

Use Case: Registration	
ID: UC1	
Actors: <ol style="list-style-type: none"> 1. Manufacturer 2. Retailer 3. Transporter 4. Dispatcher 5. Retailer 	
Preconditions: Actor needs to download Multichain and install a node on their system	
Flow of Events:	
User	System
<ol style="list-style-type: none"> 1. The use case starts when user selects the option of Register 3. The user manually asks the admin to grant permission to connect using the address 	<ol style="list-style-type: none"> 2. System generates unique address for the user 4. System generates unique address for the user 5. If the admin grants the permission, System registers user as a node on the network
Postconditions: * The node must be kept up and running.	
Alternate Flow:	

Use Case: Login	
ID: UC2	
Actors: <ol style="list-style-type: none"> 1. Manufacturer 2. Retailer 3. Transporter 4. Dispatcher 5. Retailer 	
Preconditions: Actor needs to be registered on the Multichain. User has to open the application.	
Flow of Events:	
User	System
<ol style="list-style-type: none"> 1. The use starts when the user chooses the Login Option 3. The user enters the credentials 5. User is logged in the system 	<ol style="list-style-type: none"> 2. System displays the login screen 4. System validates the credentials 6. System displays a menu based on the user type.
Postconditions:	
Alternate Flow: <ol style="list-style-type: none"> 3. – User enters incorrect username and password. <ul style="list-style-type: none"> - Error message is shown to the user. - Use Case resumes at step 2. 	

Use Case: RegisterProduct	
ID: UC3	
Actors: 1. Manufacturer	
Preconditions: Actor needs to download Multichain and install a node on their system. User has to open and login in the application.	
Flow of Events:	
User	System
1. The use case starts when user selects the option of Register Product 3. The user enters the product details and click on Register Product Button.	2. System displays the Register Product Screen. 4. The system generates a transaction and informs the User that product is being generated.
Postconditions:	
Alternate Flow:	

Use Case: Verify_Quality	
ID: UC4	
Actors: <ol style="list-style-type: none"> 1. Manufacturer 2. Retailer 3. Transporter 4. Dispatcher 5. Retailer 6. Customer 	
Preconditions: Actor needs to open in the application.	
Flow of Events:	
User	System
<ol style="list-style-type: none"> 1. The use case starts when user selects the option of Track Product 3. The user enters the product ID and clicks on Track Product button. 5. The user determines to accept or reject the product based on information generated about the product. 	<ol style="list-style-type: none"> 2. System displays a page asking the user to enter the product ID. 4. System generates the information about the product.
Postconditions:	
Alternate Flow: <ol style="list-style-type: none"> 3. <ul style="list-style-type: none"> -User Enters invalid product ID. - The system displays an error to the User. - Use Case resumes at step 3. 	

Use Case: Update_Status	
ID: UC5	
Actors: 1. Transporter	
Preconditions: Actor needs to download Multichain and install a node on their system. User needs to open and login into the application.	
Flow of Events:	
User	System
1. The use case starts when user selects the option of Update Status 3. The user enters the product ID and enters the product information.	2. System displays the page of Update Status 4. System saves the product information on the blockchain.
Postconditions:	
Alternate Flow: 3. -User Enters invalid product ID. - The system displays an error to the User. - Use Case resumes at step 3.	