**CSE213 CRA Report**

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| **Topic: Simulating operations of a Post office** | | |
| **2030183** | **Jaima Jahan Khan** | **User1: Customer** |
| **User2: General customer support agent** |
| **2022135** | **Samnoon Ahmed** | **User3: Post office clerk** |
| **User4:Delivery Driver** |
| **2021942** | **Sayeed Mohiminul Islam Taky** | **User5: Security Office** |
| **User6: Warehouse Staff** |
| **2021030** | **Daiyan Mohammad Shams** | **User7: Manager** |
| **User8: Accountant** |

**P.T.O**

**NOTE:**

there can be workflows for common **processes** as follows (**BUT, these are NOT GOALs**):

|  |  |  |  |
| --- | --- | --- | --- |
| **Process-1: Login** (for example) | | | |
|  |  | | event type |
| Workflow: | event-1 | validate user id (must be 4 or 7 digit number) | VL |
|  | event-2 | validate password (pattern told by client) | VL |
|  | … | **…….** | ……. |
|  | event-**n** | **…….** | ……. |
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| **Process-2: SignOut** (for example) | | | |
|  |  | | event type |
| Workflow: | event-1 | **…….** | **…….** |
|  | event-2 | **…….** | **…….** |
|  | … | **…….** | **…….** |
|  | event-**n** | **…….** | **…….** |
|  | | | |

**Workflow of user specific goals:**

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| **User1 name: Customer** | | | |
| **User-1, Goal-1** | **Description of Goal-1:** Create shipment (customers enter shipment details such as amount, packing criteria, and sender and recipient details.) | | event type |
| Workflow: | event-1 | Customers log into their account. | **VR** |
|  | event-2 | Customer navigates to the “ send a letter “ within the application to initiate a new shipment order. | **UIE** |
|  | event-3 | The customer selects the type of shipment they want to deliver and the time duration (e.g., 3-5 days//80tk, 5-7 days//120tk, urgent 150+ tk) (e.g., inside city, outside city). | **UID** |
|  | event-4 | Customer provides the sender's details (e.g., sender's name, address, contact number, and email.) | **UID** |
|  | event-5 | The recipient's name, address, phone number, and email are all entered by the customer. | **UID** |
|  | event-6 | The app displays a summary of given data for the user to review. The client confirms the information. | **OP, UIE** |
|  | event-7 | The customer then moves on to the payment page after verifying the item's information. | **OP** |
|  | event-8 | The client chooses their preferred payment choice, which can be a credit/debit card, a digital wallet or another type of accepted payment method. | **UID** |
|  | event-9 | After confirming payment information, the customer succeeds in the transaction and pays for the shipping service. | **UIE** |
|  | event-10 | The app gives the user a tracking number and a confirmation of the shipment, allowing them to keep track of the package's movement. | **OP** |
|  | event-11 | Finishing the work, customers may log out. | **UIE** |
|  | | | |
| **User-1, Goal-2** | **Description of Goal-2:** Shipment tracking (customers can view shipments in real time) | |  |
| Workflow: | event-1 | Log into their account | **VR** |
|  | event-2 | Navigates to the “Track Shipments” within the app. | **UIE** |
|  | event-3 | Enters unique tracing number and view shipment | **UID, OP** |
|  | event-4 | After the client has tracked their package and gotten the desired details, the customer will log out. | **UIE** |
|  | | | |
| **User-1, Goal-3** | **Description of Goal-3:** Payment (customer to choose shipping options) | |  |
| Workflow: | event-1 | Login to the account. | **VR** |
|  | event-2 | Customer navigates to the “Payment ” | **UIE** |
|  | event-3 | The customer selects the type of shipment they want to deliver and the time duration (e.g., 3-5 days//80tk, 5-7 days//120tk, urgent 150+ tk) (e.g., inside city, outside city). | **UID** |
|  | event-4 | If the customer has more than one shipment, they select the amount. | **UIE** |
|  | event-5 | The app calculates the shipping cost based on the selected options | **DP** |
|  | event-6 | Customer reviews the calculated shipping cost to make sure it is the right amount or not. | **OP** |
|  | event-7 | Customers choose their payment method from the options, such as credit/debit card, digital wallet. | **UIE** |
|  | event-8 | After successful payment, the app will show a confirmation message. | **OP** |
|  | event-9 | App will generate payment receipts. | **DP** |
|  | | | |
| **User-1, Goal-4** | **Description of Goal-4:** Check the Order/Shipment History (Keep a record of all previous shipments for the client, that includes information on delivery dates, shipping charges, and tracking numbers.) | |  |
| Workflow: | event-1 | After login, the customer looks for “Shipment History” in the app. | **VR,UIE** |
|  | event-2 | The app displays a list of past shipments. | **OP** |
|  | event-3 | The customer selects a shipment from the list and views more details. | **UIE** |
|  | | | |
| **User-1, Goal-5** | **Description of Goal-5:** Package Pickup (Provide customers the option to plan a pickup for their products, allowing them to choose the day, time, and place for the delivery person to pick them up.) | |  |
| Workflow: | event-1 | The customer clicks to the “Pickup” | **UIE** |
|  | event-2 | Choose the pickup place for the package. | **UID** |
|  | event-3 | Choose the pickup time for the package. | **UID** |
|  | event-4 | After verifying that the pickup information is good enough, the customer confirms the pickup request by clicking a "Confirm" or "Submit" button. | **UIE** |
|  | event-5 | A customer receives a notification from the application confirming that the pickup request was submitted properly. | **OP** |
|  | | | |
| **User-1, Goal-6** | **Description of Goal-6:** Modify Shipment Information (Before the product is sent, give customers the option to modify the shipment's details, for example: the shipping address or the day of delivery.) | |  |
| Workflow: | event-1 | The customer browses the "Modify Shipment" option. | **UIE** |
|  | event-2 | If a customer has many shipments, they can pick which one they want to change. | **UID** |
|  | event-3 | By selecting the shipment option from the app, shows the recent information. That adds the sender and recipient details, destination address, delivery date and other important information. | **UID** |
|  | event-4 | Customer pick the specific information they want to change. ( For example, they can pick to alter the delivery date or destination address.) | **UID** |
|  | event-5 | Offers editable options for the chosen information. A new address/an alternative delivery date is entered by the consumer. | **OP** |
|  | event-6 | By clicking a "Save!" button after verifying that the edited information is right. | **UIE,VR** |
|  | event-7 | App may ask the customer to make any necessary payments or refunds if the changes cause an increase in the cost of delivery. | **OP,UID** |
|  | event-8 | For documents or future use, the customer may want to print the updated confirmation. | **UIE** |
