

Functional Requirement Specifications

Sky2C Shipping App

V2.0

Version Control

Version	Change Description	Author	Date
1.0	Document Initiation	Pallav Kakkar	9/2/2017
1.1	Addition of Mobile Users	Pallav Kakkar	10/2/2017
1.2	Updates based on query answers	Pallav Kakkar	15/2/2017
2.0	Updates based on mobile app scenarios and discussions	Vikash Jaiswal	20/2/2017

Purpose

The purpose of this document is to outline the functional requirements to build the proposed solution required to fulfill the contractual and systematic obligations that Mobilyte has towards the Sky2C project.

The platform is to fill the gap remaining in the shipping process for Sky2C (<http://www.sky2c.com>). As of the initiation of this project, the company relies upon Descartes' logistical system for its shipping needs. This system is limited in the sense that it is unable to provide a solution for end to end tracking. It provides tracking that is limited to Port to Port scenarios.

The required solution is such that we can integrate the tracking system with the existing Decartes system. With the use of a cell phone application along with the existing website, the aim of the project is to plugin the gap, so that customers can easily know the status of the shipment.

NOTE: This document is to be taken into consideration alongside Wireframe, Scope documents generated separately.

Assumptions and Constraints

Mobilyte would build the system with the guidance of the client. This would include acquiring data, building reports in accordance with the guidelines set by the client.

The management of Descartes transactions, and the authenticity of the that data would be concern of the client.

Tracking information generated by third party vendors is not something Mobilyte is in a position to verify. It is the responsibility of the client to ensure authentic and valid data is provided by services providers they choose to engage in the system.

The ability of the system to keep track of individuals is limited to the valid data input by the users. The system is unable to verify falsified information.

It is also assumed that the client would outline for Mobilyte the exact business logic that needs to be automated by the application being designed.

System would be compatible with:

Android Gingerbread - Android Nougat

iOS 7 - iOS 10.

FUNCTIONAL REQUIREMENTS

User Roles

The system is to engage four user types, one of them being end users, while two user types are considered to be part of the delivery vendor team, another pair of administrators are to be included. The first of which can be considered the Sky2c admin user, while the second administrator is referred to as a staff member.

- a) Sky2c Admin - has a purview of the complete system. Is responsible for Descartes data, would be able to create all user types.
- b) Staff Member - has the ability to create Agent/Driver Users, assigns orders to agents/drivers. Ensures authenticity of order details being forwarded to users.
- c) Agent User/Driver User - receive order assignments for delivery. These users would also use the mobile app to conduct the actual shipping and tracking. Agent can create Driver and assigned orders.
- d) Sky2C end customer - will use the website to track their orders with login and without login.

User Requirements

The aim of the system is to improve tracking of shipments being handled via Descartes system. The objectives to be achieved using mobile application technology are:

- i. Providing detailed tracking in comparison with Descartes
- ii. Ability to include vendor information on the system
- iii. Make it easier for front end users to know the status of their shipments

The solution described in the following text has been based on dissection of requirements into user stories, which are based on modules that have been established.

The following tables are a complete description of the system with functional requirements as the main point of focus, from every user's point of view, taking into account all possible use cases, as furnished by client, and understood by Mobilyte.

Administrative User (AU) Functional Requirements (WEB BASED)

Section/ Requirement ID	Requirement Definition
AU 1.0	Login Screen
AU 1.1	The login screen would consist of: Email id & User id Password Login button
AU 1.2	If the user inputs incorrect credentials while logging in, he would be kept on the login screen, and would be displayed an error message.
AU 1.3	If the user's log in credentials are correct, he would be brought to his dashboard screen.
AU 2.0	Admin Dashboard
AU 2.1	The admin has access to the following navigation: Dashboard Sky2C Staff Agents/Drivers Customers Orders
AU 2.2	On the dashboard the admin is provided with key metrics, which include (filtered on the basis of date ranges): Total number of registered customers Total number of Sky2C staff Total number of orders completed Total number of unassigned orders A table displaying all orders that are new to the system for a given day (have not been assigned to anybody yet) A table displaying all orders that have been delivered for a given day
AU 3.0	Manage Sky2C staff. Sky2c Staff cannot see staff list and cannot view/edit/update other drivers added by agents.
AU 3.1	Here a list of all the staff users added by the administrator are displayed.
AU 3.1.1	The table is sortable/searchable on the basis of keywords

