Software Requirements Specification Document

A comprehensive logistics management application using Cloud Platform

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Brief problem statement

We are going to implement this project using Progress Rollbase which is a platform as a service software. In this project, we are supposed to design, develop and deploy a comprehensive logistics solution. The project aims at helping the customers to manage their logistics information, load tracking system, search for nearby dealers and place their order.

System requirements

We are going to use Rollbase technology which is Platform as a Service Software. It is a Cloud Platform which provides in-built tools like point & click,drag &drop in a webbrowser for the rapid development of standards-based business applications.we may also be using JavaScript,HTML and CSS. Here is the brief description:-

Progress Rollbase: Application Development Platform (Which deploys the developed application into Amazon Elastic Compute Cloud)

Amazon RDS: Database

HTML/JavaScript: Languages

AJAX/REST/SOAP APIs

Users profile

There will be 3 sets of users which will be:

1. Customers:

Needs familiarity on how to use Internet, how to register for a portal, how to login to the portal and track for services etc. They can create their account and book a consignment

sponsored by a dealer. They can also see their previous consignments and track the current ones. Basically, this project will provide them a gateway to order a desired consignment and get the best out of it.

2. Dealers:

They will be able to place their consignments along with the option of estimated cost.

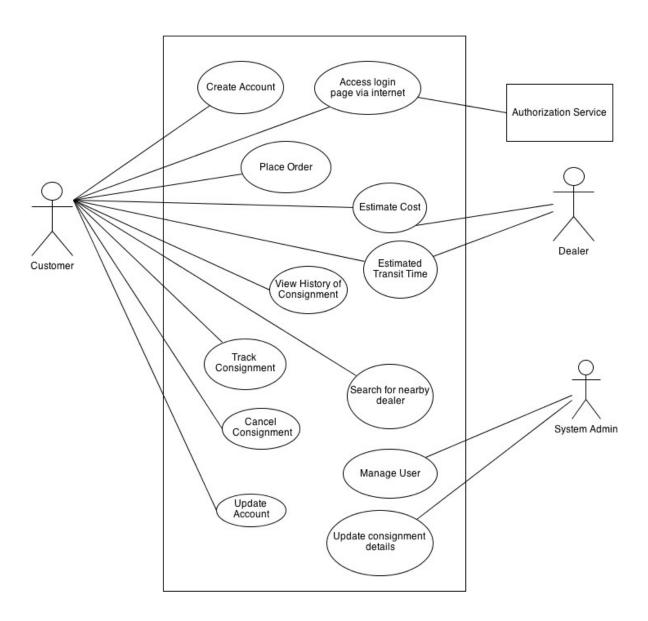
3. System Administrator:

Knowledge on comprehensive management of web application. e.g. Adding new location, updating price information. He should know how a logistics system works online. He can grant access to new people to create their account and order a consignment. He also has the ability to edit any account or logistic post.

Feature requirements (described using use cases)

| No. | User Case Name | Description | Release |
|-----|-------------------|---|---------|
| 1. | User Login | Verifying the user name and the corresponding password | 1 |
| 2. | Place order | User is able to place order for the delivery of his | 1 |
| | | consignment | |
| 3. | Estimate the cost | User is able to estimate the cost by entering the source | 2 |
| | | and destination, weight and the service of consignment | |
| 4. | View Previous | User is able to check his log e.g. his previously ordered | 1 |
| | Consignment | consignments | |
| 5. | Track | User is able to track the current location of his | 1 |
| | Consignment | consignment | |
| 6. | Search for nearby | User is able to locate the nearby dealers and hence get the | 2 |
| | Dealer | contact information of the dealers | |
| 7. | Cancel Booking | Customer should be able to cancel the booking | 2 |
| 8. | Manage users | System Administrator can delete/edit user accounts | 2 |
| 9. | Update | System Administrator can update the details of the | 2 |
| | Consignment | consignment. | |
| | Details | | |
| 10. | Update User | Users can update their account | 1 |
| | Account | | |
| 11. | Create User | New people can create their account. | 1 |
| | Account | | |
| | | | |
| | | | |
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Use case diagram