|  | event-9 | Customer log out from their account after finishing the shipment change or use the app. | **UIE** |
|  | | | |
| **User-1, Goal-7** | **Description of Goal-7:** Generate shipping tags ( Give the option to create printable shipping invoice with barcodes for quick tracking and identification. ) | |  |
| Workflow: | event-1 | In case they have many shipments, the customer selects the shipment for their own wish to generate an invoice. | **UIE** |
|  | event-2 | For a particular shipment, the app gives a "Generate invoice" button or something. | **UIE** |
|  | event-3 | The screen displays the created shipping label. The client can then decide whether to download and save it as a printable copy. | **OP,DP** |
|  | event-4 | In order to provide easy tracking and identification, the customer securely attached the printed shipping tag to the shipment. | **UID** |
|  | event-5 | The user may choose to go back to the dashboard or logout from the system. | **UIE** |
|  | | | |
| **User-1, Goal-8** | **Description of Goal-8:** Contact customer support ( Give customers a way to get in touch with your customer service staff for help, questions, or to report any problems with their shipments.) | |  |
| Workflow: | event-1 | The user logs in to the account. | **VR** |
|  | event-2 | Customers show the type of their query, such as general assistance, shipment-related problem, billing query, or related categories. | **UIE** |
|  | event-3 | Customers give a comprehensive review of their question or problem, including any important info, tracking numbers, or order information. | **UID** |
|  | event-4 | Customers select their preferred form of contact, which could be via live chat, phone call, or email. Also, some apps have a "Call Me Back" option for phone support. | **UID** |
|  | event-5 | Customer send their questions to the customer care team by clicking a "Submit" or "Send" button. | **UID,UIE** |
|  | event-6 | To fix the problem or offer help, the customer and the support staff work jointly. After getting a satisfactory response or solution, the customer may officially close the case. | **UIE** |
|  | event-7 | The user may choose to go back to the dashboard or logout from the system. | **UIE** |

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| **User-2 name:** **General Customer Support Agent** | | | |
| **User-2, Goal-1** | **Description of Goal-1:** Handling customer inquiries ( Provide information about services, shipment tracking, and other support to customers asked for support) | | event type |
| Workflow: | event-1 | Agentslog into their account. | **VR** |
|  | event-2 | Navigates to the “Assist” option and looks for a list of customer issues. | **UIE** |
|  | event-3 | When a customer enquiry is received, the agent looks for which option the customer preferred to communicate with. Whether it is online call, email, chat request or in-person inquiry. | **UIE** |
|  | event-4 | The customer care agent describes the type of question, for example, whether it is about services, shipment tracking, or general assistance. | **UID** |
|  | event-5 | If there is an issue or difficulty with the query, the agent gives solutions or options to fix it, looking for a positive result. | **UIE** |
|  | event-6 | The agent keeps a record of the inquiry's specifics, that includes contact information of the customer, the subject of the query and any solutions or actions given. | **UID** |
|  | event-7 | The agent checks to see if the customer is satisfied after the issue has been fixed, asks if there are any other questions and then formally ends the conversation. | **OP** |
|  | event-8 | The user may choose to go back to the dashboard or logout from the system. | **UIE** |
|  | | | |
| **User-2, Goal-2** | **Description of Goal-2:** Tracking shipment (Assist customers in tracking their shipments by giving them information on the whereabouts and status of their items.) | |  |
| Workflow: | event-1 | The user logs in to the account. | **VR** |
|  | event-2 | Navigate to the “Tracking” option. If gets any requests about tracking, then calls the customer and listens to the tracing query. | **UIE** |
|  | event-3 | The agent puts the customer's unique tracking number into the app to see real-time information about the shipment. | **UID** |
|  | event-4 | Agent gets the info and shares it with the customer (e.g., in transit, out for delivery but in other hub and so to be delivered ) | **OP** |
|  | event-5 | After giving information, thanking the customer and asking if there are any other questions. | **UID** |
|  | event-6 | The user may choose to go back to the dashboard or logout from the system. | **UIE** |
|  | | | |
| **User-2, Goal-3** | **Description of Goal-3:** Issue Solving (Address and fix usual customer issues, such as missed deliveries, delivery delays, or address changes. ) | |  |
| Workflow: | event-1 | The agent logs in to the account. | **VR** |
|  | event-2 | Navigates to the “Delivery issue” to look for delivery issues. Calls customers ask for if delivery is missing, delivery delays or address changes. | **UIE** |
|  | event-3 | The agent puts the customer's unique tracking number into the app to see package whereabouts. | **UID,OP** |
|  | event-4 | The agent contact with delivery team and ask for resolution for example reschedule or tracking down a delayed/missing shipment | **UID** |
|  | event-5 | After solving the issue the agent creates contact with the customer and ensures the problem is solved and asks if there are any other questions. | **UID** |
|  | event-6 | The user may choose to go back to the dashboard or logout from the system. | **UIE** |
|  | | | |
| **User-2, Goal-4** | **Description of Goal-4:** Assist about Billing and Payment (Help customers with billing-related problems, such as describing costs and payment options and solving payment problems.) | |  |
| Workflow: | event-1 | The agent logs in to the account. | **VR** |
|  | event-2 | Agent looks at the “ Billing assist” option. And contact with customers. (e.g., either it's related to charges, way of payment, or a problem with payment.) | **UIE** |
|  | event-3 | To look at every detail of the query, the agent uses the app to access the customer's invoice and payment information by putting in the customer ID. | **UID** |
|  | event-4 | Then the agent offers ways to fix the payment problem, for example helping the customer to complete a payment again, updating payment information or explaining how to correct billing errors. | **UID** |
|  | event-5 | After solving the billing issue, the agent asks the customer to confirm the issue is solved and asks if there are any other questions. | **UID** |
|  | event-6 | The user may choose to go back to the dashboard or logout from the system. | **UIE** |
|  | | | |
| **User-2, Goal-5** | **Description of Goal-5:** Lost or Damaged Shipment Statements (Help customers file issues for lost or damaged items and funding in solving issues.) | |  |
| Workflow: | event-1 | The agent logs in to the account. | **VR** |