Section/ Requirement ID	Requirement Definition
AU 3.1.2	The listing table allows for: Enabling/Disabling a staff member Editing the details of a staff member Changing password for a staff member's account
AU 3.1.2.1	Disabling a staff member would result in the concerned staff member not being able to log in to the system
AU 3.1.2.2	Editing a user would lead the administrator to the "Add new staff member" screen, with pre-filled information
AU 3.1.2.3	Changing password would trigger an email to the concerned staff member with a new password for his account.
AU 3.1.3	The admin would be able to add new staff members by clicking on the "add New" button available on this page
AU 4.0	Add/Edit staff member
AU 4.1	The add new staff member screen contains the following fields: First Name (mandatory, editable) Last Name (mandatory, editable) Email Address (mandatory, non-editable)
AU 4.1.1	In the case of edit, the information in the above fields would be pre-filled
AU 4.2	On clicking on the save button, the system would generate an email, with a preset password, that would allow the newly added staff member to log in
AU 5.0	Manage Agents
AU 5.1	Here a list of all the agent users added by the administrator are displayed
AU 5.1.1	The table is sortable/searchable on the basis of keywords
AU 5.1.2	The listing table allows for: Enabling/Disabling a agent member Editing the details of a agent member Changing password
AU 5.1.2.1	Disabling a agent member would result in the concerned agent member not being able to log in to the system
AU 5.1.2.1.1	An agent can be disabled only if none of the orders/packages assigned to him have been scanned for any shipment process.
AU 5.1.2.1.2	If the the agent has ongoing shipments, the disable button/option would not be available.
AU 5.1.2.2	Editing a user would lead the administrator to the "Add new agent member" screen, with pre-filled information
AU 5.1.2.3	Changing password would trigger an email to the concerned agent member with a new password for his account.

Section/ Requirement ID	Requirement Definition
AU 5.1.3	The admin would be able to add new agent members by clicking on the “add New” button available on this page
AU 6.0	Add/Edit agent member
AU 6.1	The add new agent member screen contains the following fields: First Name (mandatory, editable) Last Name (mandatory, editable) Email Address (mandatory, non-editable)
AU 6.1.1	In the case of edit, the information in the above fields would be pre-filled
AU 6.2	On clicking on the save button, the system would generate an email, with a preset password, that would allow the newly added staff member to log in
AU 7.0	Manage Customers
AU 7.1	Here a list of all the customer users added by the administrator are displayed.
AU 7.1.1	The table is sortable/searchable on the basis of keywords
AU 7.1.2	The listing table allows for: Enabling/Disabling a customer member Changing password
AU 7.1.2.1	Disabling a customer member would result in the concerned customer member not being able to log in to the system
AU 7.1.2.2	Changing password would trigger an email to the concerned customer member with a new password for his account.
AU 8.0	Manage Drivers
AU 8.1	Here a list of all the driver users added by the administrator & staff are displayed. List doesn't consist drivers added by agents.
AU 8.1.1	The table is sortable/searchable on the basis of keywords
AU 8.1.2	The listing table allows for: Enabling/Disabling a driver member Editing the details of a driver member Changing password
AU 8.1.2.1	Disabling a driver member would result in the concerned driver member not being able to log in to the system
AU 8.1.2.2	Editing a user would lead the administrator to the “Add new agent member” screen, with pre-filled information
AU 8.1.2.3	Changing password would trigger an email to the concerned agent member with a new password for his account.
AU 8.1.3	The admin would be able to add new driver members by clicking on the “add New” button available on this page