Use case description

| Use Case Number: | UC-1 |
|---------------------|---|
| Use Case Name: | User Login |
| Overview: | User should be able to log into the site with correct password and user name. |
| Actors: | Customer and Dealer. |
| Pre condition: | System should have information regarding correct password and user name. |
| Flow: | Main (success) Flow: Steps should be numbered. |
| | User selects login option. |
| | 2. Fills details(name,password). |
| | 3. Clicks on submit. |
| | 4. If correct details are provided, he is redirected to his homepage. |
| | Alternate Flows: Include the post condition for each alternate flow if different from the main flow. |
| | If he enters wrong details, error message is displayed. |
| | Post condition- He is not logged in. |
| Post Condition: | User should be directed to its home page if he enters right combination else a error message should be given to the user. |

| Use Case Number: | UC-2 |
|---------------------|--|
| Use Case Name: | Place Order |
| Overview: | User should be able to place their order of consignment. |
| Actors: | Customer |
| Pre condition: | User should be logged in and there should be a dealer present with the desired source and destination location |
| Flow: | Main (success) Flow: Steps should be numbered. |
| | User selects Place Order option. |
| | 2. He selects category under which he wants to place his order. |
| | 3. Fills in details (company's name, dealer, source, destination). |
| | 4. Clicks on submit. |
| | 5. If all details are correct, then his order is confirmed. |
| | Alternate Flows: Include the post condition for each alternate flow if different from the main flow. |
| | If errors are present- error message is displayed. |
| | Post condition- He is asked to fill the details again. |
| | 2. If he cancels the order- he is redirected to his homepage. |
| | Post condition- The order is not placed. |
| Post Condition: | If order has been placed message should be given to user regarding it else an error message should be given. |

| Use Case Number: | UC-3 | |
|---------------------|--|--|
| Use Case Name: | Estimated cost | |
| Overview: | User Should be able to see the estimated cost based on source, destination, weight, service etc. | |
| Actors: | Customer | |
| Pre condition: | The dealer should provide an estimation of the cost based on source , destination,weight, service etc. | |
| Flow: | Main (success) Flow: Steps should be numbered. | |
| | User selects "Estimated Cost" option from homepage. | |
| | He fills in the details of the consignment (name, service type, weight, source, destination) whose estimated cost he wants to see. | |
| | Clicks on submit. If correct details are given, he is able to see the estimated cost of the concerned consignment. | |
| | Alternate Flows: Include the post condition for each alternate flow if different from the main flow. | |
| | If incomplete details are given – he is given an error message. | |
| | Post Condition- He is asked to fill again. | |
| | 2. If he selects "Back" option -estimated cost option is canceled. | |
| | Post Condition- He is redirected to his homepage. | |
| Post Condition: | Estimated cost of his consignment will be displayed. | |
| | | |

| Use Case Number: | UC-4 |
|---------------------|--|
| Use Case Name: | History of Consignment. |
| Overview: | User should be able to view his previous consignments. |
| Actors: | Customer |
| Pre condition: | System should have information regarding correct password and user name. |
| Flow: | Main (success) Flow: Steps should be numbered. |
| | User selects "History" option from homepage. |
| | All the consignments with full details(name, dealer, source, destination) will be displayed. |
| | Alternate Flows: Include the post condition for each alternate flow if different from the main flow. |
| | 1. If he is a new user(no previous consignments): |
| | Post Condition-He will see a message regarding no history. |
| Post Condition: | All details regarding his previous consignment should be visible. |

| Use Case Number: | UC-5 |
|---------------------|--|
| Use Case Name: | Track Consignment |
| Overview: | Customer is able to track and get the location of the consignments booked by him |
| Actors: | Customer |
| Pre condition: | Customer is logged in and is able to see his booked consignments and have a track option along with them |
| Flow: | Main (success) Flow: Steps should be numbered. |
| | Consignment details are visible on the homepage of the user. |
| | 2. There is a "track" option besides every consignment. |
| | 3. User selects "track" option. |
| | User sees the current location of his consignment. |
| | Alternate Flows: Include the post condition for each alternate flow if different from the main flow. |
| Post Condition: | Once customer presses the locate button he gets the location of the selected consignment |

| Use Case Number: | UC-6 |
|---------------------|--|
| Use Case Name: | Search for nearby Dealers |
| Overview: | Customer is able to locate the nearby dealers and get the contact information. |
| Actors: | Customer |
| Pre condition: | Customer enters his location and has a search button |
| Flow: | Main (success) Flow: Steps should be numbered. |
| | User selects "Search Dealers" option from homepage. |
| | 2. Enters his current location. |
| | 3. Gets details of the nearby dealers(name, company, contact). |
| | Alternate Flows: Include the post condition for each alternate flow if different from the main flow. |
| | If he cancels the option- he is redirected to his homepage. |
| | Post Condition- He would not be able to see his nearby dealers. |
| Post Condition: | Customer get the address and the contact information of the nearby dealers. |