|  | event-2 | By clicking “lost & damaged” agent will see the list of file issues. And make a call to listen to a description of the issue. | **UIE** |
|  | event-3 | Agent records of the claim along with customer’s information, claim type and the taken actions to help the customer. | **UID** |
|  | event-4 | Complaint is resolved or accepted, the agent informs the customer of the result and discusses the next actions such as refunds or package replacement. | **UIE** |
|  | event-5 | Then the user may choose to go back to the dashboard or logout from the system. | **UIE** |
|  | | | |
| **User-2, Goal-6** | **Description of Goal-6:** Update information (In order to maintain current records, update customer information in the system, such as updated contact information or address information.) | |  |
| Workflow: | event-1 | The agent logs in to the account. | **VR** |
|  | event-2 | Tapping on “Update info” agent will see a list of requests for updates. Agent will call the customer and listen to the customer when they ask for an update to their information (e.g., change of address or contact information.) | **UIE,OP** |
|  | event-3 | The agent verifies the client's authentication according to set security protocols to guarantee that sensitive information is updated appropriately**.** | **UID** |
|  | event-4 | Inserts the updated information into the database. | **UID** |
|  | event-5 | Agent confirms the changes and asks the customer to verify if it is okay. | **VR** |
|  | event-6 | After that the user may choose to go back to the dashboard or logout from the system. | **UIE** |
|  | | | |
| **User-2, Goal-7** | **Description of Goal-7:** Stamp sales(Agent sell postage stamps to customer. ) | |  |
| Workflow: | event-1 | Login into the system | **VR** |
|  | event-2 | After successful login a dashboard will appear from where the agent will select stamp sales option. | **UIE** |
|  | event-3 | Agent selects the type of stamps the customer wants to buy, enters the quantity and selects the payment method. | **UID** |
|  | event-4 | The agent prints a receipt for the customer and updates the inventory. | **DP** |
|  | event-**5** | The user may choose to go back to the dashboard or logout from the system. | **UIE** |
|  | | | |
| **User-2, Goal-8** | **Description of Goal-8:** Urgent delivery (Agent prioritize urgent delivery task.) | |  |
| Workflow: | event-1 | Login into the system | **VR** |
|  | event-2 | After successful login a dashboard will appear from where the agent will select the “urgent task”option. | **UIE** |
|  | event-3 | Customer requests regarding urgent delivery services will be shown in a new interface. | **OP** |
|  | event-4 | The agent checks the amount of urgent delivery requests and prioritizes by sending those parcels to the delivery team. | **DP** |
|  | event–5 | The agent selects a P.O. box that fits the customer's requirements if available. | **UID** |
|  | event-6 | The agent checks completed tasks to keep track of progress and take care of urgent things right away. | **DP** |
|  | event-**7** | The user may choose to go back to the dashboard or logout from the system. | **UIE** |

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| **User-3 name:** **Post office clerk** | | | |
| **User-3, Goal-1** | **Description of Goal-1:** **Accept incoming packages.** | | event type |
| Workflow: | event-1 | **Begin by receiving packages from various sources, including mail carriers, delivery services, and customers dropping off parcels.** | **…….** |
|  | event-2 | **Check the packages for accuracy in terms of the sender's address, recipient's address, and any special instructions.** | **…….** |
|  | event-3 | **Verify the package's condition to ensure it's not damaged or compromised.** | **…….** |
|  | event-4 | **Record relevant information, such as tracking numbers, sender details, recipient information, and package dimensions, in the post office's database or tracking system.** | **…….** |
|  | event-**5** | **If postage fees are not prepaid, calculate the postage based on the weight, size, destination, and chosen delivery service** | **…….** |
|  | | | |
| **User-3, Goal-2** | **Description of Goal-2:** **Generate shipping labels.** | |  |
| Workflow: | event-1 | **Begin by inspecting the package to ensure it's properly sealed and in good condition for shipping. Address any visible damage or issues.** | **…….** |
|  | event-2 | **Use the post office's label printing system or software to create shipping labels. This system may be connected to a database or an online platform.** | **…….** |
|  | event-3 | **Input the collected information into the label printing system accurately. Ensure that there are no typos or errors in the addresses and contact details.** | **…….** |
|  | event-4 | **Initiate the label printing process within the system. The label should include important information such as sender and recipient addresses, tracking barcode, and postage details.** | **…….** |
|  | event-**5** | **Once the label is printed, carefully affix it to the package. Ensure that it is securely attached and clearly visible.** | **…….** |
|  | | | |
| **User-3, Goal-3** | **Description of Goal-3:** **Calculate shipping costs.** | |  |
| Workflow: | event-1 | **Begin by assisting the customer who is seeking information about shipping costs. Greet them politely and ask for details about their package.** | **…….** |
|  | event-2 | **Ask the customer for the destination address, including the ZIP code or postal code, and any specific delivery requirements or preferences.** | **…….** |
|  | event-3 | **Based on the customer's needs and preferences, recommend suitable shipping services, such as standard mail, priority mail, express mail, or international shipping options.** | **…….** |
|  | event-4 | **Input the package details into the rate calculator system, including weight, dimensions, and destination information.** | **…….** |
|  | event-**5** | **Offer the customer multiple shipping options if available. This might include different delivery times and cost levels.** | **…….** |
|  | | | |
| **User-3, Goal-4** | **Description of Goal-4:** **Process customer payments.** | |  |
| Workflow: | event-1 | **Greet customers and assist them when they approach the service counter for payments. Maintain a friendly and professional demeanor.** | **…….** |
|  | event-2 | **Ask customers to specify the purpose of their payment, such as postage, shipping, or purchasing mailing supplies.** | **…….** |
|  | event-3 | **Calculate the total amount due, including the cost of postage or services and any associated fees or taxes. Use a cash register or computerized payment system for accurate calculations.** | **…….** |
|  | event-4 | **Accept payment from the customer. This may involve various forms of payment, including cash, credit/debit cards, checks, money orders, or electronic payment methods.** | **…….** |
|  | event-**5** | **If the customer pays in cash, count the money carefully, provide change if necessary, and maintain an organized cash register or cash-handling process.** | **…….** |
|  | | | |
| **User-3, Goal-5** | **Description of Goal-5:** **Handle customer inquiries.** | |  |
| Workflow: | event-1 | **Listen carefully to the customer's inquiry. Ask clarifying questions if needed.** | **…….** |
|  | event-2 | **Provide the customer with the information they need. This may involve explaining postal services and regulations, helping the customer fill out forms, or tracking a package.** | **…….** |
|  | event-3 | **Be patient and understanding. Some customers may have complex inquiries or may be frustrated. Be sure to take the time to resolve their issue to their satisfaction.** | **…….** |
|  | … | **…….** | **…….** |
|  | event-**n** | **…….** | **…….** |
|  | | | |
| **User-3, Goal-6** | **Description of Goal-6:** **Data Entry** | |  |
| Workflow: | event-1 | **Receive the data to be entered. This may be in the form of paper documents, electronic files, or customer requests.** | **…….** |
|  | event-2 | **Enter the data into a computer system. This may involve using a database, spreadsheet, or other software program.** | **…….** |
|  | event-3 | **Verify the accuracy of the entered data. This may involve proofreading the data or using a data verification program.** | **…….** |
|  | event-4 | **Save the data and/or send it to the appropriate recipient. This may involve archiving the data electronically or printing it out.** | **…….** |
|  | event-**n** | **…….** | **…….** |
|  | | | |
| **User-3, Goal-7** | **Description of Goal-7:** **Safety and Security** | |  |
| Workflow: | event-1 | **Screen mail and packages for suspicious items. Post office clerks may be trained to identify suspicious items, such as packages that are leaking or have unusual wiring.** | **…….** |
|  | event-2 | **Handle mail and packages safely. Post office clerks should follow proper lifting techniques and wear appropriate personal protective equipment (PPE) when handling mail and packages.** | **…….** |
|  | event-3 | **…….** | **…….** |
|  | … | **…….** | **…….** |
|  | event-**n** | **…….** | **…….** |
|  | | | |
| **User-3, Goal-8** | **Description of Goal-8:** **…….** | |  |
| Workflow: | event-1 | **…….** | **…….** |
|  | event-2 | **…….** | **…….** |
|  | event-3 | **…….** | **…….** |
|  | … | **…….** | **…….** |
|  | event-**n** | **…….** | **…….** |

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| **User-4 name:** **Delivery Driver** | | | |
| **User-4, Goal-1** | **Description of Goal-1:** **Route Planning** | | event type |
| Workflow: | event-1 | **Post Office Clerks receive delivery requests from various sources, including online orders, postal customers, and businesses. These requests may come in the form of physical packages, digital orders, or customer service inquiries.** | **…….** |
|  | event-2 | **The clerk starts by sorting incoming packages based on their destination and delivery route. Packages are grouped together to ensure they are all headed in the same direction.** | **…….** |
|  | event-3 | **The clerk assesses the urgency and priority of each package or mail item. Some items may require expedited delivery, while others can be grouped with regular deliveries.** | **…….** |
|  | event-4 | **Here is a sample work process for a delivery driver in a post office mobile app** | **…….** |
|  | event-**n** | **…….** | **…….** |
|  | | | |
| **User-4, Goal-2** | **Description of Goal-2:** **Package Pickup** | |  |
| Workflow: | event-1 | **Customers or businesses initiate pickup requests by contacting the post office through various channels, such as phone calls, emails, or online forms.** | **…….** |
|  | event-2 | **The Post Office Clerk interacts with the customer or business representative to confirm pickup details, including the pickup location, date, and time preferences.** | **…….** |
|  | event-3 | **The clerk generates a pickup order or receipt for the customer, which serves as proof of the scheduled pickup. This document typically includes a unique pickup reference number.** | **…….** |
|  | … | **The clerk communicates the pickup details to the designated pickup team or driver. This involves providing them with the pickup location, scheduled pickup time, and any specific instructions or special handling requirements.** | **…….** |
|  | event-**n** | **The pickup team collects the packages and loads them into the designated vehicle, ensuring that packages are secure and properly organized to prevent damage during transportation.** | **…….** |
|  | | | |
| **User-4, Goal-3** | **Description of Goal-3:** **Package Sorting** | |  |
| Workflow: | event-1 | **The Post Office Clerk receives incoming packages and mail items from various sources, including mail carriers, drop-off locations, and businesses.** | **…….** |
|  | event-2 | **The clerk records essential information about each package, such as sender information, recipient information, tracking numbers, and any special handling instructions. This information is typically entered into a database or sorting system.** | **…….** |
|  | event-3 | **…….** | **…….** |
|  | … | **…….** | **…….** |
|  | event-**n** | **…….** | **…….** |
|  | | | |
| **User-4, Goal-4** | **Description of Goal-4:** **Delivery Confirmation** | |  |
| Workflow: | event-1 | **The Post Office Clerk starts by verifying the delivery route information for postal workers or delivery drivers, which includes the addresses and package details.** | **…….** |
|  | event-2 | **The clerk dispatches postal workers or delivery drivers with the sorted packages, providing them with the necessary route information, including delivery addresses and order details.** | **…….** |
|  | event-3 | **The postal workers or drivers use a mobile device or scanner to track the status of each package throughout the delivery process. This includes scanning barcodes or QR codes on packages.** | **…….** |
|  | … | **The clerk and postal workers maintain accurate records of delivered and undelivered packages. This information is recorded in the postal service's tracking system.** | **…….** |
|  | event-**n** | **…….** | **…….** |
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| **User-4, Goal-5** | **Description of Goal-5:** **Navigation Assistance** | |  |
| Workflow: | event-1 | **The delivery driver is assigned a delivery route for the day, typically through a mobile app or device. This assignment includes information about the addresses to be visited, the order of stops, and any special delivery instructions.** | **…….** |
|  | event-2 | **The driver inputs the address of the first delivery destination into the navigation app. The app calculates the optimal route to reach the location.** | **…….** |
|  | event-3 | **In some cases, the driver may be required to take photographs of delivered packages at the recipient's location to provide additional visual evidence of the delivery.** | **…….** |
|  | … | **…….** | **…….** |
|  | event-**n** | **…….** | **…….** |
|  | | | |
| **User-4, Goal-6** | **Description of Goal-6:** **Communication** | |  |
| Workflow: | event-1 | **Before starting their delivery route, the driver accesses the post office's mobile app or device to retrieve information about the day's route, including addresses, order details, and special instructions.** | **…….** |
