Hospital Pharmacy System (HPS)

3. FARMACIE SPITAL

Un spital are o farmacie proprie si mai multe sectii. Necesarul de medicamente pe sectii este deservit de catre farmacia spitalului. Spitalul pune la dispozitia acestora o aplicatie pentru gestiunea comenzilor de medicamente ale sectiilor si onorarea acestor comenzi din partea farmaciei. Aplicatia este compusa din:

•mai multe terminale localizate in fiecare sectie: Personalul medical de pe sectii foloseste aceste terminale pentru a inregistra comenzile de medicamente. Un element de comanda refera medicametul dorit și cantitatea solicitata. De pe o sectie se pot înregistra oricâte comenzi. Imediat dupa inregistrarea unei comenzii, aceasta poate fi consultata la farmacie.

•un terminal pentru farmacie: Farmacistii observa lista comenzilor facute de pe sectii, prioritizata după momentul sosirii acestora. Pentru onorarea unei comenzi, farmacistul o selecteaza din lista, (pregateste medicamentele si le trimite pe sectii) dupa care declanseaza un buton "comanda onorata". În urma acestei acțiuni, comanda este eliminata din lista afisata de farmacie si apare ca si onorata in fereastra sectiei care a inițiat-o.

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| ID and name | **UC-01 : Login** | | |
| Primary actor | Medical personnel/ Pharmaceutist | Secondary actors | - |
| Description | A worker comes to work, opens the application, and wants to start making orders. | | |
| Trigger | A employee opens a new instance of the app | | |
| Preconditions | PRE – 01: The employee is registered in the system | | |
| Postconditions | POST – 01: The employee has access to the functionalities of the application according to his status. | | |
| Normal flow | **1.0 Login**   1. The employee opens the HPS. 2. HPS displays a form with two inputs for username and password. 3. The employee introduces his username and password. 4. HPS displays the window available to him | | |
| Alternative flows | **1.1 Invalid username and password**   1. HPS displays an error indicating that the username and password are wrong (see 1.1.E1). 2. Return to step 2 of the normal flow | | |
| Exceptions | **1.1 The user is not registered**  HPS does not support password recovery; employee should recover his password from system administrators | | |

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| ID and name | **UC-02 : View medications** | | |
| Primary actor | Medical personnel | Secondary actors | - |
| Description | The medical personnel views all the medications available for order. | | |
| Trigger | 1. The medical personnel wants to view the medications. 2. The medical personnel wants to place an order. | | |
| Preconditions | PRE – 01: The medical personnel is registered in the system | | |
| Postconditions | - | | |
| Normal flow | **1.0 View the medications list**  1. After autentification, the sistyem displays the list of medications in real-time. | | |
| Alternative flows | - | | |
| Exceptions | - | | |

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| ID and name | **UC-03 : Place order** | | |
| Primary actor | Medical personnel | Secondary actors | - |
| Description | Based on a terminal, the medical personnel can place medications orders for their section if there is enough stock of the meds. | | |
| Trigger | The medical personnel wants to place an order. | | |
| Preconditions | PRE – 01: The medical personnel is registered in the system  PRE-02: There is enough stock of the meds. | | |
| Postconditions | - | | |
| Normal flow | **1.0 Ordered placed successfully**   1. The medical personnel selects a product from the list and their quantity.   2. The system determines that the required quantity is in stock.  3. The medical personnel adds the selected product to the basket.  4. The system retains the product.  5. The medical personnel completes the order. | | |
| Alternative flows | **1.1 Insufficient quantity in stock**  2a. The system determines that the required quantity is not in  stock.  2a.1. The medical personnel enters a new (valid) quantity.  It goes back to point 2 in Normal flow. | | |
| Exceptions | - | | |

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| ID and name | **UC-04 : View placed orders** | | |
| Primary actor | Medical personnel | Secondary actors | - |
| Description | The medical personnel views all his orders. | | |
| Trigger | The medical personnel wants to view the status of the orders he placed. | | |
| Preconditions | PRE – 01: The medical personnel is registered in the system | | |
| Postconditions | - | | |
| Normal flow | **1.0 View the orders list**  1. The sistyem displays the list of placed orders in real-time. | | |
| Alternative flows | - | | |
| Exceptions | - | | |