| Use Case Number: | UC-7 |
|---------------------|--|
| Use Case Name: | Cancel Booking |
| Overview: | Customer should be able to cancel booking before it has reached the destination |
| Actors: | Customer |
| Pre condition: | User must be logged in. |
| | He must have some active consignment which is under the process of delivery. |
| Flow: | Main (success) Flow: Steps should be numbered. |
| | User selects "Cancel Booking" option from homepage. |
| | Gives the details of the consignment which he wants to cancel. |
| | 3. If correct details are given-the consignment is canceled. |
| | Alternate Flows: Include the post condition for each alternate flow if different from the main flow. |
| | If he cancels the option-he is redirected to his homepage. |
| | Post Condition- The consignment is not canceled. |
| | If the consignment has already reached its destination- corresponding message will be displayed. |
| | Post Condition- He is unable to cancel his consignment. |
| Post Condition: | Its delivery should get canceled after deducting some percentage of the cost. |
| | 2. The remaining money should be given back to the customer. |

| Use Case Number: | UC-8 |
|---------------------|---|
| Use Case Name: | Manage Users |
| Overview: | System Administrator can delete/edit account of any user |
| Actors: | System Administrator |
| Pre condition: | User whose account needs to be edited/deleted should be there. |
| | There should be some unacceptable entity in the user's account. |
| Flow: | Main (success) Flow: Steps should be numbered. |
| | Administrator selects the user account which he wants to edit or delete. |
| | He selects edit/delete option. |
| | If edit is selected- administrator changes the details/permissions of the user or block him from ordering a specific consignment. |
| | If delete is selected- user account is deleted. |
| | Alternate Flows: Include the post condition for each alternate flow if different from the main flow. |
| | If there is no such objectionable entity based on which the administrator can edit/delete the user's account, then error message will be displayed. |
| | Post Condition- User's account is not deleted/edited. |
| Post Condition: | User's account gets deleted. |
| | His all active consignments get canceled. |

| Use Case Number: | UC-9 |
|---------------------|--|
| Use Case Name: | Update Consignment Details |
| Overview: | System Administrator can update the details of the consignment. |
| Actors: | System Administrator |
| Pre condition | 1.The concerned consignment whose details are to be updated should be present. |
| Flow: | Main (success) Flow: Steps should be numbered. |
| | Administrator selects update details option. |
| | He selects the concerned consignment. |
| | He updates the details of the consignment. |
| | If submit is selected- details get updated. |
| | Alternate Flows: Include the post condition for each alternate flow if different from the main flow. |
| | If he cancels the update option:- |
| | Post Condition- The consignment details are not updated. |
| Post Condition: | The details of the consignment are updated. |
| | |

| Use Case Number: | UC-10 |
|---------------------|--|
| Use Case Name: | Update user account |
| Overview: | Users can update their account. |
| Actors: | Users |
| Pre condition: | User should be logged in. |
| | |
| Flow: | Main (success)Flow: should be numbered. |
| | User selects Update Account option. |
| | He fills in the updated details. |
| | He submits the values. |
| | Alternate Flows: Include the post condition for each alternate flow if different from the main flow. |
| | If he cancels the option he is redirected to his homepage. |
| | Post Condition- User's account is not updated. |
| Post Condition: | User's account gets updated. |

| Use Case Number: | UC-11 |
|---------------------|--|
| Use Case Name: | Create User Account |
| Overview: | New people can create their account. |
| Actors: | User |
| Pre condition: | There should not be an existing user. |
| Flow: | Main (success) Flow: Steps should be numbered. |
| | User selects create account option. |
| | 2. He fills in the details. |
| | If he clicks submit, message regarding new account is displayed. |
| | Alternate Flows: Include the post condition for each alternate flow if different from the main flow. |
| | If the user name is already present, error is displayed. |
| | Post condition-User account is not created. |
| | 2. If he selects cancel option: |
| | Post Condition-His account is not created. |
| Post Condition: | 1 User account is created |
| | |