Product Owner | Technical Assessment

Assessment Brief

Nebula's Software Team is developing a mobile application for a Petrochemical Company, ABC Fuels, who markets and sells petroleum products. The purpose of this mobile application is to allow fuel station owners/dealers to order and track their daily petrochemical products ordered from ABC Fuels, on the go. The products that they can order include petrochemicals such as diesel, petrol and oil.

The Fuel Stations are dependent on ABC Fuels to deliver their orders promptly for them to be able to do business. The biggest challenges for dealers up until now have been:

- That they have no visibility over where their orders are in the delivery pipeline and if it will be on time
- Moreover, they currently place orders manually by phoning ABC Customer Services.

To develop and release version 1 of the app successfully, Nebula must provide the client with project definition document needs to cover the following areas:

- An overview and vision of the solution
- The scope of work to be completed
- An estimated timeline and costs
- Any other considerations the client needs to be aware of

Use the high-level brief and requirements outlined below to put together:
1. A project definition document for the client to approve
2. A user story breakdown for the Scrum team to be able to start development on

Please be sure to document any other assumptions made for the purpose of this assessment.

Requirements Breakdown

FRQ1.1 Order Placement
- User should be able to place orders across all products/account linked to user's profile. The User's organizational data such as customer number(s) can be obtained from the partner identification service.
- ABC Fuels sells hundreds of products in various pack sizes, weight or volume combinations. It must be easy for the customer to identify and select the required product that he / she wants to order:
    - Portal should display recent/frequent orders (configurable i.e. last 30 days or last 5 orders etc.)
    - Top ordered products applicable to customer should be available to choose from
    - Re-order option(s) must be available if customer place repeat orders.
    - Product Search capability
    - Direct linking to product related information (Material Safety Data Sheets – MSDS, websites, marketing material, etc.)
    - Any other recommendation that will make it easy for the customer to identify the required product
- Stock out / product shortage alerts must be displayed.
- Alternative products should be displayed if stock out or shortage occurs
- Ability interact with ABC Fuels support staff real time without leaving the function that the user is busy with:
    - Ability to log a query directly from in the Online ordering application
    - Ability to live chat to the Customer Service Centre (CSC)
    - Interaction to be presence and time aware (for example not available after hours)
    - Any other potential means of interaction
- Ability to print, email, save order information on order creation.
- The overall user experience must have the ability to order online like a "Shopping Cart" linking to relevant product information (Material Safety Data Sheets, etc).

FRQ1.2 Order Tracking

- Users should be able to easily track the status of all orders (open, on hold, etc.)
  - using default settings and configuration
  - query based on multiple selection criteria
  - multiple dashboard views
- Users should be able to view progress of all orders
- View should be available by tracking through geographical representation (ABC Fuel corporate information is limited but the system must make provision for it)
- View should be available to track on time bar showing various keys status throughout the delivery process
- User Alerting
  - Should be configurable
  - Based on multiple predefined events (i.e. when orders have breached SLA period, change in order status, etc.)
- Order status should be available on the user's dashboard.

FRQ1.3 – Order Query (related to incident logging)

- Search and display orders by multiple selection criteria
  - order status (open, closed, etc.)
  - order number
  - date range
  - value
  - product and product grouping
  - etc.
- Create query for escalation to CSC/Credit/Sales
- Create query that initiates online support with CSC

FRQ1.4 –Price Quotation

- Query pricing on specific products
- Confirmation of price query to convert to order placement.

FRQ1.5 – Query Stock/SLA

- Search product and availability
- Input product and quantity and view SLA

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