**National University of Computer and Emerging Sciences**

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**SDA Project**

**(Online Medical Management System)**

**Fall 2021**

**Department of Computer Science**

**USE CASE DESCRIPTION**

**//Sign-Up**

| **Identifier** | | **UC-1** | |
| --- | --- | --- | --- |
| **Name** | | **Sign-Up** | |
| **Description** | | **To get registered as a valid user.** | |
| **Priority** | | **High** | |
| **Actors** | | **Patient** | |
| **Pre-condition(s)** | | **None** | |
| **Post-condition(s)** | | **The account of the user will be created and he/she will be registered as a valid user.** | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | **User shall click the “Sign-Up” button.** | | **Users shall be directed to the Sign-Up page.** |
| **2** | **User shall enter username.** | |  |
| **3** | **. User shall enter a password.** | |  |
| **4** | **.User shall enter email.** | |  |
| **5** | **User shall click on “Enter History”** | | **User shall be directed to the “User History” page** |
| **6** | **User shall enter BioData** | |  |
| **7** | **User shall enter Medical History** | |  |
| **8** | **User shall enter Family History.** | |  |
| **9** | **User shall enter Drug History.** | |  |
| **10** | **User shall enter Socio-Economic History** | |  |
| **11** | **User shall enter Allergies** | |  |
| **12** | **User shall click on “enter” button** | | **System will save the entry and display “successfully entered”** |
| **Alternate Course(s) of Action** | | | |
| **2a** | **Users may enter a wrong username.** | | **System shall display message**  **“Please enter a valid username for login”.** |
| **2b** | **Users may forget to enter the username.** | | **System will display “Username field empty”.** |
| **3a** | **Users may enter a wrong password.** | | **System will display “Please enter a valid password for login”.** |
| **3b** | **Users may forget to enter the password.** | | **System will display “Password field empty.”** |
| **4a** | **User may enter wrong email** | | **System shall display message**  **“Please enter a valid email for login”.** |
| **4b** | **User may forget to enter the email** | | **System will display “email field empty”.** |

**//Login**

| **Identifier** | | **UC-2** | |
| --- | --- | --- | --- |
| **Name** | | **Login** | |
| **Description** | | **To have access to the system and its functionalities by logging in through valid credentials.** | |
| **Priority** | | **High** | |
| **Actors** | | **Admin, Doctor, Patient** | |
| **Pre-condition(s)** | | **Users should have signed-up already. User must have a login ID and password to LOGIN** | |
| **Post-condition(s)** | | **Users will be able to open their profile and use the system.** | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | **Users shall click the “Login” button.** | | **Users shall be directed to the login page.** |
| **2** | **User shall enter the username.** | |  |
| **3** | **. User shall enter the password.** | |  |
| **4** | **Users shall click on the“Enter” Button.** | | **System will check whether the user is a doctor, patient or admin and direct him to his profile accordingly.** |
|  |  | |  |
| **Alternate Course(s) of Action** | | | |
| **2a** | **Users may enter a wrong username.** | | **System shall display message**  **“Please enter a valid username for login”.** |
| **2b** | **Users may forget to enter the username.** | | **System will display “Username field empty”.** |
| **3a** | **Users may enter a wrong password.** | | **System will display “Please enter a valid password for login”.** |
| **3b** | **Users may forget to enter the password.** | | **System will display “Password field empty.”** |

**//View doctors**

| **Identifier** | | **UC-3** | |
| --- | --- | --- | --- |
| **Name** | | **View Doctor** | |
| **Description** | | **To be able to view doctors with respect to their specialization.** | |
| **Priority** | | **High** | |
| **Actors** | | **Patient** | |
| **Pre-condition(s)** | | **Users must be logged in to the system.** | |
| **Post-condition(s)** | | **User shall be able to view the list of doctors present in the system** | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | **User shall click on “View Doctors”.** | | **User shall be directed to the “Department list” page** |
| **2** | **User shall select a department from the list of departments.** | | **User shall be able to view the doctors of that department.** |
| **3** | **User shall click on “View doctor details” button** | | **User shall be able to view the details of the selected doctor.** |
|  | | | |

**//Book appointments**

| **Identifier** | | **UC-4** | |
| --- | --- | --- | --- |
| **Name** | | **Book Appointments** | |
| **Description** | | **To book an appointment with a doctor.** | |
| **Priority** | | **High** | |
| **Actors** | | **Patient** | |
| **Pre-condition(s)** | | **User must have logged in to the system and must be on that particular doctor's details page with whom he wants to book an appointment with.** | |
| **Post-condition(s)** | | **User request for an appointment with that doctor will be sent to the admin.** | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | **User shall click on “Book Appointment” button.** | | **System shall display message**  **“Your request has been sent. Wait until it is approved”.** |

**//Approve Requests**

| **Identifier** | | **UC-5** | |
| --- | --- | --- | --- |
| **Name** | | **Request Approval.** | |
| **Description** | | **To approve a request of a patient.** | |
| **Priority** | | **High** | |
| **Actors** | | **Admin.** | |
| **Pre-condition(s)** | | **Patient must have sent a request.** | |
| **Post-condition(s)** | | **Patient will be able to see a confirmation or rejection message.** | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | **User shall check for free time slots.** | |  |
| **2** | **User shall click on “Book Time Slot” button.** | | **System shall change the status of that time slot from “Free” to “Full” and send a confirmation message to the patient.** |

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| **Alternate Course(s) of Action** | | | |
| **2a** | **User shall not find any free time slot.** | | **System shall send a message to the patient “No free time slot available currently. Please check again later”.** |

**//Advanced payment**

| **Identifier** | | **UC-6** | |
| --- | --- | --- | --- |
| **Name** | | **Make Payment** | |
| **Description** | | **To make an advanced payment in order to get the appointment booked.** | |
| **Priority** | | **High** | |
| **Actors** | | **Patients** | |
| **Pre-condition(s)** | | **Users should have received a confirmation message from the admin.** | |
| **Post-condition(s)** | | **A token number will be assigned to the user.** | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | **Users shall click on the “Proceed to payment” button.** | | **Users shall be directed to the payment page where all the details of payment will be shown .** |
| **2** | **User shall enter the card holder name.** | |  |
| **3** | **User shall enter Address.** | |  |
| **4** | **User shall enter the pin number.** | |  |
| **5** | **User shall enter the CRC number.** | |  |
| **6** | **User shall click on “Confirm payment”.** | | **System shall perform transaction from the user's bank account and display the message “Transaction successful. Your Token no is #. ”** |

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| **Alternate Course(s) of Action** | | | |
| **2a** | **User may enter invalid name** | | **System shall display message**  **“Enter valid name”.** |
| **2b** | **User may forget to enter name** | | **System shall display message**  **“Please enter your name”.** |
| **3a** | **User may enter invalid address** | | **System shall display message**  **“Enter valid address”.** |
| **3b** | **User may forget to enter address** | | **System shall display message**  **“Please enter the address”.** |
| **4a** | **User may enter invalid pin number** | | **System shall display message**  **“Enter valid pin”.** |
| **4b** | **User may forget to enter pin number** | | **System shall display message**  **“Please enter the pin number”.** |
| **5a** | **User may enter invalid CRC number** | | **System shall display message**  **“Enter valid CRC”.** |
| **5b** | **User may forget to enter CRC number** | | **System shall display message**  **“Please enter CRC”.** |

**//Prescribe medicine/test**

| **Identifier** | | **UC-7** | |
| --- | --- | --- | --- |
| **Name** | | **Prescribe** | |
| **Description** | | **To prescribe medicine or tests to the patient.** | |
| **Priority** | | **High** | |
| **Actors** | | **Doctor** | |
| **Pre-condition(s)** | | **Users should be logged in to the system and have access to that specific patient's profile/history.** | |
| **Post-condition(s)** | | **The prescription form will be filled.** | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | **User shall click the “Prescribe” button.** | | **Users shall be directed to the “prescription form” page.** |
| **2** | **User shall enter medicine name.** | |  |
| **3** | **.User shall enter an amount of medicine.** | |  |
| **4** | **Users shall enter tests.** | |  |
| **5** | **Users shall click on the “Save” Button.** | | **System will save the entry and display “successfully entered”** |
|  |  | |  |
| **Alternate Course(s) of Action** | | | |
| **2a** | **Users may not enter medicine name.** | | **System shall display message**  **“This is a required field”.** |
| **2b** | **User may enter alphabets/characters** | | **System shall display message**  **“Please enter a number”.** |
| **3a** | **Users may not enter the amount of the medicine.** | | **System shall display message**  **“This is a required field”** |

**//View prescription**

| **Identifier** | | **UC-8** | |
| --- | --- | --- | --- |
| **Name** | | **View Prescription** | |
| **Description** | | **To view medicine or tests that the doctor has prescribed to the patient.** | |
| **Priority** | | **Low** | |
| **Actors** | | **Doctor, Patient** | |
| **Pre-condition(s)** | | **Users should be logged in to the system and have access to that specific patient's history.** | |
| **Post-condition(s)** | | **User will be able to view the prescription.** | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | **User shall click on “View Prescription”.** | | **Users shall be directed to the prescription tab.** |

**//View history**

| **Identifier** | | **UC-9** | |
| --- | --- | --- | --- |
| **Name** | | **View History** | |
| **Description** | | **To view the history of patients.** | |
| **Priority** | | **Low** | |
| **Actors** | | **Doctor, Patient** | |
| **Pre-condition(s)** | | **Users should be logged in to the system and have access to that specific patient's history.** | |
| **Post-condition(s)** | | **User shall be able to view history of the patient.** | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | **User shall click on “View History”.** | | **Users shall be directed to the history tab.** |

**//Update Profile**

| **Identifier** | | **UC-10** | |
| --- | --- | --- | --- |
| **Name** | | **Update** | |
| **Description** | | **To be able to update profile and information that has been entered already.** | |
| **Priority** | | **Low** | |
| **Actors** | | **Patient** | |
| **Pre-condition(s)** | | **Users should be logged in to the system and have access to their own profile.** | |
| **Post-condition(s)** | | **The profile of that specific user will be updated.** | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | **User shall click the “Update” button.** | | **Users shall be directed to the “update profile” page.** |
| **2** | **User shall enter username.** | |  |
| **3** | **. User shall enter a password.** | |  |
| **4** | **User shall enter new email** | |  |
| **5** | **Users shall click on the“Update History” Button.** | | **System shall direct the user to the “User history” page** |
| **6** | **User shall enter BioData** | |  |
| **7** | **User shall enter Medical History** | |  |
| **8** | **User shall enter Family History.** | |  |
| **9** | **User shall enter Drug History.** | |  |
| **10** | **User shall enter Socio-Economic History** | |  |
| **11** | **User shall enter Allergies** | |  |
| **12** | **User shall click on “save” button** | | **System will save the entry and display “successfully entered”** |
| **Alternate Course(s) of Action** | | | |
| **2a** | **Users may enter a wrong username.** | | **System shall display message**  **“Please enter a valid username”.** |
| **3a** | **Users may enter a wrong password.** | | **System will display “Please enter a valid password”.** |
| **4a** | **User may enter wrong email** | | **System shall display message**  **“Please enter a valid email”.** |

**//Leave a review**

| **Identifier** | | **UC-11** | |
| --- | --- | --- | --- |
| **Name** | | **Leave a Review** | |
| **Description** | | **To leave a review about the doctor.** | |
| **Priority** | | **Low** | |
| **Actors** | | **Patient** | |
| **Pre-condition(s)** | | **Users should be logged in to the system and have access to that specific patient's history.** | |
| **Post-condition(s)** | | **User shall be able to leave a review on the doctor's profile..** | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | **User shall click on “Review” button.** | | **Users shall be directed to the review box.** |
| **2** | **User shall enter a review in the review box.** | |  |
| **3** | **User shall click on “Save” button.** | | **System shall display message “Thank you for your review”.** |

**//Enroll Doctor**

| **Identifier** | | **UC-12** | |
| --- | --- | --- | --- |
| **Name** | | **Doctor Enrollment** | |
| **Description** | | **To enroll a new doctor in the system** | |
| **Priority** | | **High** | |
| **Actors** | | **Admin** | |
| **Pre-condition(s)** | | **User should be logged in to the system.** | |
| **Post-condition(s)** | | **A new doctor will be enrolled/added in the system.** | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | **User shall click the “Enroll Doctor” button.** | | **Users shall be directed to the “enrollment” page.** |
| **2** | **User shall doctor name.** | |  |
| **3** | **.User shall enter doctor username.** | |  |
| **4** | **Users shall enter a doctor password.** | |  |
| **5** | **User shall enter doctor department/specialization** | |  |
| **6** | **Users shall click on the “Save” Button.** | | **System will save the entry and display “successfully entered”** |
|  |  | |  |
| **Alternate Course(s) of Action** | | | |
| **2a** | **Users may enter invalid name.** | | **System shall display message**  **“Enter valid doctor name”.** |
| **2b** | **User may forget to enter the name.** | | **System shall display message**  **“This is a required field”.** |
| **3a** | **User may enter invalid username** | | **System shall display message**  **“Enter valid username for doctor”** |
| **3b** | **User may forget to enter the username** | | **System shall display message**  **“This is a required field”.** |
| **4a** | **User may enter invalid password** | | **System shall display message**  **“Enter valid password for doctor”** |
| **4b** | **User may forget to enter password** | | **System shall display message**  **“This is a required field”.** |
| **5a** | **User may enter invalid department** | | **System shall display message**  **“Enter valid department for doctor”** |
| **5b** | **User may forget to enter department** | | **System shall display message**  **“This is a required field”.** |

**//Delete Account**

| **Identifier** | | **UC-13** | |
| --- | --- | --- | --- |
| **Name** | | **Delete Account** | |
| **Description** | | **To leave a review about the doctor.** | |
| **Priority** | | **Low** | |
| **Actors** | | **Patient** | |
| **Pre-condition(s)** | | **Users should have an existing account.** | |
| **Post-condition(s)** | | **User shall be able to delete all his information from the database.** | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | **User shall click on “Settings” button.** | | **System shall display the settings tab.** |
| **2** | **User shall click on “Delete Account”.** | | **System shall display a message “Are you sure you want to delete your account?”** |
| **3** | **User shall click on “OK” button.** | | **System shall display the message “Account successfully deleted”.** |
|  |  | |  |