Section/ Requirement ID	Requirement Definition
AU 9.0	Add/Edit driver member
AU 9.1	The add new driver member screen contains the following fields: First Name (mandatory, editable) Last Name (mandatory, editable) Email Address (mandatory, non-editable) & Phone no. Email id is not mandatory.
AU 9.1.1	In the case of edit, the information in the above fields would be pre-filled
AU 9.2	On clicking on the save button, the system would generate an email, with a preset password, that would allow the newly added driver member to log in
AU 9.3	Once a driver has been created, the staff/admin member would have to approve the driver. Only once the driver is approved, would he be available to be assigned.
AU 10.0	Manage Orders
AU 10.1	Here the admin can view a list of all the orders on the system in chronological order
AU 10.1.1	The table is sortable/searchable on the basis of Keywords Status
AU 10.2	The admin would assign agents or a drivers to any unassigned agent/driver
AU 11.0	Assigning Delivery Members
AU 11.1	The staff/admin member would be able to assign an order or parts of an order (i.e. packages) to either agents or drivers
AU 11.2	While assigning the items, the admin would be able to choose from the following: For agent users - choose the name of an agent who is on the system For driver users - the admin/staff member would be able to choose from: Any driver Driver by name Drivers who have submitted certain documents

Agent User (AGU) Functional Requirements (WEB PORTAL)

Section/ Requirement ID	Requirement Definition
AGU 1.0	Log in Screen
AGU 1.1	The login screen would consist of: Username/Email Password Log in button Forgot Password
AGU 1.2	If the user inputs incorrect credentials while logging in, he would be kept on the login screen, and would be displayed an error message.
AGU 1.3	If the user's log in credentials are correct, he would be brought to his dashboard screen.
AGU 2.0	Agent User Dashboard
AGU 2.1	The agent has access to the following navigation: Dashboard Drivers Orders
AGU 2.2	On the dashboard the agent is provided with key metrics, which include (filtered on the basis of date ranges): Total number of registered customers Total number of drivers Total number of orders completed Total number of unassigned orders A table displaying all orders that are new to the system for a given day (have not been assigned to anybody yet) A table displaying all orders that have been delivered for a given day
AGU 3.0	Manage Drivers
AGU 3.1	Here a list of all the driver users added by the agent are displayed.
AGU 3.1.1	The table is sortable/searchable on the basis of keywords
AGU 3.1.2	The listing table allows for: Enabling/Disabling a driver member Editing the details of a driver member Changing password

Section/ Requirement ID	Requirement Definition
AGU 3.1.2.1	Disabling a driver member would result in the concerned driver member not being able to log in to the system
AGU 3.1.2.2	Editing a driver would lead the agent to the “Add new driver member” screen, with pre-filled information
AGU 3.1.2.3	Changing password would trigger an email to the concerned driver with a new password for his account.
AGU 3.1.2.4	A driver can only be disabled if he has not any on going orders. If he is currently working on a delivery, then the agent user wouldn't be able to disable him.
AGU 3.1.3	The agent would be able to add new driver members by clicking on the “add New” button available on this page
AGU 4.0	Add/Edit driver member
AGU 4.1	The add new driver member screen contains the following fields: First Name (mandatory, editable) Last Name (mandatory, editable) Email Address (non mandatory, editable) Phone no (mandatory, editable)
AU 4.1.1	In the case of edit, the information in the above fields would be pre-filled
AGU 4.2	On clicking on the save button, the system would generate an email, with a preset password, that would allow the newly added driver member to log in
AGU 4.3	On clicking on a single driver, the agent would be able to view his details
AGU 4.4	The agent would also need to approve the driver before the driver would be able to receive orders. This can be done before or after the driver has uploaded required documents.
AGU 5.0	Driver detail screen
AGU 5.1	Driver detail screen is organized under 3 main tabs: Documents Open Orders Completed Order
AGU 5.2	The documents tab contains necessary documents uploaded by the driver user and approve button for approving the driver
AGU 5.2.1	The agent would be able to view & download the available files
AGU 5.3	Open orders would display a table containing all orders that have been assigned to said driver, but have not been delivered yet
AGU 5.3.1	Clicking on an individual order id would lead the user to the order details page
AGU 5.4	Completed orders tab would display a table containing all orders that have been assigned to said driver, and have been delivered
AGU 5.4.1	Clicking on an individual order would lead the user to the order details page

