed date:  03.23.2021 | | |
| Test Priority (Low, Medium, High): Medium | | | Test Executed by: MR. ISMAIL HOSSAIN | | |
| Module Name: Check Search product Results | | | Test Execution date: 03.23.2021 | | |
| Test Title: Provide results to the user. | | | | | |
| Description: Test website result checking feature. | | | | | |
| Precondition (If any): User must have to log in as a customer or seller. | | | | | |
| Test Steps | Test Data | Expected Results | | Actual  Results | Status  (Pass/Fail) |
| 1. Open the apps. 2. Log in as a customer or seller. 3. Click search result, then find the products & Results. 4. Select the product to buy. | Search product | User should see desired product result. | | As expected | Pass |
| Post Condition: User successfully gets to see his/her product search result. | | | | | |

**TESTING-4**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Project Name: ONLINE WHOLESALE MARKET | | | Test Designed by:  MR. ISMAIL HOSSAIN | | |
| Test Case ID: 4 | | | Test Designed date:  03.23.2021 | | |
| Test Priority (Low, Medium, High): Medium | | | Test Executed by: MR. ISMAIL HOSSAIN | | |
| Module Name: Check any order notification. | | | Test Execution date: 03.23.2021 | | |
| Test Title: Checking preferred products notification. | | | | | |
| Description: Test notification checking feature. | | | | | |
| Precondition (If any): User must have to log in as a seller or a customer. | | | | | |
| Test Steps | Test Data | Expected Results | | Actual  Results | Status  (Pass/Fail) |
| 1. Open the apps. 2. Log in as a seller or customer. 3. Select preferred product. 4. Then see the notification. | Get notification via text or mail. | User will be able to see all available notices. | | As expected | Pass |
| Post Condition: User can successfully see the ordered notices. | | | | | |

**TESTING-5**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Project Name: ONLINE WHOLESALE MARKET | | | Test Designed by:  MR. ISMAIL HOSSAIN | | |
| Test Case ID: 5 | | | Test Designed date:  03.23.2021 | | |
| Test Priority (Low, Medium, High): Medium | | | Test Executed by: MR. ISMAIL HOSSAIN | | |
| Module Name: Check the product limit. | | | Test Execution date: 03.23.2021 | | |
| Test Title: Checking preferred products limitation. | | | | | |
| Description: Test product limit less than or greater than that. | | | | | |
| Precondition (If any): User must have to log in as a seller. | | | | | |
| Test Steps | Test Data | Expected Results | | Actual  Results | Status  (Pass/Fail) |
| 1. Open the apps. 2. Log in as a seller. 3. Select preferred products and set the limit of this products or goods. 4. Then see that is ok to increase or decrease the product limit. | Get the access to set the limit of a product. | Seller will be able to see the product limit. | | As expected | Pass |
| Post Condition: Seller can see this the limitation of this product is increasing and decreasing as much as he/she can. | | | | | |