|  | event-2 | **If the driver is responsible for picking up packages from the post office or distribution center, they confirm the pickup by marking the items as collected in the app. This action may trigger an automated notification to the post office.** | **…….** |
|  | event-3 | **The driver uses the mobile app to send and receive messages related to deliveries. This can include instructions from the post office, alerts about package availability, and special recipient requests.** | **…….** |
|  | … | **…….** | **…….** |
|  | event-**n** | **…….** | **…….** |
|  | | | |
| **User-4, Goal-7** | **Description of Goal-7:** **Proof of Delivery** | |  |
| Workflow: | event-1 | **This is the most common form of POD. Delivery drivers can use a paper POD form or an electronic POD form on a mobile device. The recipient should sign the POD form to acknowledge that they have received the delivery.** | **…….** |
|  | event-2 | **…….** | **…….** |
|  | event-3 | **…….** | **…….** |
|  | … | **…….** | **…….** |
|  | event-**n** | **…….** | **…….** |
|  | | | |
| **User-4, Goal-8** | **Description of Goal-8:** **Return Processing** | |  |
| Workflow: | event-1 | **The delivery driver arrives at the specified delivery location, which is typically provided in the route information on their mobile app or device.** | **…….** |
|  | event-2 | **The driver confirms the identity of the recipient to ensure that the package is handed over to the correct person. This may involve checking identification or asking for the recipient's name.** | **…….** |
|  | event-3 | **Using their mobile app or device, the driver marks the package as "out for delivery" and enters the recipient's name and signature. Some systems also allow for the capture of electronic signatures.** | **…….** |
|  | … | **…….** | **…….** |
|  | event-**n** | **…….** | **…….** |

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| **User-5 name:** **Security Office** | | | |
| **User-5, Goal-1** | **Description of Goal-1:** **User Authentication** | | event type |
| Workflow: | event-1 | **Users create an account by providing necessary information like name, email, and phone number. They choose a strong password, or the app might offer them the option to set up two-factor authentication (2FA).** | **…….** |
|  | event-2 | **The app encrypts the login credentials and sends them to the post office's authentication server.** | **…….** |
|  | event-3 | **The authentication server verifies the login credentials against the post office's user database.** | **…….** |
|  | event-4 | **The app stores the session token on the user's device.** | **…….** |
|  | event-**5** | **The app provides a way for the user to log out of the app, which will invalidate the session token and prevent unauthorized access to the user's account.** | **…….** |
|  | | | |
| **User-5, Goal-2** | **Description of Goal-2:** **Access Control** | |  |
| Workflow: | event-1 | **Implement user authentication to ensure that only authorized personnel can access the security office features of the mobile app.** | **…….** |
|  | event-2 | **Implement 2FA as an additional layer of security, requiring users to provide a second form of verification, such as a one-time code sent to their mobile device, to gain access to sensitive security features.** | **…….** |
|  | event-3 | **Create a workflow for users to request access to certain security features or data. These requests should be reviewed and approved by higher-level security personnel or administrators to ensure proper access control.** | **…….** |
|  | event-4 | **Implement session management to control the duration of user sessions. Users should be automatically logged out after a certain period of inactivity to prevent unauthorized access in case a device is left unattended.** | **…….** |
|  | event-**5** | **Maintain detailed audit logs to track user activities within the security office features of the app.** | **…….** |
|  | | | |
| **User-5, Goal-3** | **Description of Goal-3:Surveillance Monitoring** | |  |
| Workflow: | event-1 | **Integrate surveillance cameras' video feeds into the mobile app, allowing security personnel to access live footage from various areas of the post office.** | **…….** |
|  | event-2 | **Provide real-time monitoring of video streams to allow security officers to continuously observe activities within and around the post office.** | **…….** |
|  | event-3 | **Implement motion detection algorithms to alert security personnel when unusual activity or motion is detected in restricted areas** | **…….** |
|  | event-4 | **Enable security officers to access the surveillance system remotely through the mobile app, allowing them to monitor the premises from any location.** | **…….** |
|  | event-**5** | **Create an event logging system that records significant events, such as alarms, intrusions, or system malfunctions, for future reference and analysis.** | **…….** |
|  | | | |
| **User-5, Goal-4** | **Description of Goal-4:** **Incident Reporting** | |  |
| Workflow: | event-1 | **Users, typically security personnel or authorized employees, should log in to the mobile app securely using their credentials.** | **…….** |
|  | event-2 | **Provide a list of predefined incident types such as theft, vandalism, safety hazard, or suspicious activity. Users should select the appropriate type that best describes the incident.** | **…….** |
|  | event-3 | **Utilize the mobile device's GPS capabilities to automatically capture the incident's location or allow users to input it manually. This is crucial for tracking incidents on a map.** | **…….** |
|  | event-4 | **Enable users to attach photos, videos, or audio recordings related to the incident. Visual and audio evidence can be invaluable for investigations.** | **…….** |
|  | event-**5** | **Include a text field where users can provide a detailed description of the incident. This should include date, time, persons involved, and any other relevant information.** | **…….** |
|  | | | |
| **User-5, Goal-5** | **Description of Goal-5: Alarm Management** | |  |
| Workflow: | event-1 | **Implement a system to monitor alarms generated by various security devices such as motion detectors, door sensors, and surveillance cameras.** | **…….** |
|  | event-2 | **When an alarm is triggered, security personnel should promptly verify the incident's legitimacy by checking surveillance footage or other relevant information.** | **…….** |
|  | event-3 | **Develop a notification system that alerts security staff or on-duty officers when an alarm is triggered, ensuring a swift response to potential security threats.** | **…….** |
|  | event-4 | **Define clear and documented response procedures for different types of alarms, specifying the roles and responsibilities of security personnel in the event of an alarm.** | **…….** |
|  | event-**5** | **Create a system for documenting all alarm events and responses. This data can be valuable for analysis, trend identification, and auditing purposes.** | **…….** |
|  | | | |
