Product Requirements

Team: *Golisano Super Squad*

Revision Number	*Revision Date*	*Summary of Changes*	*Author(s)*
0.1	*09/08/2015*	*Use Cases Documented for R1*	*Entire Team*
0.2	*10/23/2015*	*Requirement User Stories updated*	*Philip Bedward*
0.3	*10/25/2015*	*Use Cases Updated*	*Entire Team*
0.4	*12/7/2015*	*Release 2*	*Nathan Stevens*

Brief problem statement

We represent a funding group (HAccelerator) chartered to create applications for the benefit of health-care across the country. The project we currently want to make a reality will be called **HealthNet**. At its core, HealthNet is meant to enable their hospitals in the US to be able to manage both employees and patients. The successful implementation should make it easy for users to effortlessly sign-up as patients so that the hospital can, without difficulty, manage their procedures and patient related tasks to optimize day-to-day work-flow.

The HealthNet product is intended to improve hospitals by providing an easy mechanism for managing employees, gathering statistical data on the inner workings of the hospital, signing up patients, making appointments, and allowing ease of transfer of both patients and their information between hospitals.

We want a product whose emphasis is on ease of use, whose navigation is straightforward and where the status of any, and all, information shown is clearly displayed. Ultimately, a system where understanding and communication about hospital and patient matters is improved.

We are creating an application that is efficient and functional for users on both ends of the patient and doctor exchange. A user will be able to follow a simple and guiding interface to sign up for, schedule, and cancel appointments making an experience beneficial for both the patient and health care administrative workers.

The **Doctor's who commonly move between many different hospital** will be able to access a patients information no matter which hospital they have previously visited, as long as the hospital is running HAccelerator. The goal of this application is to create a new way for Doctor's and Patients to easily access and pass medical information.

Stakeholders

HAccelerator Board of Directors – oversee the projects funding and expenses. Have vested interest in the proven success of the product but are not involved in the planning and execution.
HAccelerator Product Owner – will act as principle representative for HealthNet product needs. He/she champions the product with the Board of Directors, helps facilitate product decisions and has the ultimate say on when and what features should be released.
Software Engineering Team – is responsible for the day-to-day operations and coordination of all aspects related to the software product's life-cycle. This include, among others: planning and delegation of team roles and responsibilities; elicitation and clarification of requirements; analysis and design; implementation, testing and release of all software components.
Beta Testing Team – represent the target user base for HealthNet. Will be available in later phases of the project to conduct acceptance testing and provide feedback on product release.
Patients - one group of HealthNet users. There will be a separate interface for patients. Patients will be able to sign up with their hospital that they are currently visiting, upload/modify contact information, view their medical information and schedule/cancel appointments to a hospital.
Nurses - a group of HealthNet users. Their interface will include access to information only pertaining to the hospital that they work in, they can only view appointments but may not cancel them. Lastly, nurses will be able to modify medical information.
Doctors - HealthNet users that will have administrator functionality. They will have all functionality that a Nurse will have, with a few modifications. Doctors can view and cancel appointments, view other hospital information and move patients from one hospital to another.
Hospitals - Every hospital that decides to use the HealthNet system. Hospitals will have patients, doctors and nurses. Patients can be transferred from one hospital to another.

Users profile

Patient:

- Have basic experience using computers and browsing the Internet. Has filled out online forms or surveys and may have purchased or sold a product.
- Have a computer with access to the Internet
- Have an interest in improving their health by using an online way of interacting with their hospital
- Be willing to share information such as home address and contact information as well as more personal information such as medical history

Doctor:

- Have intermediate skill level with using a computer
- Will be using Doctor mode, for editing patients medical information
- Have ability to properly document information in electronic form
- Able to navigate the HAccelerator UI
- properly log activity in application

Nurse:

- Have intermediate skill level with using a computer
- Able to navigate the HAccelerator UI
- Properly log activity in application

System Admin:

- Information level, does not need to know much about patient doctor interaction
- Properly quantify data from activity logs.

System requirements

At a high-level this project will be source controlled in SVN, run on Django using python, sqlite and needs to be compatible with the latest browsers.

Although the application needs to be accessible through the Internet, deployments and demonstrations for this phase of the project will take place within the RIT Software Engineering environment. To this end, you must understand and document the target platforms from the perspective of the client browser as well as that of the server. Make sure to capture versions or software dependencies, programming languages and hardware specifications that are available for your use and proceed only after you document and confirm these with the customer.

Feature requirements (user stories)