**Work Breakdown Structure (WBS):**

Diagram

Description automatically generated

**Effort Estimation:**

**SLOC=Source line of codes=15000**

**PM=person months**

**DM=development time**

**P=project complexity**

**T= coefficient**

**From the equation,**

**Effort factor =2.4**

**P=1.05**

**T=0.38**

**Now, total effort=PM=Coefficient<effort factor>\*(SLOC/1000)^P**

**=2.4\*(15000/1000)^1.05**

**=41.21~41 (person month)**

**Total development time=DM=2.50\*(PM)^T**

**=2.5\*41.21^0.38**

**=10.27**

**Required number of people =ST=PM/DM**

**=41.21/10.27**

**=4.012~(4)**

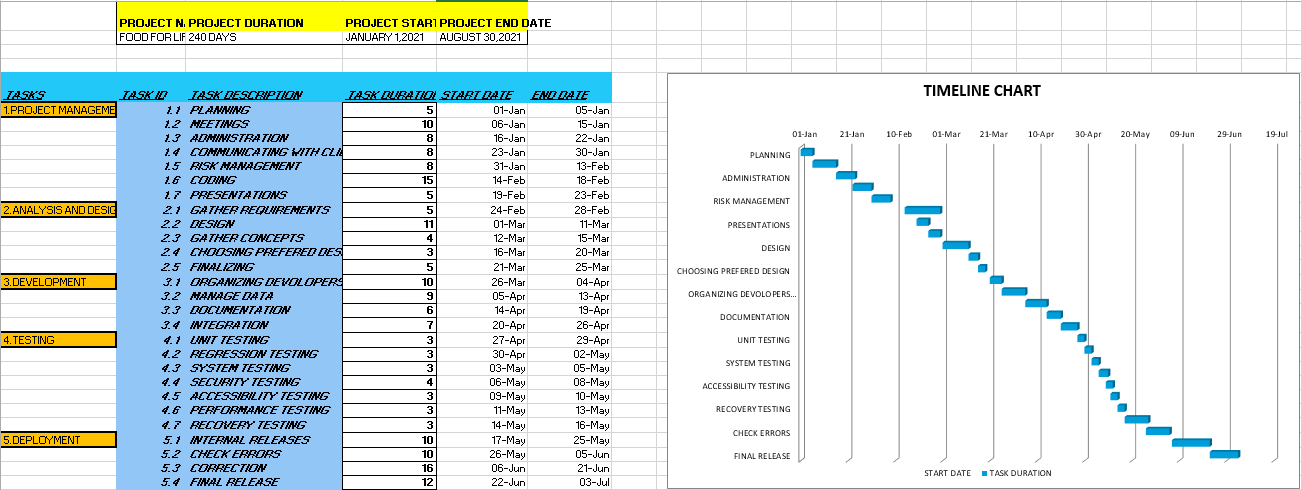
**Timeline Charts:**

**Chart 1:**

Chart

Description automatically generated

**Chart 2:**



**EVA:**

|  |  |  |
| --- | --- | --- |
| Task | Planned Effort | Actual Effort |
| 1 | 10 | 11 |
| 2 | 7 | 8 |
| 3 | 8 | 6 |
| 4 | 12.5 | 11 |
| 5 | 9 | 12 |
| 6 | 15 | 16 |
| 7 | 11 | 10 |
| 8 | 6 | 8 |
| 9 | 13 | 14 |
| 10 | 12 | 10 |
| 11 | 7 | 8 |
| 12 | 8 | 7 |
| 13 | 5 | 6 |
| 14 | 6 | 6.5 |
| 15 | 7 | 6.5 |
| 16 | 10 | 12 |
| 17 | 9 |  |
| 18 | 11 |  |
| 19 | 10.5 |  |
| 20 | 14 |  |

**BAC =41**

**BCWP=146.5**

**BCWS=191**

**ACWP=152**

**NOW,**

**SPI=BCWP/BCWS**

**=146.5/191=0.77**

**SV=BCWP-BCWS**

**=146.5-191= -44.5**

**CPI=BCWP/ACWP**

**=146.5/152=0.96**

**CV=BCWP-ACWP**

**=146.5-152= -5.5**

**Expected schedule completion=BCWS/BAC**

**= 191/41\*100%=4.65%**

**Actual completion=BCWP/BAC**

**=146.5/41\*100%=3.57%**

**Risk management table:**

**Risk table:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **RFF ID** | **Risks** | **Category** | **Probability** | **Impact** |
| 1 | Inexperienced Stuff | ST | 30% | 2 |
| 2 | Design Failure | DE | 25% | 1 |
| 3 | Software Performance | TE | 20% | 2 |
| 4 | Environmental Factors | BU | 30% | 2 |
| 5 | Hacker Attack | TE | 20% | 1 |
| 6 | Unexpected Number of Users | PS | 30% | 3 |
| 7 | Tightened Delivery Deadline | BU | 40% | 2 |
| 8 | Change of Requirements by Customer | PS | 60% | 2 |
| 9 | Technology Not Meeting Expectation | TE | 30% | 1 |
| 10 | Less Funding | BU | 50% | 1 |

|  |  |
| --- | --- |
| **Impact key** | **Impact** |
| 1 | Catastrophic |
| 2 | Critical |
| 3 | Marginal |
| 4 | Negligible |