Section/ Requirement ID	Requirement Definition
AGU 6.0	Tracking Page
AGU 6.1	<p>The tracking information displayed here would be received from one of three means:</p> <p>I. Status of shipment as per latest scans done by delivery team member</p> <p>OR</p> <p>II. Status as per third party delivery service (UPS, DHL, FedEx, YFC)</p> <p>III. Descartes</p>
AGU 6.2	<p>Tracking details required against every order:</p> <p>Order ID (generated by Descartes)</p> <p>Shipping Timestamp (as available from Descartes)</p> <p>Pick up location (as available from Descartes)</p> <p>Destination location (as available from Descartes)</p> <p>Package details - Weight, width, height, length (as available from Descartes)</p> <p>Complete Travel History of package. This includes:</p> <p>Timestamp,</p> <p>location,</p> <p>activity/status (i.e.: pick up, arrival at storehouse, arrival at port, departure from port, arrival at destination)</p>
AUMA 7.0	The agent would have the option to assign an order.
AUMA 7.1	<p>Each unassigned order can be assigned to either:</p> <ol style="list-style-type: none"> 1. Self 2. A driver 3. Any driver 4. Driver with certain documents 5. Third party vendors such as Fedx <p>And would be able to add a message, pick location, drop location when he makes an assignment. These information fields would be collected in text boxes.</p>

Registered Customer User (RCU) Functional Requirements (Web Portal)

Section/ Requirement ID	Requirement Definition
RCU 1.0	Customer Registration
RCU 1.1	Data from Descartes would be used to create customer accounts

Section/ Requirement ID	Requirement Definition
RCU 1.2	Each unique customer is filtered from Descrates' database. This user would receive an email with login credentials (email as fetched from Descrates)
RCU 1.2.1	Email would include: Login Email Address (as fetched from Descrates) User id Temporary Password URL to login page Content with instructions on how to log in and track shipments
RCU 1.3	An existing user would also be able to use the forgot password functionality. This option would be available from the log in screen
RCU 1.4	A customer user would be able to successfully login if they fill the credentials correctly.
RCU 1.4.1	If the credentials are not a match for the system, then the system would keep the user on the log in screen, where an error message would be displayed.
RCU 1.4.2	If the credentials are correct, the user would be brought to the dashboard screen
RCU 2.0	Forgot Password
RCU 2.1	If the user clicks o the forgot password link on the login screen, he would be brought to this section. Here, the user would be required to input his registered email address
RCU 2.1.1	If the user inputs an unregistered email address, he would be kept on the forgot password screen, and an error message would be displayed
RCU 2.1.2	If the user inputs a registered email address, he would be brought to the next screen, wherein he would be required to input a verification.
RCU 2.1.2.1	Upon entering a registered email address, the system would send an email to the required account, with a 6 digit verification code.
RCU 2.1.2.2	The user would be required to input this code in the verification screen
RCU 2.1.2.2.1	The verification screen would be brought up as soon as the email is triggered. This screen would remain open till either the user has input the correct verification code, or else, the screen expires after a duration of 15 minutes (at this point the verification code would also expire).
RCU 2.1.2.2.2	The verification screen would also allow the user to resend the verification code to the email
RCU 2.1.2.2.3	The verification code would expire if: 15 minutes have lapsed since it was emailed Or if a new verification code is generated for a given email address
RCU 2.1.2.2.4	If the user inputs an incorrect verification code, he would remain on the same screen, and would be shown an error message

Section/ Requirement ID	Requirement Definition
RCU 2.1.2.2.5	If he user inputs a correct verification code, he would be brought to the set password screen
RCU 3.0	Set Password
RCU 3.1	The set password screen would contain two input fields: New Password Confirm Password
RCU 3.2	The user would need to input the same data in both fields.
RCU 3.3	If the user's input don't match, then he would remain on the same screen, and would be displayed an error message
RCU 3.4	If the user's input is correct, he would be brought to the login screen, wherein he would be required to login with their new credentials
RCU 4.0	Client/Customer User Portal
RCU 4.1	The client user would have access to the following navigation options: Open Orders (Dashboard) Order History Account Settings Logout
RCU 5.0	Client User Dashboard
RCU 5.1	The Open Orders screen would act as the dashboard. These are orders which been fed into the Descartes system, and have synced with the local environment database and have not been completed yet.
RCU 5.2	Each order item would be clickable, and would lead to a order detail page, wherein the tracking details of the order would be made available
RCU 6.0	Tracking Page
RCU 6.1	The tracking information displayed here would be received from one of three means: I. Status of shipment as per latest scans done by delivery team member II. Status as per third party delivery service (UPS, DHL, FedEx, YFC) III. Descartes