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| ID and name | **UC-05 : View orders** | | |
| Primary actor | Pharmaceutist | Secondary actors | - |
| Description | The pharmaceutist views all the medications orders, ordered by the time taken. | | |
| Trigger | 1. The pharmaceutist wants to view the medications orders. 2. The pharmaceutist wants to take an order. | | |
| Preconditions | PRE – 01: The pharmaceutist is registered in the system | | |
| Postconditions | - | | |
| Normal flow | **1.0 View the medications orders list**  1. After autentification, the sistyem displays the list of medications orders in real-time. | | |
| Alternative flows | - | | |
| Exceptions | - | | |

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| ID and name | **UC-06 : Take order** | | |
| Primary actor | Pharmaceutist | Secondary actors | - |
| Description | Based on a terminal, the pharmaceutist can take medications orders and prepare them. | | |
| Trigger | The pharmaceutist wants to take an order. | | |
| Preconditions | PRE – 01: The pharmaceutist is registered in the system | | |
| Postconditions | POST – 01: The pharmacist will see the order he took in their accepted orders. | | |
| Normal flow | **1.0 Ordered taken successfully**   1. The pharmaceutist selects a meds order from their list. 2. The pharmaceutist takes the order and prepares it. | | |
| Alternative flows | - | | |
| Exceptions | - | | |

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| ID and name | **UC-07: View accepted orders** | | |
| Primary actor | Pharmaceutist | Secondary actors | - |
| Description | The pharmaceutist views all the accepted orders, ordered by the time taken. | | |
| Trigger | 1. The pharmaceutist wants to view the accepted medications orders. 2. The pharmaceutist wants to finish an order. | | |
| Preconditions | PRE – 01: The pharmaceutist is registered in the system | | |
| Postconditions | - | | |
| Normal flow | **1.0 View the accepted orders list**  1. The sistyem displays the list of accepted medications orders in real-time. | | |
| Alternative flows | - | | |
| Exceptions | - | | |

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| ID and name | **UC-08 : Deliver order** | | |
| Primary actor | Pharmaceutist | Secondary actors | - |
| Description | Based on a terminal, the pharmaceutist can deliver the medication orders. | | |
| Trigger | The pharmaceutist wants to deliver an order. | | |
| Preconditions | PRE – 01: The pharmaceutist is registered in the system | | |
| Postconditions | - | | |
| Normal flow | **1.0 Ordered delivered successfully**   1. The pharmaceutist delivers the order. 2. The pharmaceutist chooses the order from the accepted orders and pushes the button “Order finished” | | |
| Alternative flows | - | | |
| Exceptions | - | | |

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| ID and name | **UC-09 : Manage medications** | | |
| Primary actor | Admin | Secondary actors | - |
| Description | To facilitate the placing of meds orders, the system administrator deals with medications management. | | |
| Trigger | The company wants to provide employees with an application through which they can order medications. | | |
| Preconditions | PRE – 01: The admin is registered in the system | | |
| Postconditions | - | | |
| Normal flow | **1.0 Manage medications**   1. Admin opts to perform CRUD operations on products. 2. The system displays all operation options: add, delete and update medication. | | |
| Alternative flows | - | | |
| Exceptions | - | | |

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| ID and name | **UC-10 : Add medication** | | |
| Primary actor | Admin | Secondary actors | - |
| Description | The admin adds medications in the database, so the orders can be made. | | |
| Trigger | The company wants to provide employees with an application through which they can order medications. | | |
| Preconditions | PRE – 01: The admin is registered in the system | | |
| Postconditions | POST-1: The database has a new record in the table. | | |
| Normal flow | **1.0 Successfully added medication**  1. The admin adds a medication to the database along with its  stock.  2. The system updates the database with the new product  added to the table. | | |
| Alternative flows | **1.1 Error adding**  2a. The system gives an error message due to invalid data  being inserted into the table and does not perform the addition.  2a.1 The admin adds a medication with valid data to the table  again. It goes back to point 2 in Normal flow. | | |
| Exceptions | - | | |

