**Stakeholders & Onion Diagram**

Operation manager

Dispatchers

Delivery Drivers

Warehouse staff

**User stories**

Warehouse Staff User Stories:

As a warehouse staff member, I want to be able to easily access and locate the products or services that need to be delivered, so that I can efficiently prepare them for delivery.

As a warehouse staff member, I want to be able to track the status of each delivery, so that I can prioritize my tasks and ensure that each delivery is properly prepared.

As a warehouse staff member, I want to be able to communicate any issues or concerns with the delivery process to the dispatchers or operations managers, so that they can take appropriate action and ensure customer satisfaction.

Customer User Stories:

As a customer, I want to be able to easily place an order for a product or service that I need, so that I can receive it in a timely and convenient manner.

As a customer, I want to be able to track the status of my delivery, so that I can plan my day and ensure that I am available to receive the delivery.

As a customer, I want to be able to provide feedback on the delivery process and the quality of the products or services received, so that the company can make improvements and ensure customer satisfaction.

**Requirements**

Warehouse Staff:

Functional Requirements:

* The system should make it simple for warehouse workers to find and get goods or services ready for distribution.
* The system must enable warehouse personnel to monitor the progress of each delivery.
* The system should allow warehouse staff to communicate any issues or concerns with the delivery process to the dispatchers or operations managers.

Non-Functional Requirements:

* The system should be easy to use and intuitive for warehouse staff.
* The system should be highly reliable and available to ensure timely delivery.
* The system should ensure the privacy and security of customer information.

Technical Requirements:

* The system should be compatible with the hardware and software used by warehouse staff.
* The system should be able to integrate with existing inventory management systems and other related systems.
* The system should be able to handle a high volume of orders and delivery requests.

Customers:

Functional Requirements:

* The system should allow customers to easily place an order for a product or service that they need.
* The system should allow customers to track the status of their delivery.
* The system should allow customers to provide feedback on the delivery process and the quality of the products or services received.

Non-Functional Requirements:

* The system should be easy to use and intuitive for customers.
* The system should be highly reliable and available to ensure timely delivery.
* The system should ensure the privacy and security of customer information.

Technical Requirements:

* The system should be compatible with the hardware and software used by customers.
* The system should be able to handle a high volume of orders and delivery requests.
* The system should be able to provide customers with real-time updates on the status of their delivery.

Dispatchers:

Functional Requirements:

* The system should allow dispatchers to assign delivery drivers and manage the delivery process.
* The system should allow dispatchers to track the status of each delivery and monitor any issues or concerns.
* The system should allow dispatchers to communicate with warehouse staff, delivery drivers, and operations managers as needed.

Non-Functional Requirements:

* The system should be easy to use and intuitive for dispatchers.
* The system should be highly reliable and available to ensure timely delivery.
* The system should ensure the privacy and security of customer information.

Technical Requirements:

* The system should be compatible with the hardware and software used by dispatchers.
* The system should be able to integrate with existing inventory management systems and other related systems.
* The system should be able to handle a high volume of orders and delivery requests.

Delivery Drivers:

Functional Requirements:

* The system should allow delivery drivers to view the details of their assigned deliveries.
* The system should provide directions and navigation to the delivery location.
* The system should allow delivery drivers to mark a delivery as complete and provide proof of delivery.

Non-Functional Requirements:

* The system should be easy to use and intuitive for delivery drivers.
* The system should be highly reliable and available to ensure timely delivery.
* The system should ensure the privacy and security of customer information.

Technical Requirements:

* The system should be compatible with the hardware and software used by delivery drivers.
* The system should be able to integrate with navigation and mapping software.
* The system should be able to handle a high volume of delivery requests.

Operations Manager:

Functional Requirements:

* The system should allow the operations manager to monitor the delivery process and track the progress of all deliveries.
* The system should allow the operations manager to reassign deliveries if necessary.
* The system should allow the operations manager to generate reports on the delivery process and identify areas for improvement.

Non-Functional Requirements:

* The system should be easy to use and intuitive for the operations manager.
* The system should be highly reliable and available to ensure timely delivery.
* The system should ensure the privacy and security of customer information.

Technical Requirements:

* The system should be compatible with the hardware and software used by the operations manager.
* The system should be able to integrate with existing inventory management systems and other related systems.
* The system should be able to handle a high volume of delivery requests.

**Use case diagram**

**Use-case Scenario**

|  |  |  |
| --- | --- | --- |
| **Number** | DA003 | |
| **Name** | Update Delivery Locations | |
| **Description** | The "Update Delivery Locations" use case allows the delivery driver to update the locations of the delivery in real-time. This use case is useful when the driver needs to deviate from the original delivery route or schedule, or when the customer requests a change in the delivery location. | |
| **Priority** | 4 | |
| **Preconditions** | * The delivery driver must have an active delivery assigned to them. * The delivery driver must have access to the delivery management system and the relevant delivery details. * The delivery driver must have the necessary permissions to update the delivery location. | |
| **Postconditions** | * The delivery location has been updated in the delivery management system. * The customer has been notified of any changes to the delivery location or schedule. * The delivery driver can continue with the delivery process as per the updated details. | |
| **Primary Actor(s)** | Delivery Driver | |
| **Trigger** |  | |
| **Main Scenario** | **Step** | **Action** |
|  | 1 | The delivery driver logs in to the delivery management system. |
|  | 2 | The delivery driver selects the active delivery assigned to them. |
|  | 3 | The delivery driver selects the "Update Location" option from the delivery details. |
|  | 4 | The delivery driver enters the new delivery location and any relevant details or comments. |
|  | 5 | The delivery management system updates the delivery location in real time. |
|  | 6 | The delivery driver confirms the update with the customer (if required) and provides an updated delivery time estimate |
|  | 7 | The customer accepts or rejects the updated delivery details. |
|  | 8 | If the customer rejects the updated details, the delivery driver may need to contact the operation manager or customer service representative to resolve the issue |
|  | 9 | If the customer accepts the updated details, the delivery driver proceeds with the updated delivery plan. |
|  | 10 | The delivery driver completes the delivery and marks it as complete in the delivery management system |
| **Extensions** | **Step** | **Branching Action** |
|  | 1a | If the delivery driver is unable to access the delivery management system, they may need to contact the operation manager or customer service representative to update the delivery location. |
|  | 5a | If the delivery driver is unable to update the delivery location in real-time, they may need to contact the operation manager or customer service representative to coordinate the update and any necessary adjustments to the delivery schedule. |
|  | 8a  8b | If the delivery driver encounters any issues or challenges during the delivery process, they may need to contact the operation manager or customer service representative to resolve the issue and update the delivery location accordingly.  If the customer is unavailable or unresponsive, the delivery driver may need to leave the updated delivery details in a secure location and notify the customer of the location. |
|  | 10a | If the delivery driver is unable to confirm the updated delivery details with the customer, they may need to contact the operation manager or customer service representative to resolve the issue and update the delivery location accordingly |