Section/ Requirement ID	Requirement Definition
RCU 6.2	Tracking details required against every order: Order ID (generated by Descartes) Shipping Timestamp (as available from Descartes) Pick up location (as available from Descartes) Destination location (as available from Descartes) Package details - Weight, width, height, length (as available from Descartes) Complete Travel History of package. This includes: Timestamp, location, activity/status (i.e.: pick up, arrival at storehouse, arrival at port, departure from port, arrival at destination OR as per shipping company API)
RCU 7.0	Account Settings
RCU 7.1	Here the user is able to manage his basic profile. Data available here: Name Email Phone Ability to change password. This would be accessed by clicking on the change password button, which would load a modal. The modal would contain the following: Current password (mandatory) New password (mandatory) Confirm new password (mandatory) Save button. Ability to turn on/off email notifications

Non-Registered Customer User (NRCU) Functional Requirements

Section/ Requirement ID	Requirement Definition
NRCU 1.0	Non-registered customer user
NRCU 1.1	The non-registered customer user would be able to track his shipment on the system
NRCU 1.2	The user would be required to input their order id (as generated by Descartes)
NRCU 1.3	This would lead the user to the tracking page

Section/ Requirement ID	Requirement Definition
NRCU 2.0	The tracking information displayed here would be received from one of three means: I. Status of shipment as per latest scans done by delivery team member II. Status as per third party delivery service (UPS, DHL, FedEx, YFC) III. Descartes
NRCU 2.2	Tracking details required against every order: Order ID (generated by Descartes) Shipping Timestamp (as available from Descartes) Pick up location (as available from Descartes) Destination location (as available from Descartes) Package details - Weight, width, height, length (as available from Descartes) Complete Travel History of package. This includes: Timestamp, location, activity/status (i.e.: pick up, arrival at storehouse, arrival at port, departure from port, arrival at destination OR as per shipping company API)

Agent User Mobile App (AUMA) Functional Requirements

Section/ Requirement ID	Requirement Definition
AUMA 1.0	Splash screen - will be visible till app loads up
AUMA 2.0	Login Screen
AUMA 2.1	Agent user would be able to log in to the app using the same credentials that would be used for the website
AUMA 2.2	Required credentials are: Email/user id Password
AUMA 2.2.1	User would successfully log in if credentials are correct. This would lead the user to the Agent dashboard screen
AUMA 2.2.2.	If user doesn't provide correct credentials he would remain on the log in screen, and would be displayed an error message
AUMA 2.2.3	User would have the option of 'Forgot Password', from where the reset password functionality would be accessed
AUMA 3.0	Forgot Password

Section/ Requirement ID	Requirement Definition
AUMA 3.1.	User would be required to input their registered email address to receive a verification code
AUMA 3.1.1	If input email is not registered/valid, the user would remain on the same screen, and an would be displayed an error message
AUMA 3.1.2	If input email is correct, then a verification code would be sent to the user. The system would automatically move the user to the verification code screen
AUMA 3.2	Verification code screen
AUMA 3.2.1	Here the user is required to input the verification code he would have received in his email address
AUMA 3.2.2	This screen would expire after a duration of 15 minutes. The user would be brought to the login screen after the expiration
AUMA 3.2.3	The code would also expire as per the following conditions: After 15 minutes Or if new code is generated
AUMA 3.2.4	The user would have the option to request for a new verification code. If he chooses this, then the time for expiration of both verification screen and the new verification code would restart
AUMA 3.2.5	If verification code input by user is incorrect, he would be shown an error message
AUMA 3.2.6	If verification code input by the user is correct, he would be taken to the change password screen
AUMA 4.0	Change password screen - Here the user would have to create a new password by enterering the same data in the: New Password, Confirm Password Fields.
AUMA 4.1	If password change is unsuccessful, the system would keep the user on the change password screen. The user can not move beyond this screen without changing the password successfully
AUMA 4.1.1	If user doesn't change password, and closes the application, then the password remains unchanged. The user would have to go through the forgot password functionality from beginning to be able to change the password.
AUMA 4.2	If password is changed successfully, the user would be brought back to the login screen, would be displayed a success message, and would require to login with new credentials to access the account
AUMA 5.0	Agent User mobile dashboard