| **User-5, Goal-6** | **Description of Goal-6:** **Visitor Management** | |  |
| Workflow: | event-1 | **Users (both employees and visitors) should be required to register in the mobile app. Employees can use their work credentials, while visitors can create guest profiles.** | **…….** |
|  | event-2 | **Visitors should check in upon arrival at the post office. This can be done by scanning a QR code at the entrance or providing necessary information.** | **…….** |
|  | event-3 | **The app should verify the identity of visitors by requesting identification, such as a driver's license or ID card, and capturing their photo.** | **…….** |
|  | event-4 | **After identity verification, the app can issue a digital visitor pass with a unique ID, the purpose of the visit, and access permissions.** | **…….** |
|  | event-**5** | **The security office should have access to a real-time dashboard that shows all visitors currently in the post office. This helps track who is on-site at any given time.** | **…….** |
|  | | | |
| **User-5, Goal-7** | **Description of Goal-7:** **Patrolling and Checkpoints** | |  |
| Workflow: | event-1 | **Security personnel plan and schedule patrol routes and checkpoint locations within the post office. The mobile app provides a platform for creating and organizing these routes efficiently.** | **…….** |
|  | event-2 | **At each designated checkpoint, security officers use the mobile app to scan QR codes or NFC tags to log their presence. This creates a digital record of their visits.** | **…….** |
|  | event-3 | **If security officers encounter any security breaches or unusual activities during their patrol, they use the app to report incidents immediately. Incident reports should include details, images, and location data.** | **…….** |
|  | event-4 | **The app facilitates real-time communication between security personnel and the central control room. It can also send alerts or notifications to officers in case of emergencies or security breaches.** | **…….** |
|  | event-**5** | **Security officers can use the app to verify that safety equipment, such as fire extinguishers and emergency exits, are in proper condition during each patrol. They can log any issues for maintenance.** | **…….** |
|  | | | |
| **User-5, Goal-8** | **Description of Goal-8:** **Emergency Response** | |  |
| Workflow: | event-1 | **Enable users to quickly report incidents, emergencies, or suspicious activities through the mobile app. This could include options to report fires, thefts, accidents, medical emergencies, or other security-related issues.** | **…….** |
|  | event-2 | **Implement a notification system within the app to alert security personnel and relevant parties when an emergency is reported. Push notifications, SMS, and email alerts can be used to ensure swift communication.** | **…….** |
|  | event-3 | **Maintain a list of emergency contacts, including local law enforcement, fire departments, medical services, and key personnel within the organization. Users should be able to access these contacts easily.** | **…….** |
|  | event-4 | **Incorporate GPS capabilities to pinpoint the exact location of the incident or emergency when reported. This ensures that responders can reach the scene quickly.** | **…….** |
|  | event-**5** | **Create a system that allows security officers to allocate resources efficiently. This can include dispatching security personnel, requesting medical assistance, or notifying the fire department as needed.** | **…….** |

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| **User-6 name:** **Warehouse Staff** | | | |
| **User-6, Goal-1** | **Description of Goal-1:** **Package Receiving** | | event type |
| Workflow: | event-1 | **Allow warehouse staff to log in securely using unique credentials. Implement role-based access control to ensure only authorized personnel can use the app.** | **…….** |
|  | event-2 | **Enable staff to use their mobile device's camera to scan package barcodes or QR codes for quick identification. Automatically fetch package details from the database based on the scan.** | **…….** |
|  | event-3 | **Display package details such as sender, recipient, shipping method, and contents to the staff. Provide real-time tracking information if available.** | **…….** |
|  | event-4 | **Implement a verification step to confirm that the package matches the information displayed in the app. Use additional scans or checks, such as weighing the package, to ensure accuracy.** | **…….** |
|  | event-**5** | **Enable staff to assign packages to specific storage locations within the warehouse. Implement a search and retrieval system to quickly find and access stored packages** | **…….** |
|  | | | |
| **User-6, Goal-2** | **Description of Goal-2:** **Inventory Management** | |  |
| Workflow: | event-1 | **Warehouse staff can use the app to log in and record incoming shipments. Scan barcodes or QR codes on packages to update inventory records.** | **…….** |
|  | event-2 | **Allow staff to categorize items based on their type, size, and destination. Use dropdown menus or custom tags for easy sorting.** | **…….** |
|  | event-3 | **Maintain a digital map of the warehouse to track the exact location of items. Warehouse staff can use the app to find items quickly by searching or scanning barcodes.** | **…….** |
|  | event-4 | **Enable staff to receive and process orders through the app. Confirm the items picked, verify their condition, and generate shipping labels.** | **…….** |
|  | event-**5** | **Set up reorder points for low-stock items. The app can generate purchase orders or request transfers from other post office locations.** | **…….** |
|  | | | |
| **User-6, Goal-3** | **Description of Goal-3:** **Sorting and Routing** | |  |
| Workflow: | event-1 | **Allow staff to scan incoming packages using the mobile app. The app can capture package details, such as tracking numbers, sender information, and recipient details.** | **…….** |
|  | event-2 | **Provide a feature for staff to generate and print labels for packages if needed. The app should include label printing options to attach to packages.** | **…….** |
|  | event-3 | **Enable staff to enter or scan the destination address for each package. The app can help validate addresses and suggest corrections in real-time.** | **…….** |
|  | event-4 | **Create a module that provides sorting instructions for packages, such as the destination bin or route. The app should allow for easy updates to sorting rules.** | **…….** |
|  | event-**5** | **Enable real-time tracking of packages within the warehouse. Staff can use the app to locate and monitor the status of packages in transit.** | **…….** |
|  | | | |
| **User-6, Goal-4** | **Description of Goal-4:** **Package Tracking** | |  |
| Workflow: | event-1 | **Warehouse staff should log in securely using their credentials to access the app.** | **…….** |
|  | event-2 | **Enable the camera to scan package barcodes or QR codes for quick identification and tracking.** | **…….** |
|  | event-3 | **Allow staff to record incoming packages by scanning or manually entering package information, including sender, recipient, destination, and contents.** | **…….** |