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| ID and name | **UC-11 : Delete medication** | | |
| Primary actor | Admin | Secondary actors | - |
| Description | The admin deletes medications from the database, if the stock is 0. | | |
| Trigger | Stock is equal to 0. | | |
| Preconditions | PRE – 01: The admin is registered in the system | | |
| Postconditions | POST-1: The database has a minus record in the table. | | |
| Normal flow | **1.0 Successfully deleted medication**  1. The admin deletes a medication from the database.  2. The system updates the database without the product. | | |
| Alternative flows | **1.1 Delete not done**  1a. The admin deletes a record that is not in the database.  1a.1 The database remains unupdated until the admin enters existing data. It goes back to point 1 in Normal flow. | | |
| Exceptions | - | | |

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| ID and name | **UC-12 : Update medication** | | |
| Primary actor | Admin | Secondary actors | - |
| Description | Once a certain valid quantity of a medication has been ordered, the medication is updated with its new stock. | | |
| Trigger | A medical personnel places an order. | | |
| Preconditions | PRE – 01: The admin is registered in the system | | |
| Postconditions | POST-1: The database has an updated record in the table. | | |
| Normal flow | **1.0 Successfully updated medication**  1. The admin updates the stock of a medication from the  database.  2. The system updates the database with the changed  product. | | |
| Alternative flows | **1.1 Update Not Done**  1a. The admin wants to update a record that does not exist in  the database.  1a.1 The database remains unchanged until the admin enters  existing data. It returns to point 1 in Normal flow.  **1.2 Error updating**  2a. The system displays an error message due to an update  with invalid data.  2a.1 The database remains unchanged until valid data is  entered. It goes back to point 2 in Normal flow. | | |
| Exceptions | - | | |

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| ID and name | **UC-13 : Manage accounts** | | |
| Primary actor | Admin | Secondary actors | - |
| Description | To facilitate the placing of meds orders, the system administrator deals with accounts management. | | |
| Trigger | Employees use an application through which they can order medications. | | |
| Preconditions | PRE – 01: The admin is registered in the system | | |
| Postconditions | - | | |
| Normal flow | **1.0 Manage accounts**   1. Admin opts to perform CRUD operations on accounts. 2. The system displays all operation options: add, delete and update account. | | |
| Alternative flows | - | | |
| Exceptions | - | | |

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| ID and name | **UC-14 : Add account** | | |
| Primary actor | Admin | Secondary actors | - |
| Description | The admin adds creates accounts for the employees. | | |
| Trigger | The employees want to place/take orders. | | |
| Preconditions | PRE – 01: The admin is registered in the system | | |
| Postconditions | POST-1: The database has a new record in the table. | | |
| Normal flow | **1.0 Successfully added account**  1. The admin adds an account to the database.  2. The system updates the database with the new account  added to the table. | | |
| Alternative flows | - | | |
| Exceptions | - | | |

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| ID and name | **UC-15: Delete account** | | |
| Primary actor | Admin | Secondary actors | - |
| Description | The admin deletes accounts from the database, if the employees are not hired anymore. | | |
| Trigger | An employee doesn’t work in the hospital anymore. | | |
| Preconditions | PRE – 01: The admin is registered in the system | | |
| Postconditions | POST-1: The database has a minus record in the table. | | |
| Normal flow | **1.0 Successfully deleted account**  1. The admin deletes an account from the database.  2. The system updates the database without the account. | | |
| Alternative flows | **1.1 Delete not done**  1a. The admin deletes a record that is not in the database.  1a.1 The database remains unupdated until the admin enters existing data. It goes back to point 1 in Normal flow. | | |
| Exceptions | - | | |

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| ID and name | **UC-16 : Update account** | | |
| Primary actor | Admin | Secondary actors | - |
| Description | An employee can choose to change their account password within the app at any time. | | |
| Trigger | An employee wants to change their password. | | |
| Preconditions | PRE – 01: The admin is registered in the system | | |
| Postconditions | POST-1: The database has an updated record in the table. | | |
| Normal flow | **1.0 Successfully updated account**  1. The admin updates the password of an account from the  database.  2. The system updates the database with the changed  account. | | |
| Alternative flows | **1.1 Update Not Done**  1a. The admin wants to update a record that does not exist in  the database.  1a.1 The database remains unchanged until the admin enters  existing data. It returns to point 1 in Normal flow.  **1.2 Error updating**  2a. The system displays an error message due to an update  with invalid data.  2a.1 The database remains unchanged until valid data is  entered. It goes back to point 2 in Normal flow. | | |
| Exceptions | - | | |