Section/ Requirement ID	Requirement Definition
AUMA 5.1	User would have access to following navigation options: Orders (dashboard) Scan Change Password Log out
AUMA 5.2	Agent Dashboard has a list of all orders that are to be managed by the agent. The listing would be ordered as following: All unassigned orders first All ongoing orders next All closed orders last Orders would be displayed in chronological order, and would be filterable
AUMA 5.3	Each order item clickable and would link through to the order detail screen
AUMA 9.0	Order Detail Screen
AUMA 9.1	On the order detail page, the agent user would be displayed the following information: Order ID (generated by Descartes) Total Number of products/package Track location Assign List of products Pick up location Drop off location User assigned to order/Option to assign
AUMA 9.2	The agent would have the option to assign an order.
AUMA 9.3	Each unassigned order can be assigned to either: 6. Self 7. A driver 8. Any driver 9. Driver with certain documents 10. Third party vendors And would be able to add a message, pick location, drop location when he makes an assignment. These information fields would be collected in text boxes.
AUMA 9.3.1	In the case the user selects self, no other information would be required of him

Section/ Requirement ID	Requirement Definition
AUMA 9.3.2	If the user selects driver, then options to select a driver would be populated. Only after the agent has selected a driver would be able to move ahead. Agent can also select any driver.
AUMA 9.3.3	If the user selects Third Party Vendors, he would have to select between one of the four pre-defined vendors: UPS, DHL, FedEx, YFC Then enter the tracking ID provided by the vendor. The system is expected to get tracking information from the third party vendor, based on the tracking ID provided by them.
AUMA 9.4	Agent would be able to scan the product, only if he has assigned the order to himself. This would lead to the scanning screen.
AUMA 9.5	Agent would be able to track the order, only if the order has already been assigned to a user
AUMA 10.0	Scan Screen
AUMA 10.1	The mobile devices' camera would be initiated. The user would be able to scan the QR code from here
AUMA 10.2	In case the system is unable to scan the QR code for some reason, he would be able to input the order ID associated with the code. This should be printed on the QR code label itself.
AUMA 10.3	Upon successful input of data, the user would move to the Status update screen
AUMA 10.4	The case of a failed scan would also be if the delivery member (agent/driver) scans a QR code belonging to an order ID, for which he is not viewing the detail page for. Ex. If user is on order detail screen for order ID 1, but scans a QR code for order ID 2, scan should fail
AUMA 10.4.1	If scan fails, then user is asked to either go back to order detail screen, or to scan again
AUMA 11.0	The status update screen would allow the delivery member (agent/driver) to provide the status of the shipping process. Options available here are: Pick up from source Drop at warehouse Pick from warehouse Drop at port Pick from port Delivered
AUMA 11.1	Upon clicking on update, the user would be brought back to the order detail screen and location is tracked via Gps
AUMA 12.0	Order track screen

Section/ Requirement ID	Requirement Definition
AUMA 12.1	Here the agent can view the status of any of the shipment that were ever assigned to him
AUMA 12.2	If agent had assigned himself to deliver
AUMA 12.2.1	In this case the tracking status would consist of: Pick up from source Drop at warehouse Pick from warehouse Drop at port Pick from port Delivered + Tracking details provided by Descartes
AUMA 12.3	If agent had assigned a driver to deliver the shipment
AUMA 12.3.1	In this case the tracking status would consist of: Pick up from source Drop at warehouse Pick from warehouse Drop at port Pick from port Delivered + Tracking details provided by Descartes
AUMA 12.4	If the agent had assigned a third party vendor to deliver the shipment
AUMA 12.5	In this case the tracking status would consist of: The user would be provided with the tracking details as provided by concerned API + Tracking details provided by Descartes
AUMA 13.0	Change Password
AUMA 13.1	User would be able to change password by filling in: Old password New password Confirm new password
AUMA 13.2	User would be able to update password by clicking on the submit button
AUMA 13.2.1	Password would not be updated if: Old password is not correct If new and confirm password fields don't match

Section/ Requirement ID	Requirement Definition
AUMA 13.2.2	Successful password change would lead the user to login screen and display a success message. The user would have to login again into their account after successfully changing their password

Driver User (DU) Mobile App Functional Requirements

Section/ Requirement ID	Requirement Definition
DU 1.0	Splash screen - will be visible till app loads up
DU 2.0	Login Screen
DU 2.1	Driver user would be able to log in to the app using the same credentials that the agent used to create the driver
DU 2.2	Required credentials are: Email/Phone Password A driver can login with phone no aswell. An otp will be send for password.
DU 2.2.1	User would successfully log in if credentials are correct. This would lead the user to the Agent dashboard screen
DU 2.2.2.	If user doesn't provide correct credentials he would remain on the log in screen, and would be displayed an error message
DU 2.2.3	User would have the option of 'Forgot Password', from where the reset password functionality would be accessed
DU 2.2.4	In each case, the system would generate a verification code that the driver has to input to login. The verification code would be delivered via Twilio API to the users phone/email for logging in.
DU 3.0	Forgot Password
DU 3.1.	User would be required to input their registered email address to receive a verification code
DU 3.1.1	If input email is not registered/valid, the user would remain on the same screen, and an would be displayed an error message
DU 3.1.2	If input email is correct, then a verification code would be sent to the user. The system would automatically move the user to the verification code screen
DU 3.2	Verification code screen
DU 3.2.1	Here the user is required to input the verification code he would have received in his email address
DU 3.2.2	This screen would expire after a duration of 15 minutes. The user would be brought to the login screen after the expiration

Section/ Requirement ID	Requirement Definition
DU 3.2.3	The code would also expire as per the following conditions: After 15 minutes Or if new code is generated
DU 3.2.4	The user would have the option to request for a new verification code. If he chooses this, then the time for expiration of both verification screen and the new verification code would restart
DU 3.2.5	If verification code input by user is incorrect, he would be shown an error message
DU 3.2.6	If verification code input by the user is correct, he would be taken to the change password screen
DU 4.0	Change password screen - Here the user would have to create a new password by entering the same data in the: New Password, Confirm Password Fields.
DU 4.1	If password change is unsuccessful, the system would keep the user on the change password screen. The user can not move beyond this screen without changing the password successfully
DU 4.1.1	If user doesn't change password, and closes the application, then the password remains unchanged. The user would have to go through the forgot password functionality from beginning to be able to change the password.
DU 4.2	If password is changed successfully, the user would be brought back to the login screen, would be displayed a success message, and would require to login with new credentials to access the account
DU 5.0	Driver User dashboard
DU 5.1	User would have access to following navigation options: Orders (dashboard) Scan Certificates History Change Password Log out
DU 5.2	Driver Dashboard has a list of all orders that are to be delivered by him. The listing would be ordered as following: All new orders (never scanned) first All ongoing orders (scanned, but not delivered) next All closed orders (orders that are closed) last Orders would be displayed in chronological order, and would be filterable

Section/ Requirement ID	Requirement Definition
DU 5.3	Each order item is clickable and would link through to the order detail screen
DU 6.0	Order Detail Screen
DU 6.1	On the order detail page, the driver user would be displayed the following information: Order ID (generated by Descartes) Total Number of products/package Pick up location Drop off location Customer details and its shipping address
DU 6.2	The driver would able to click on the scan button to go to the Scan Screen
DU 7.0	Scan Screen
DU 7.1	The mobile devices' camera would be initiated. The user would be able to scan the QR code from here
DU 7.2	In case the system is unable to scan the QR code for some reason, he would be able to input the order ID associated with the code. This should be printed on the QR code label itself.
DU 7.3	Upon successful input of data, the user would move to the Status update screen
DU 7.4	The case of a failed scan would also be if the delivery member (agent/driver) scans a QR code belonging to an order ID, for which he is not viewing the detail page for. Ex. If user is on order detail screen for order ID 1, but scans a QR code for order ID 2, scan should fail
DU 7.4.1	If scan fails, then user is asked to either go back to order detail screen, or to scan again
DU 8.0	The status update screen would allow the delivery member (agent/driver)to provide the status of the shipping process. Options available here are: Pick up from source Drop at warehouse Pick from warehouse Drop at port Pick from port Delivered
DU 8.1	Upon clicking on update, the user would be brought back to the order detail screen. And the location is track via GPS.
DU 9.0	Certificates Listing page - accessed via the navigation
DU 9.1	The certificate listing page consists of all certificates added by the user himself. There should be a submit button to submit all the certificates so that agent can approve the driver.

Section/ Requirement ID	Requirement Definition
DU 9.2	Each list item would display the following information: Name of certificate Expiry Date Issued by Issued at Certificate Number Uploaded file name
DU 9.3	Each list item would allow the user to download the file he had uploaded associated with the certificate
DU 9.4	Each list item can be deleted
DU 9.5	The option to add a new certificate would be available on the screen. This would lead to the add certificate screen. Only image can be added as new certificate. Driver can browser from Gallery or click the picture of certificates.
DU 10.0	Add certificate screen
DU 10.1	To add a certificate the driver user would have to input the following details: Certificate name Expiration date: MM/DD/YYYY Issued by Certificate Number Option to upload a certificate document from system gallery.
DU 10.1.1	Acceptable formats for files: JPG, PNG, all files under 4 MB
DU 10.2	Upon clicking add, the system would add the certificates, only if the certificate name and the certificate number are unique items on the system
DU 10.3	If the user doesn't meet the criteria for unique entries, he would remain on the add screen and an error will be shown
DU 10.4	If the user successfully fills the form, he would be brought to the certificate listing screen

Open Issues

#	Date	Issue	Severity	Remarks
1	9/2/17	Need sample of Descartes CSV	High	
2	9/2/17	How do we take into account warehouses that may be used during shipment	High Resolved - 15/2/2017	These have to be taken into account. We will create a status for the same.
3	9/2/17	It is assumed that once a driver is assigned a shipment, then no other driver would be involved at any point until successful delivery. If not please specify how to change this	High Resolved - 15/2/2017	Multiple drivers as well as multiple agents have to be included.
4	9/2/17	It is assumed Descartes will provide the necessary QR/Barcode for tracking	High	Need sample
5	9/2/17	Syncing of Descartes database is yet to be confirmed and clarified	High	
6	9/2/17	Kindly confirm all the third party shipping companies that would be integrated in the system	Medium	
7	9/2/17	Kindly confirm data fields required to create: Staff Member User Driver User Agent User Customer User	High Resolved - 15/2/2017	Addition of phone number field for mobile app users.
8	9/2/17	Kindly explain how the system assures that the order has reached its logical destination, and has not been lost/stolen by a user on the way, and isn't logged as falsely delivered.	High Resolved - 15/2/2017	This is beyond the purview of the system. App is not going to take this into account
9	9/2/17	Kindly confirm task list to be used by Staff Member User Agent User Driver User	High	
10	9/2/17	Kindly explain what would happen to ongoing or assigned orders for users	High	Users would be activated/deact

		who are suspended. Please take into account Driver User Agent User	Resolved - 15/2/2017	ivated only. A user can be deactivated if: There are no orders assigned to him, If he has not started/scanned the order yet. If the order falls under "ongoing" the user cannot be deactivated.
11	10/2/17	It is assumed that the order would have an ID and QR code associated with it. Please let us know if each individual package within an order would be numbered and would need to be scanned as well. If this is the case we would need to alter the flow of things mentioned here.	High Resolved - 14/2/2017	Typically, this is in the form xxxxxxx-nn, where xxxxxxx is the order number and nn will be the package number. If there are 4 packages then this will be 01, 02, 03, 04, etc.
12	10/2/17	Kindly share a complete sample of an order with multiple items (if applicable)	High	
13	10/2/17	Kindly share how the QR/Barcode would be generated, printed, and placed on the package.	Medium Resolved - 12/2/17	QR code/barcode would be made available in print format by sky2c. Explained system would not generate the code, but only scan it.
14	15/2/2017	Need a list of instances of when the system is to generate notifications. We will require the content of the same.	Medium	

APPENDIX A - GLOSSARY

Yet to be defined.