|  | event-4 | **Assist staff in sorting packages based on their destinations or routes for efficient distribution.** | **…….** |
|  | event-**5** | **Provide real-time tracking information for each package within the warehouse, including its current location, status, and expected delivery time.** | **…….** |
|  | | | |
| **User-6, Goal-5** | **Description of Goal-5:** **Quality Control** | |  |
| Workflow: | event-1 | **When items arrive at the warehouse, staff should inspect the packages for damage, accuracy, and completeness. Use the mobile app to scan barcodes or QR codes to verify the shipment.** | **…….** |
|  | event-2 | **Utilize the mobile app to accurately update inventory levels when items are received, moved, or shipped. Implement real-time inventory tracking to minimize errors.** | **…….** |
|  | event-3 | **Ensure that staff uses the mobile app to pick the correct items for customer orders. Implement barcode scanning and validation to reduce order fulfillment errors.** | **…….** |
|  | event-4 | **Verify that items are packed securely and appropriately. Use the mobile app to capture images of packages to document their condition before shipping.** | **…….** |
|  | event-**5** | **Before shipping, staff should verify that the correct items are in the package and that the recipient's address matches the order. The mobile app can assist in this verification process.** | **…….** |
|  | | | |
| **User-6, Goal-6** | **Description of Goal-6:** **Delivery Scheduling** | |  |
| Workflow: | event-1 | **When packages arrive at the warehouse, the mobile app should send real-time notifications to warehouse staff, including package details and sender information.** | **…….** |
|  | event-2 | **Warehouse staff can use the app to scan and sort packages based on their destinations and delivery routes, ensuring efficient organization.** | **…….** |
|  | event-3 | **The app should offer route optimization features that help warehouse staff plan the most efficient delivery routes based on package destinations and delivery time windows.** | **…….** |
|  | event-4 | **Allow supervisors or staff managers to assign specific packages to individual delivery personnel using the app.** | **…….** |
|  | event-**5** | **Ensure that addresses on packages are accurate and up to date by integrating address validation tools into the app, reducing delivery errors.** | **…….** |
|  | | | |
| **User-6, Goal-7** | **Description of Goal-7:** **Reporting and Analytics** | |  |
| Workflow: | event-1 | **Provide real-time tracking information for packages, allowing warehouse staff to monitor the movement of parcels within the facility. This includes scanning barcodes or QR codes for quick updates.** | **…….** |
|  | event-2 | **Enable staff to easily update and track the status and location of packages within the warehouse. This ensures efficient storage and retrieval.** | **…….** |
|  | event-3 | **Create customized dashboards that display key performance metrics for warehouse staff, such as order processing times, delivery accuracy, and inventory turnover.** | **…….** |
|  | event-4 | **Implement algorithms that analyze package destinations and suggest optimized delivery routes for postal workers, minimizing delivery times and costs.** | **…….** |
|  | event-**5** | **Provide a feature for staff to report damaged or tampered packages. This should include the ability to upload images and submit incident reports directly through the app.** | **…….** |
|  | | | |
| **User-6, Goal-8** | **Description of Goal-8:** **Communication and Alerts** | |  |
| Workflow: | event-1 | **When a new package arrives at the warehouse, the app should send an alert to the relevant staff member, including package details and recipient information.** | **…….** |
|  | event-2 | **Staff should receive real-time updates about changes in inventory, including new arrivals, dispatches, and stock levels. This helps in managing resources effectively.** | **…….** |
|  | event-3 | **Warehouse staff should receive alerts regarding the day's delivery schedule, including the number of packages, destinations, and any special handling requirements.** | **…….** |
|  | event-4 | **In case of urgent pickup requests or time-sensitive packages, staff should be alerted immediately to prioritize these shipments.** | **…….** |
|  | event-**5** | **If a more efficient delivery route is available, the app can provide real-time route optimization alerts to minimize travel time and fuel costs.** | **…….** |

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| **User-7 name:** **Manager** | | | |
| **User-7, Goal-1** | **Description of Goal-1:** **Manager can view and edit Employee**  **information** | | event type |
| Workflow: | event-1 | **Workflow of login process will be executed first.** | VR |
|  | event-2 | **If login successful, dashboard will be loaded** | **DP** |
|  | event-3 | **Manager can click “View Employee” to view employee information** | **OP,DP** |
|  | Event 4 | **Manager can click “Edit” to edit employee information and click “ Save”to save changes** | UIE,DP |
|  | event-**5** | **Manager can select “Back button” to go back to dashboard** | **DP** |
|  | | | |
| **User-7, Goal-2** | **Description of Goal-2: Manager can search Employees to check information.** | |  |
| Workflow: | event-1 | **Workflow of login process will be executed first.** | VR |
|  | event-2 | **If login successful, dashboard will be loaded** | **DP** |
|  | event-3 | **Manager can click “Verify Employee” to verify employee information** | **OP,DP** |
|  | event-**4** | **Manager can select “Back button” to go back to dashboard** | **DP** |
|  | | | |
| **User-7, Goal-3** | **Description of Goal-3:** **Manager can generate reports on shipping activity.** | |  |
| Workflow: | event-1 | **Workflow of login process will be executed first.** | VR |
|  | event-2 | **If login successful, dashboard will be loaded** | **DP** |
|  | event-3 | **Manager can click “ Generate Report” to customize report data like date,shipping address etc…** | **OP,DP** |
|  | event-4 | **Manager can click “Verification” to verify reports data from database.** | UIE,DP |
|  | event-**5** | **Manager can select “Back button” to go back to dashboard** | **DP** |
|  | | | |
| **User-7, Goal-4** | **Description of Goal-4:** **Manager can Configure system settings.** | |  |
| Workflow: | event-1 | **Workflow of login process will be executed first.** | VR |
|  | event-2 | **If login successful, dashboard will be loaded** | **DP** |
|  | event-3 | **Manager can click “ Configure System Settings” to view system information.** | **OP,DP** |
|  | event-4 | **Manager can click “Change” to change any information and click “Save” to save changes** | UIE,DP |
|  | event-**5** | **Manager can select “Back button” to go back to dashboard** | **DP** |
|  | | | |
| **User-7, Goal-5** | **Description of Goal-5:** **Manager can view and edit Employee Designations** | |  |
| Workflow: | event-1 | **Workflow of login process will be executed first.** | VR |