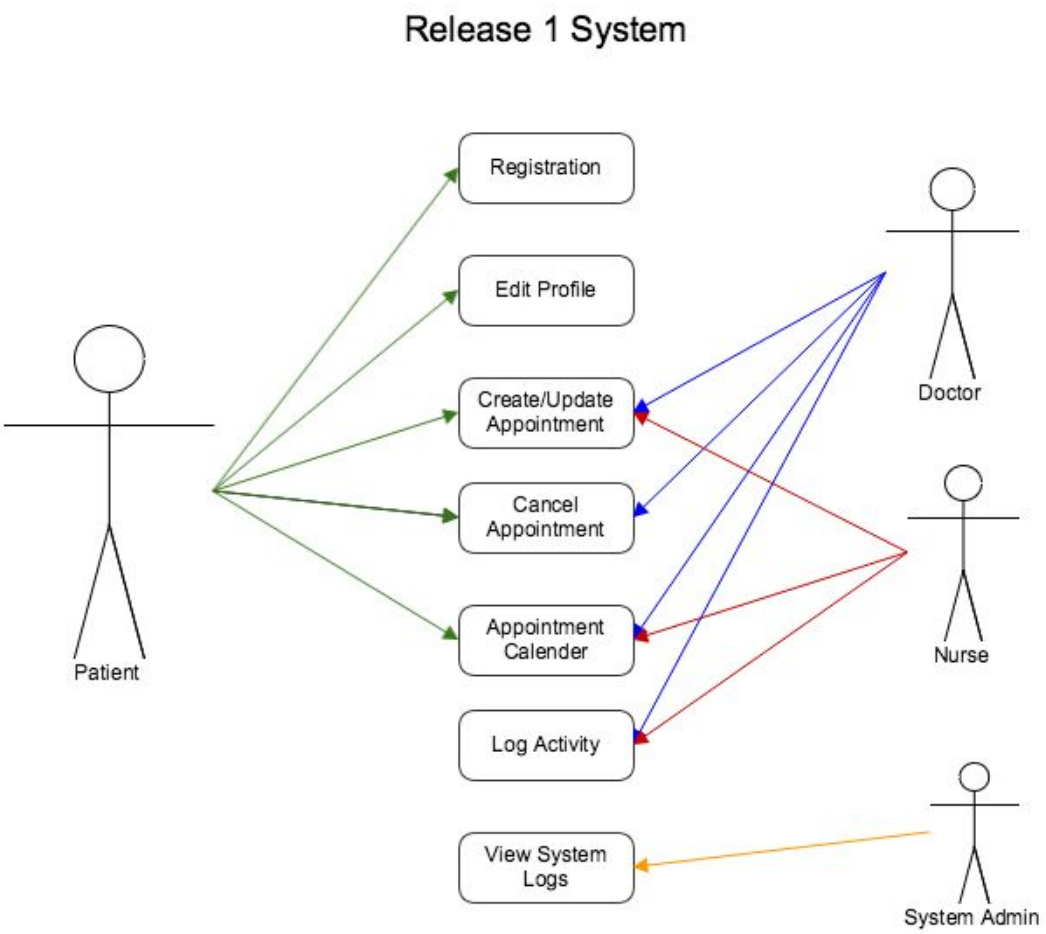
No.	User Story Name	Description	Release
1	Patient Registration	Users sign up to become a Patient by providing the following: Full Name, Email, Phone number, Insurance information, an Emergency Contact (linking to another patient registration if the contact is in the system), and deciding unique login credentials. After account creation a user can add: Medical History, Current Medications, Preferred Hospitals.	**R1**
2	Administrator Registration	Doctors, Nurses, and Administrators will be added to the system by other administrators. All information for creating these new accounts will be done through an administrator account.	**R2**
3	Update Patient Profile Information	Patients can update their profile information.	**R1**
4	Update Patient Medical Information	Doctors and Nurses can update patient medical information.	**R2**
5	Export Information	Patients will be able to export their information and their test results from the system with relevant privacy warnings.	**R2**
6	Create or Update Patient Appointment	Patients, doctors and nurses can create or update an appointment with a doctor and at one of the doctor's available locations.	**R1**

		If the patient or doctor already has an appointment at the time selected, then the system will not allow for the appointment.	
7	Cancel Patient Appointment	Patients can cancel their existing appointments. Doctors can cancel their existing appointments. Nurses cannot cancel (only modify) existing appointments.	**R1**
8	Appointment Calendar	Doctors and patients will easily be able to view all of their appointments in a calendar view. Nurses will be able to see all appointments for the day and week between Patients and Doctors.	**R1**
9	Add/Remove Prescriptions	Doctors can add or remove a prescription to a patient record. Nurses can view the prescriptions of patients belonging to the same hospital. Patients can view their prescriptions from their account.	**R2**
10	Viewing Patient Medical Information, Prescriptions and Tests and Results	Doctors can view all medical information for any patient in the system (regardless of Hospital). Nurses can only view patient medical information in the hospital they work for. Patients can view their tests (pending or completed) and view the corresponding results for those tests that have been released by the doctor. Prescriptions and other non-sensitive information is viewable by the patient without a need for doctor's release.	**R2**

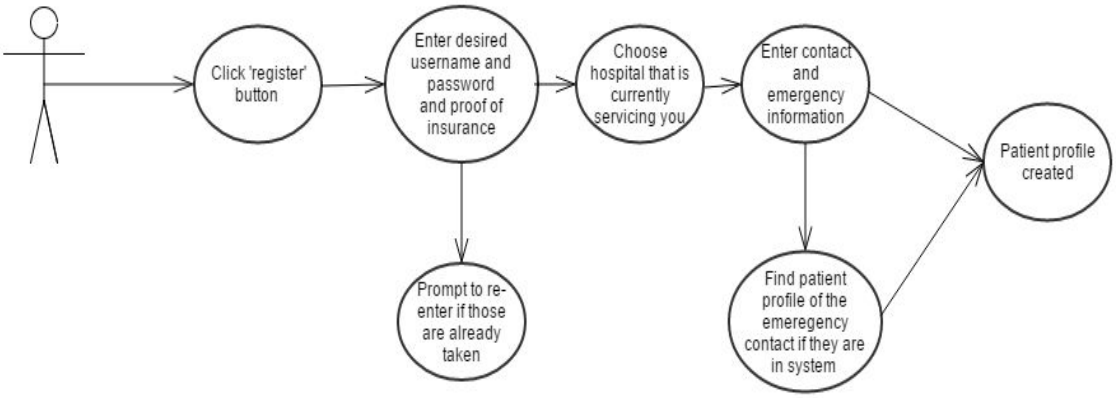
11	Release Test Results	Doctors (within the patients hospital) can, upon evaluating a patients' test results, release them for view by that patient. Comments may be added to the specific test result for view by the patient.	**R2**
12	Logging System Activity	For security, many actions in the system will be logged for review at a later date. Some examples of actions to be logged include but are not limited to updating of a Patients information, viewing of a Patients information/records, and transfers of a Patient from one hospital to another.	**R1**
13	Admission and Discharge to/from Hospital	Doctors and Nurses can admit a patient to the hospital for an extended stay (reasons could be: emergency, observation, surgery, etc.). These are typically unexpected visits but can result from a decision made after a scheduled appointment. This event is recorded by the system. Doctors are the only ones to approve a patients' discharge from the Hospital. This event is recorded by the system.	**R2**
14	Viewing Activity Log	Administrators will be able to view the logs of all system activity for a given time-frame at their hospital. Some examples of this might be: - breakdown of the viewing activity of patient records or by system user - most common system activities (or by user) Other important and informative statistics yet to be determined.	**R1** .
15	Viewing System Statistics	Administrators will be able to view compiled statistics for a given time-frame at their hospital. Some examples of this might be: - number of patients visiting the hospital - average number of visits per patient	**R2**

		- average length of stay (from admission to discharge) - most common reasons for being admitted to the hospital - prescription statistics Other important and informative statistics yet to be determined.	
16	Patient Transfer	Patient can be transferred between hospitals. Transfers can be carried out by either administrators or by doctors (ones who are at the receiving hospital).	**R2**
17	Upload Patient Information	Doctors will be able to upload the results of a patients tests if needed. Doctors will be able to upload images such as those used in X-Rays to update a patients record. Uploads are considered as updates to a patient's medical information.	**R2**
18	Send Private Message	Doctors, nurses, patients and administrators can send private messages of limited length via the system.	**R2**
19	Update Hospital Personnel	Administrator can add new employees(doctors and nurses), and/or update employee information.	**R2**
20	Remove/Move Personnel	Administrator and remove a Doctor/Nurse from the hospital and root if they are fired/quit. If the Doctor/Nurse changes hospitals then their information will be transferred to that hospital	**R2**

Use case diagram and description



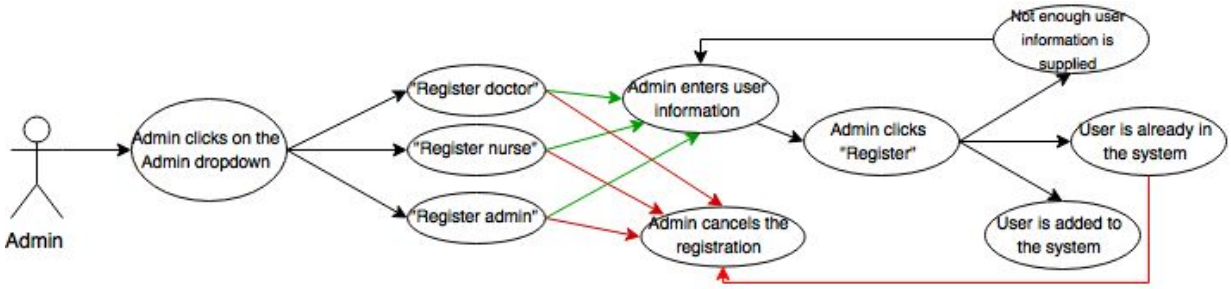
Patient Registration UC-01



Use Case Number:	UC-01
Use Case Name:	Registration
Overview:	Registrant shall provide personal, medical, and emergency contact information to the System upon registering and becoming a Patient.
Actor(s):	Registrant
Pre-condition(s):	- System has been setup and configured. - System is running and open for registrations. - Registrant has accessed website via URL
Scenario Flow:	Main (success) Flow: 1. Registrant selects option to register 2. System requests login information and insurance information 3. Registrant provides login information and insurance information 4. System verifies that login credentials are not already taken and checks insurance. ● Returns to step 2 if login credentials are taken and if insurance information is false. 5. System requests personal information 6. Registrant provided personal information 7. System verifies required information is provided.

	● If information is invalid System displays message. Return to Step 2 8. System requests information about hospital (name, address etc.,) 9. Registrant provides hospital's information 10. System verifies required information is provided. ● If information is invalid System displays message. Return to Step 5 11. System requests emergency contact information 12. Registrant provides emergency contact information 13. System verifies required information is provided 13.1. If information is invalid System displays message. Return to Step 8 14. System displays confirmation of registration
Alternate Flows:	Alternate Flow #1: After Step 2 in success scenario System will display the option to Cancel the registration process. The following steps would occur: 1. Registrant selects option to cancel during registration 2. System requests confirmation to cancel 3. Registrant confirms intent 4. System returns to main screen Alternate Flow #2: The emergency contact information is an existing user in the system. After step 10 the following steps would occur: 1. Registrant selects option to select an emergency contact from the system 2. System displays a search bar for the Registrant to input the user's name 3. Registrant inputs the user's name and presses enter 4. System returns a list of users with matching names 5. Registrant chooses intended user 6. System sets that user as an emergency contact
Post Condition:	Registrant did not complete registration. System does not store Registrant's information.

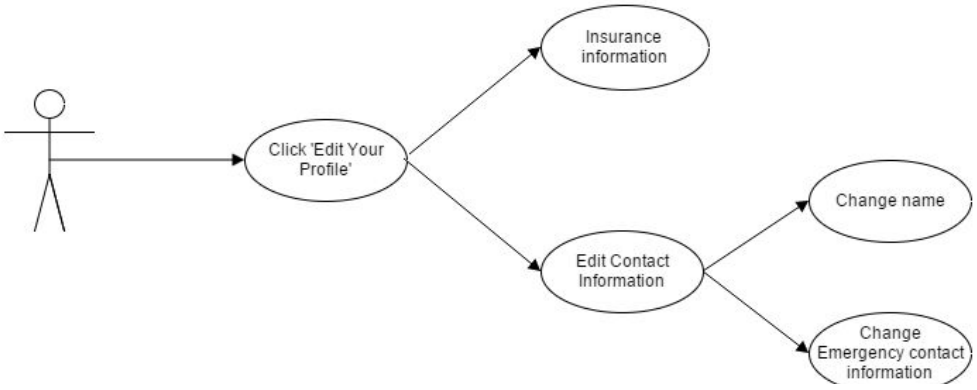
Administrator Registration UC-02



Use Case Number:	UC-02
Use Case Name:	Administrator Registration
Overview:	Administrators will use HealthNet to add doctors, nurses, and other administrators to the site.
Actor(s):	Administrators
Pre-condition (s):	1. At least one administrator is registered in HealthNet 2. The doctor/nurse/administrator being added to application is not already a member of HealthNet
Scenario Flow:	Main (success) flow 1. Administrator clicks on the “Admin” drop down 2. The admin chooses the option based on the type of user the admin is adding a. “Register Doctor” b. “Register Nurse” c. “Register Admin” 3. The admin adds the relevant information for the user they are adding, including name, personal information, user name, etc 4. The user is successfully added to HealthNet
Alternate Flows:	Alternate Flow #1- After successfully completing steps 1-3 above, the admin reaches step 4. However, the user he is registering is already registered with HealthNet. The following steps would occur: 1. The admin attempts to register the user. However, the user is already registered within HealthNet. The registration fails.

	2. The admin is notified that the following user is already registered with HealthNet. Alternative Flow #2 - The admin has not added enough information about the user. He reaches step 4, and attempts to add the user. The following steps occur: 1. The admin attempts to register the user. However, not enough information is inputted, and the registration fails. 2. The admin is notified that they have not added enough information.
Post Condition:	The user being registered is added to HealthNet, or if a failure condition occurs, the user is not added.

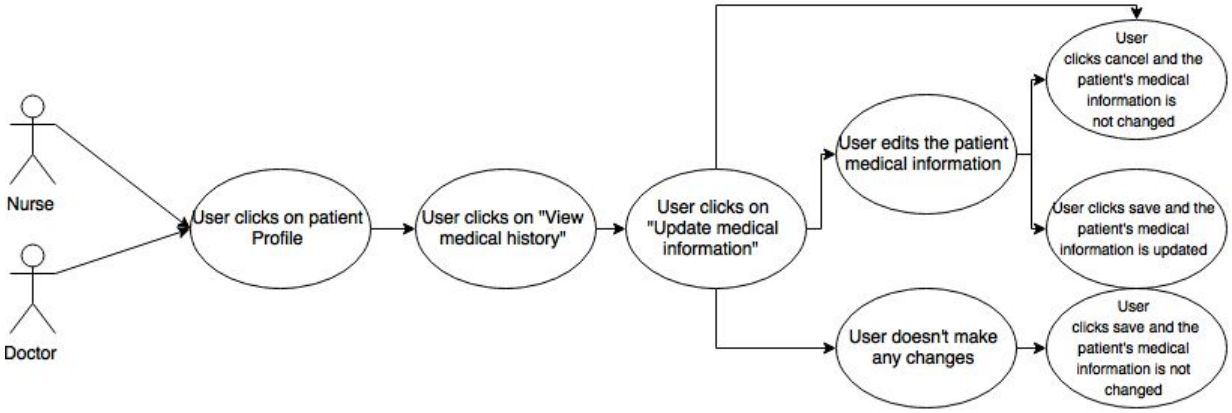
Update Patient Profile Information UC-03



Use Case Number:	UC-03
Use Case Name:	Update Patient Profile Information
Overview:	Registrant will modify their personal, contact and emergency contact information
Actor(s):	Registrant
Pre-condition (s):	- System has been setup and configured. - Registrant has accessed website via URL. - Registrant is logged in.

Scenario Flow:	Main (success) Flow: 1. Registrant clicks the Edit Profile link. 2. System loads the current patient information in an editable format 3. Registrant edits their contact information. ● Registrant can edit their name. ○ If name is already registered in System the Registrant cannot use it ● Registrant can edit their insurance information. ○ System checks this new information ● Registrant can edit their emergency contact information. ○ System searches for emergency contact 4. Registrant saves their edited information
Alternate Flows:	Alternate Flow #1: After Step 2 in success scenario System will display the option to Cancel the profile editing process. The following steps would occur: 5. Registrant selects option to cancel during while editing their 6. System requests confirmation to cancel 7. Registrant confirms intent 8. System returns to main screen Alternate Flow #2: The emergency contact information is an existing user in the system. After step 10 the following steps would occur: 7. Registrant selects option to select an emergency contact from the system 8. System displays a search bar for the Registrant to input the user's name 9. Registrant inputs the user's name and presses enter 10. System returns a list of users with matching names 11. Registrant chooses intended user 12. System sets that user as an emergency contact
Post Condition:	User is in System with modified information.

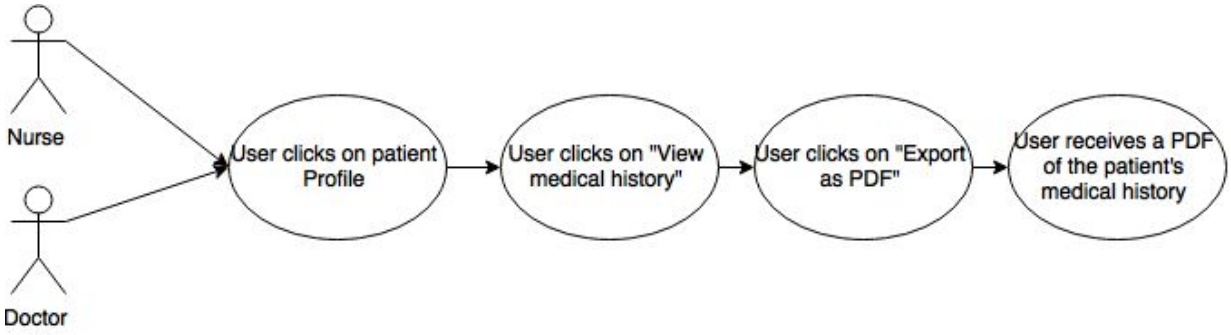
Update Patient Medical Information UC-04



Use Case Number:	UC-04
Use Case Name:	Update Patient Medical Information
Overview:	A doctor or a nurse can update a patient's medical information.
Actor(s):	Doctor, Nurse
Pre-condition (s):	1. The patient is already registered with HealthNet. 2. The patient has medical information to be updated. 3. The doctor/nurse is registered with HealthNet.
Scenario Flow:	Main (success) flow 1. A doctor or a nurse clicks on a patient's profile. 2. The doctor or nurse sees the patient's current medical information by clicking on "View medical history" 3. The doctor/nurse clicks on "Update medical information." 4. The doctor/nurse edits the patient's medical info. 5. The doctor/nurse clicks save and the patient's information is updated.
Alternate Flows:	Alternative Flow #1 - No changes 1. A doctor or a nurse clicks on a patient's profile. 2. The doctor or nurse sees the patient's current medical information by clicking on "View medical history" 3. The doctor/nurse clicks on "Update medical information." 4. The doctor/nurse does not edit the patient's information 5. The doctor/nurse clicks save and the patient's information is not changed

	Alternative Flow #2 - Cancel 1. A doctor or a nurse clicks on a patient's profile. 2. The doctor or nurse sees the patient's current medical information by clicking on "View medical history" 3. The doctor/nurse clicks on "Update medical information." 4. The doctor/nurse edits the patient's medical info. 5. The doctor/nurse clicks cancel and the changes are not saved
Post Condition:	The patient's information is updated or not updated, depending on whether the doctor/nurse makes substantial changes **and** saves them.

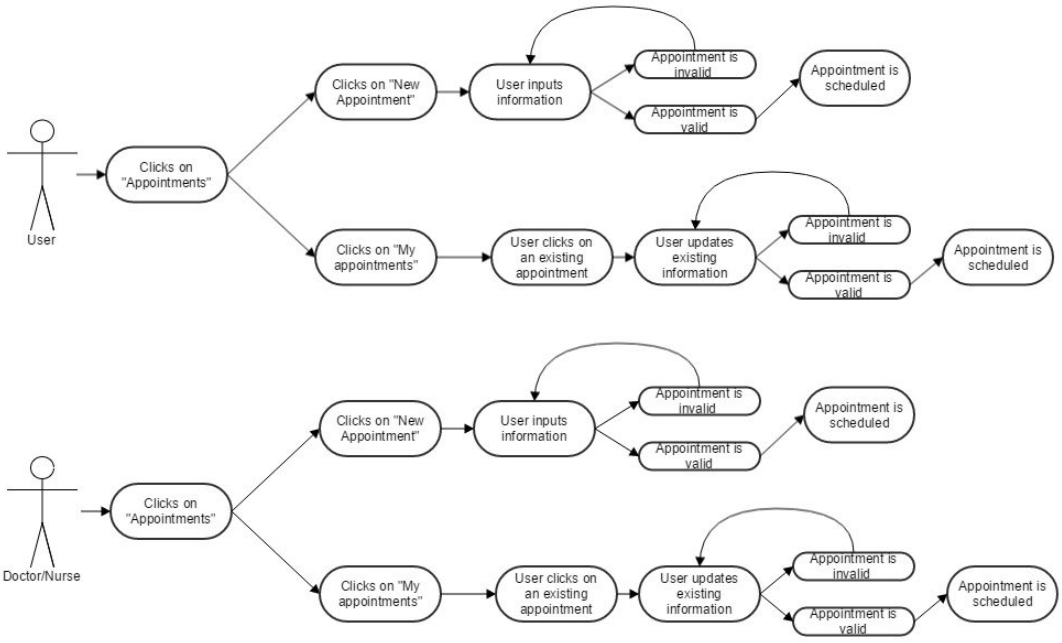
Export Information UC-05



Use Case Number:	UC-05
Use Case Name:	Export Information
Overview:	A doctor or nurse can export a user's medical information to a PDF file.
Actor(s):	Doctor, Nurse
Pre-condition(s):	1. The patient is already registered with HealthNet. 2. The patient has medical information to export. 3. The doctor/nurse is registered with HealthNet.
Scenario Flow:	Main (success) flow 1. A doctor or a nurse clicks on a patient's profile. 2. The doctor or nurse sees the patient's current medical information by clicking on "View medical history" 3. The doctor/nurse clicks on "Export as PDF." 4. The doctor/nurse receives a PDF of the patient's medical information.

Alternate Flows:	*There are no alternate flows.*
Post Condition:	The doctor/nurse receives a PDF print out of the user's medical information

Create or Update Patient Appointment UC-06

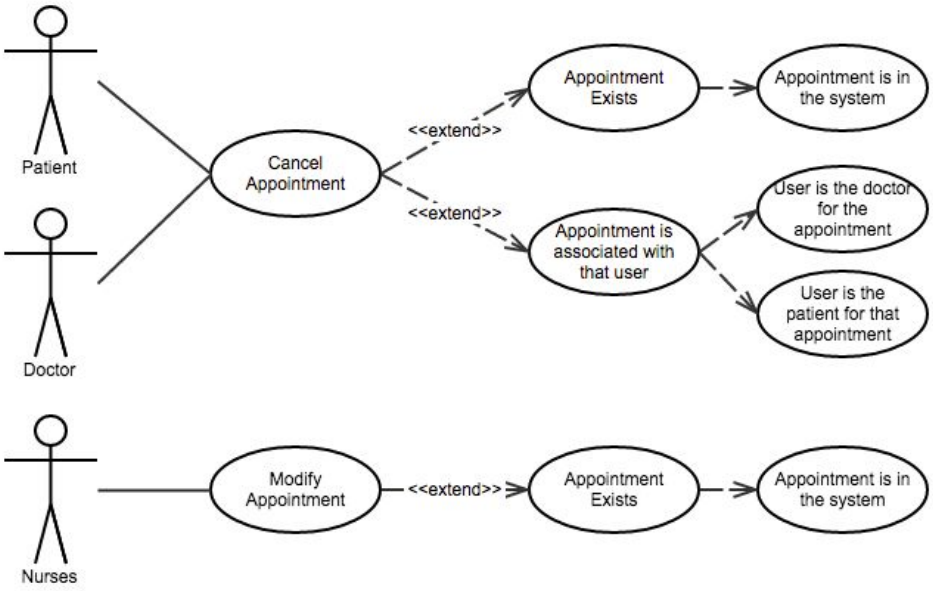


Use Case Number:	UC-06
Use Case Name:	Create or Update Patient Appointment
Overview:	HealthNet users must be able to create an appointment with a doctor at one of their branch locations.

Actor(s):	Patient, Doctor, Nurse
Pre-condition(s):	Doctor must be accepting new appointments User and doctor/office representative must agree on time to schedule appointment User has created an account
Scenario Flow:	**Main (success) Flow - Create a New Appointment** 1. User logs into the HealthNet application. 2. User clicks on a link to “Appointments” 3. User clicks a button to “Schedule new Appointment” 4. User enters details about the appointment. a. Date and time b. The doctor/patient they would like to see. 5. The system confirms that the details are correct. 6. There are no existing appointments for that date and time, so the appointment is approved. **Update an Appointment** 1. User logs into the HealthNet application. 2. User clicks on a link to “Appointments” 3. User clicks a link to “My appointments” 4. User sees details about the appointment a. Date and time b. The doctor/patient they would like to see. 5. User enters new information a. The date and time for the updated appointment b. The doctor/patient they would like to see 6. There are no existing appointments for that updated date/time, so the appointment is approved.
Alternate Flows:	Alt Flow #1 - Unsuccessful appointment creation 1. User logs into the HealthNet application. 2. User clicks on a link to “Appointments” 3. User clicks a button to “Schedule new Appointment” 4. User enters details about the appointment. a. Date and time i. The doctor/patient they would like to see.

	5. The system confirms that the details are correct. 6. There are existing appointments for that date and time, so the appointment is not approved a. User returns to step 4 to reenter date and time OR b. User cancels the request Alt Flow #2 - Unsuccessful appointment updating 1. User logs into the HealthNet application. 2. User clicks on a link to “Appointments” 3. User clicks a link to “My appointments” 4. User sees details about the appointment a. Date and time b. The doctor/patient they would like to see. 5. User enters new information a. The date and time for the updated appointment b. The doctor they would like to see 6. There are existing appointments for that updated date/time, so the appointment request is denied a. User is asked to re-enter details b. OR the user can cancel the appointment..
Post Condition:	The user successfully creates/updates an appointment, or if the date/time was not successful, no appointment is scheduled.

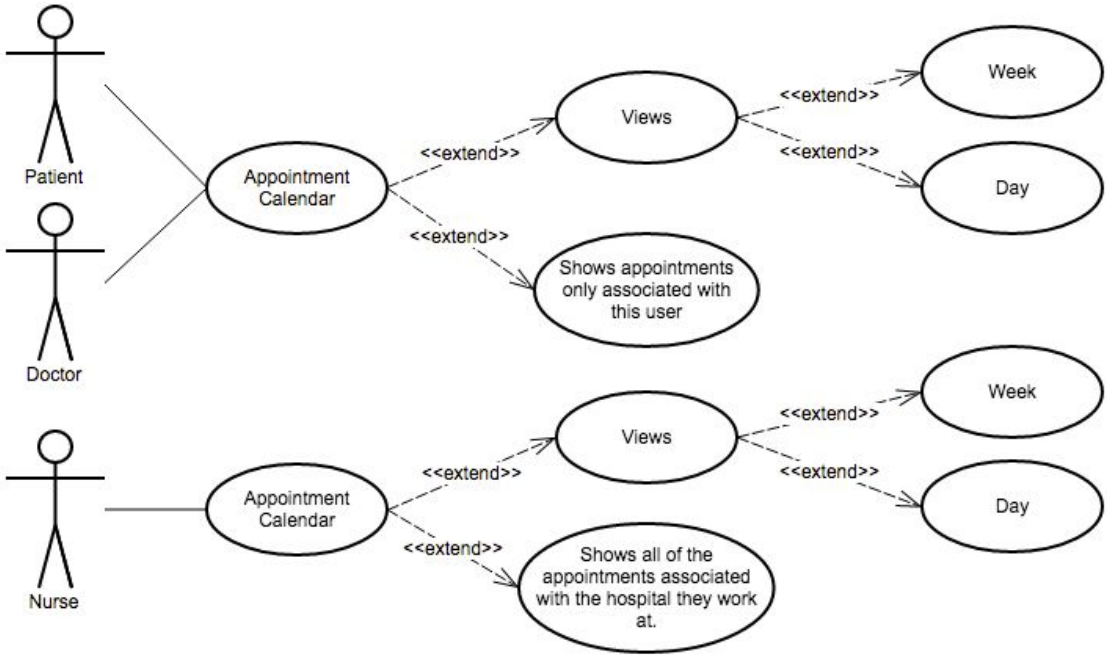
Cancel Patient Appointment



Use Case Number:	UC-07
Use Case Name:	Cancel Patient Appointment
Overview:	User shall log in and go to their currently scheduled appointments, selecting the appropriate one and choosing to cancel it.
Actor(s):	User: Patient or Doctor
Pre-condition(s):	- User has created an account - User has an appointment in the system
Scenario Flow:	**Main (success) Flow:** 1. User goes to the site (URL) 2. System requests login information 3. User logs into their account

	4. System confirms the login information a. If account information is not recognized return to step 2 5. User goes to their list of currently scheduled appointments 6. System provides a list in chronological order of the appointments associated with the use 7. User selects an appointment to edit 8. System brings up the detailed/editable view of the single appointment chosen 9. User chooses to delete the appointment 10. System asks for confirmation a. If user decides to cancel return to step 8 11. System deletes the appointments
Alternate Flows:	Alternate Flow #1: After Step 6 in success scenario System brings up an empty list, as the user does not have any appointments scheduled yet. [See “Create or Update Patient Appointment” for appointment creation]
Post Condition:	The appointment is scheduled if the user confirms its cancellation.

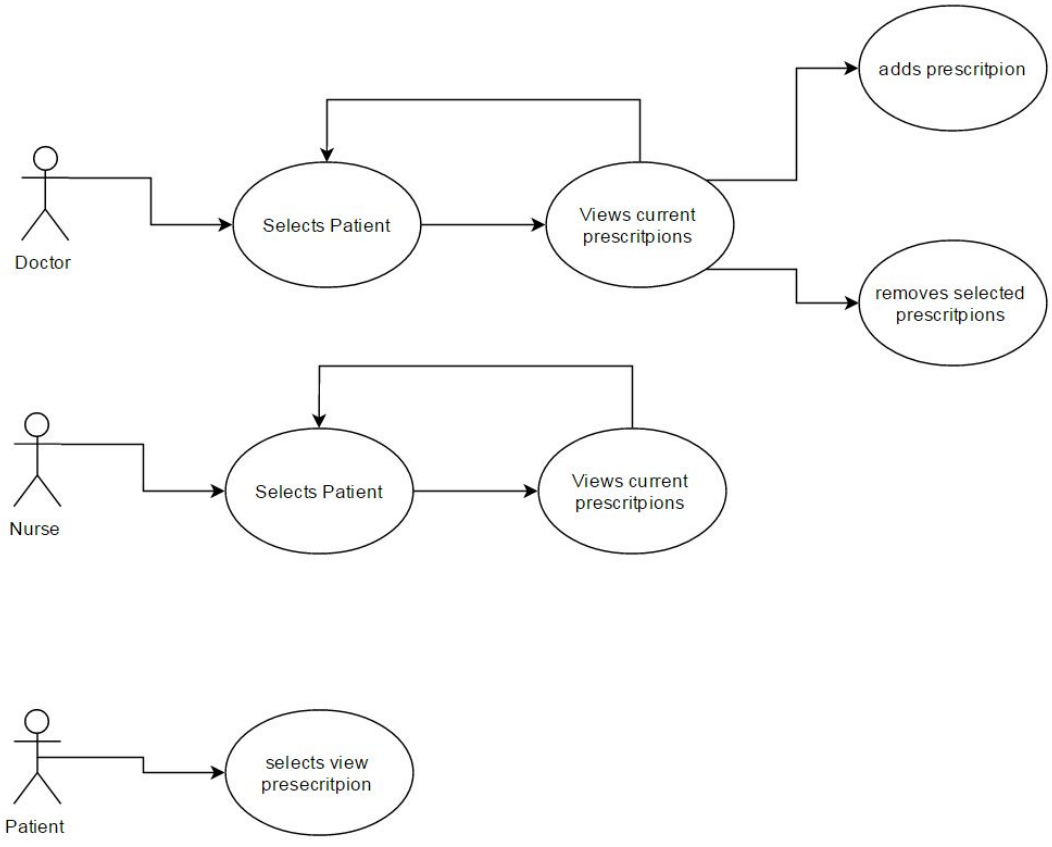
Appointment Calendar



Use Case Number:	UC-08
Use Case Name:	Appointment Calendar
Overview:	Doctors and patients will easily be able to view all of their appointments in a calendar view. Nurses will be able to see all appointments for the day and week between Patients and Doctors.
Actor(s):	Doctors, Patients, & Nurses
Pre-condition(s):	- User has created an account
Scenario Flow:	**Main (success) Flow:** 1. User goes to the site (URL) 2. System requests login information 3. User logs into their account 4. System confirms the login information 4.1. If account information is not recognized return to step 2

	5. User goes to the Appointment Calendar page 5.1. User can change the view between Day and Week as they desire 5.2. User can shift the dates in the calendar forward or backward to see other days or weeks
Alternate Flows:	There are no alternate flows for this scenario.
Post Condition:	The user has the information concerning the appropriate appointments.

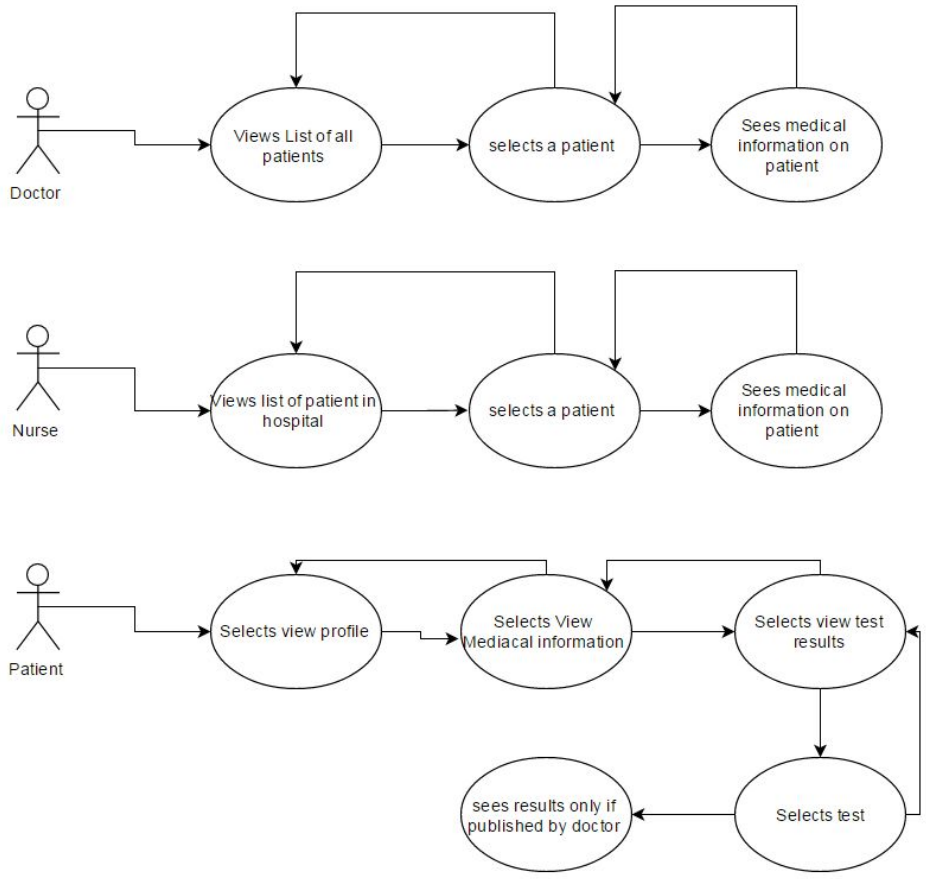
Add/Remove Prescriptions UC-09



Use Case Number:	UC-09
Use Case Name:	Add/Remove Prescriptions
Overview:	Doctors can add or remove a prescription to a patient record. Nurses can view the prescriptions of patients belonging to the same hospital. Patients can view their prescriptions from their account.
Actor(s):	Doctor, nurses, patient
Pre-condition(s):	- System has been setup and configured. - User has already registered - User is logged into system - For Doctors/nurses already selected Patients from option menu
Scenario Flow:	Main (success) Flow: Doctor 1. Doctor selects a patient from the patient list 2. Doctor then sees list of prescriptions for selected patient 3. Doctor selects add prescription and adds prescriptions Main (success) Flow: Nurse 1. Nurse selects a patient from the patient list 2. Nurse then sees list of prescriptions for selected patient Main (success) Flow: Patient 1. Patient selects View Prescriptions 2. Patient can see all prescriptions
Alternate Flows:	Alternate Flow #1 Doctor remove prescription 1. Doctor selects a patient from the patient list 2. Doctor then sees list of prescriptions for selected patient 3. Doctor selects remove prescription and prescription is removed Alternate Flow #2 Doctor wants another patient 1. Doctor selects a patient form the patient list 2. Doctor wants a different patient and hit back 3. Doctor selects a patient from the patient list 4. Doctor views prescriptions for patient Alternate Flow #1 Nurse wants another patient 1. