## **Use case template**

For Pharmacy - Hospital:

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| **ID and name** | UC-1: Authenticate User on Terminal | | |
| **Primary actor** | Medical Staff / Pharmacy Staff | **Secondary actors** | Hospital Authentication System |
| **Description** | Pharmacy staff uses the pharmacy terminal to view and fulfill Before accessing the medication order system, medical and pharmacy staff must authenticate themselves using their hospital credentials on the terminal. The system verifies the credentials through the Hospital Authentication System and grants access accordingly. | | |
| **Trigger** | A staff member attempts to access the terminal. | | |
| **Preconditions** | PRE-1: The staff member is registered in the Hospital Authentication System. | | |
| **Postconditions** | POST-1: The user is authenticated and granted access to the terminal's functionalities.  POST-2: The user's session is established and logged for security auditing. | | |
| **Normal flow** | 1. **Staff Member selects the "Login" option on the terminal.** 2. **System prompts for a Username and Password.** 3. **Staff Member enters their hospital credentials.** 4. **System sends the credentials to the Hospital Authentication System for verification.** 5. **Hospital Authentication System verifies the credentials.** 6. **Hospital Authentication System confirms authentication success.** 7. **System grants access and displays the main menu with terminal functionalities.** 8. **System logs the user session for auditing purposes.** | | |
| **Alternative flows** | **-** | | |
| **Exceptions** | **3.0.E1 Invalid Credentials**   1. **Hospital Authentication System rejects the credentials as invalid.**    * **2a. Staff Member is prompted to retry (maximum of 3 attempts).**    * **2b. If the maximum attempts are exceeded, System locks the account and notifies the hospital's IT security team.**   **3.0.E2 Network Error**   1. **System cannot connect to the Hospital Authentication System due to network issues.**    * **2a. System displays an error message and suggests retrying later.**    * **2b. Staff Member is unable to proceed until the network connection is restored.** | | |

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| **ID and name** | UC-2: Register Medication Order | | |
| **Primary actor** | Medical Staff | **Secondary actors** | Pharmacy Staff |
| **Description** | Medical staff from a hospital department uses a terminal to register a medication order. Each order specifies the desired medication and the required quantity. Orders can be placed at any time and are instantly visible at the pharmacy terminal. | | |
| **Trigger** | Medical staff needs to order medication for a patient or for restock. | | |
| **Preconditions** | PRE-1: Medical staff is logged into the department terminal.  PRE-2: The medication is listed in the hospital's inventory system. | | |
| **Postconditions** | POST-1: The order is registered in the system with a status of "Pending."  POST-2: The order is visible on the pharmacy terminal, prioritized by the time of arrival.is updated. | | |
| **Normal flow** | 1. **Medical Staff selects the "Register Order" option on the department terminal.** 2. **System displays a list of available medications and their current inventory status.** 3. **Medical Staff selects the required medication and specifies the quantity needed.** 4. **System validates the availability of the medication.** 5. **Medical Staff confirms the order.** 6. **System registers the order with status "Pending" and timestamps the request.** 7. **System displays the order confirmation to the Medical Staff.** 8. **System updates the pharmacy terminal to display the new order in the prioritized list.** | | |
| **Alternative flows** | **1.1 Multiple Orders**   * **1. Medical Staff selects the "Add Another Item" option.** * **2. Return to step 2 of the normal flow.** | | |
| **Exceptions** | **1.0E1.System informs Medical Staff that the medication is out of stock.**   * **2a. If Medical Staff modifies the order with a different medication or quantity, return to step 3 of the normal flow.** * **2b. Else, if Medical Staff cancels the order, System terminates the use case.** | | |

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| **ID and name** | UC-3: Fulfill Medication Order | | |
| **Primary actor** | Pharmacy Staff | **Secondary actors** | Medical Staff |
| **Description** | Pharmacy staff uses the pharmacy terminal to view and fulfill medication orders received from hospital departments. Orders are displayed in the order of arrival. Once the medication is prepared and dispatched, the pharmacy staff marks the order as "Fulfilled," updating the status on the terminal. | | |
| **Trigger** | A new order is registered and appears in the pharmacy's order list. | | |
| **Preconditions** | PRE-1: Pharmacy staff is logged into the pharmacy terminal.  PRE-2: The medication requested is available in the pharmacy's inventory. | | |
| **Postconditions** | POST-1: The order status is updated to "Fulfilled."  POST-2: The order is removed from the pharmacy's order list.  POST-3: The order status is displayed as "Fulfilled" on the originating department's terminal. | | |
| **Normal flow** | **1.** **Pharmacy Staff views the list of pending medication orders.**  **2.Pharmacy Staff selects an order to fulfill.**  **3.System displays the order details, including medication and quantity.**  **4.Pharmacy Staff prepares the medication.**  **5.Pharmacy Staff confirms that the medication is ready and dispatched.**  **6.System updates the order status to "Fulfilled."**  **7.System removes the order from the pharmacy's order list.**  **8.System displays the order as "Fulfilled" on the originating department's terminal.** | | |
| **Alternative flows** | **-** | | |
| **Exceptions** | **2.0E1.System informs Pharmacy Staff of the insufficient inventory to fulfill the order.**   * **2a. If Pharmacy Staff modifies the quantity, return to step 4 of the normal flow.** * **2b. Else, if Pharmacy Staff cancels the order, System updates the order status to "On Hold" and terminates the use case.** | | |