|  | event-2 | **If login successful, dashboard will be loaded** | **DP** |
|  | event-3 | **Manager can click the “Employees button”** | **OP,DP** |
|  | event-4 | **Details are shown and accessed from the database** | UIE,DP |
|  | event-**5** | **Manager can select an Employee from the list and click designation to check current designation and click Promote/Transfer button to change designation** | **DP** |
|  | | | |
| **User-7, Goal-6** | **Description of Goal-6:** **Manager can view salary** | |  |
| Workflow: | event-1 | **Workflow of login process will be executed first.** | VR |
|  | event-2 | **If login successful, dashboard will be loaded** | **DP** |
|  | event-3 | **Manager can click the “Employees” button** | **OP,DP** |
|  | event-4 | **Details are shown and accessed from the database** | UIE,DP |
|  | event-**5** | **Manager can select an Employee from the list and click Salary to see current salary** | **DP** |
|  | | | |
| **User-7, Goal-7** | **Description of Goal-7:** **Manager can view and modify Branch Reports.** | |  |
| Workflow: | event-1 | **Workflow of login process will be executed first.** | VR |
|  | event-2 | **If login successful, dashboard will be loaded** | **DP** |
|  | event-3 | **Manager can click the “Branch Report” button Details are shown and accessed from the database** | **OP,DP** |
|  | … |  | UIE,DP |
|  | event-**4** | **Manager can also click the Create Report button to manually add report information and click the Save button to save changes database will be updated according to their changes** | **DP** |
|  | | | |
| **User-7, Goal-8** | **Description of Goal-8: Manager can view and update Policy for employees** | |  |
| Workflow: | event-1 | **Workflow of login process will be executed first.** | VR |
|  | event-2 | **If login successful, dashboard will be loaded** | **DP** |
|  | event-3 | **Manager can click the Policy button to view policies** | **OP,DP** |
|  | event-4 | **Manager can click Update to change their policies by identifying the need and consult with board** | UIE,DP |
|  | event-**5** | **Manager can click Save button to save their changes and database will be updated according to their changes** | **DP** |

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| **User-8 name:** **Accountant** | | | |
| **User-8, Goal-1** | **Description of Goal-1:** **Accountant can generate bill** | | event type |
| Workflow: | event-1 | **Workflow of login process will be executed first.** | VR |
|  | event-2 | **If login successful, dashboard will be loaded** | **DP** |
|  | event-3 | **Accountant can click “ Create Bill ” to generate new bill and click “Save” to save their database** | **OP,DP** |
|  | event-4 | **Accountant can click “Print” to print bill copy** | UIE,DP |
|  | event-**5** | **Accountant can select “Back button” to go back to dashboard** | **DP** |
|  | | | |
| **User-8, Goal-2** | **Description of Goal-2:**  **Accountant can edit bills and update payment** | |  |
| Workflow: | event-1 | **Workflow of login process will be executed first.** | VR |
|  | event-2 | **If login successful, dashboard will be loaded** | **DP** |
|  | event-3 | **Accountant can click “ Edit ” to edit previous bill and click “Update” to Update payment save new changes in their database** | **OP,DP** |
|  | event-4 | **Accountant can click “Save” to save new changes in their database** | UIE,DP |
|  | event-**5** | **Accountant can select “Back button” to go back to dashboard** | **DP** |
|  | | | |
| **User-8, Goal-3** | **Description of Goal-3:** **Accountant can view pending bills and update payment** | |  |
| Workflow: | event-1 | **Workflow of login process will be executed first.** | VR |
|  | event-2 | **If login successful, dashboard will be loaded** | **DP** |
|  | event-3 | **Accountant can click “ Pending Bills ” to view pending bills from their database** | **OP,DP** |
|  | event-4 | **Accountant can click “Paid” to update pending bills to paid** | UIE |
|  | event-**5** | **Accountant can click “Save” to save new changes in their database** | **DP** |
|  | event-6 | **Accountant can select “Back button” to go back to dashboard** | DP |
|  | | | |
| **User-8, Goal-4** | **Description of Goal-4 Accountant can view and update insurance records** | |  |
| Workflow: | event-1 | **Workflow of login process will be executed first.** | VR |
|  | event-2 | **If login successful, dashboard will be loaded** | **DP** |
|  | event-3 | **Accountant can click “insurance” to view insurance records from the database.** | **OP,DP** |
|  | event-4 | **Accountant can click “Update” to update their insurance policies** | UIE,DP |
|  | event-**5** | **Accountant can click “Save” to save all the changes in database** | **DP** |
|  | event-6 | **Accountant can select “Back button” to go back to dashboard** | DP |
|  | | | |
| **User-8, Goal-5** | **Description of Goal-5:** **Accountant can review financial transactions and make reports** | |  |
| Workflow: | event-1 | **Workflow of login process will be executed first.** | VR |
|  | event-2 | **If login successful, dashboard will be loaded** | **DP** |
|  | event-3 | **Accountant can click “Review Transaction” to view and analysis financial transactions from the database.** | **OP,DP** |
|  | event-4 | **Accountant can click “ Create Reports” to make reports** | UIE,DP |
|  | event-**5** | **Accountant can select “Back button” to go back to dashboard** | **DP** |
|  | | | |
| **User-8, Goal-6** | **Description of Goal-6:Accountant can view and modify financial reports** | |  |
| Workflow: | event-1 | **Workflow of login process will be executed first.** | VR |
|  | event-2 | **If login successful, dashboard will be loaded** | **DP** |
|  | event-3 | **Accountant can click “ View ” to view financial reports** | **OP,DP** |
|  | event-4 | **Accountant can click “ Modify “ to edit financial reports and click “Save” to save changes** | UIE,DP |
|  | event-**5** | **Accountant can select “Back button” to go back to dashboard** | **DP** |
|  | | | |
| **User-8, Goal-7** | **Description of Goal-7:** **Accountant can view and update bills and invoice** | |  |
| Workflow: | event-1 | **Workflow of login process will be executed first.** | VR |
|  | event-2 | **If login successful, dashboard will be loaded** | **DP** |
|  | event-3 | **Accountant can click “ View ” to view bills and invoice** | **OP,DP** |
|  | event-4 | **Accountant can click “ Update” to edit or verify bills and invoice and click “ Save ” to save changes in database** | UIE,DP |
|  | event-**5** | **Accountant can select “Back button” to go back to dashboard** | **DP** |
|  | | | |
| **User-8, Goal-8** | **Description of Goal-8:** **Accountant can give feedback** | |  |
| Workflow: | event-1 | **Workflow of login process will be executed first.** | VR |
|  | event-2 | **If login successful, dashboard will be loaded** | **DP** |
|  | event-3 | **Accountant can click “ Feedback ” to attach any feedback with bills and invoices** | **UIE,DP** |
|  | event-**4** | **Accountant can select “Back button” to go back to dashboard** | DP |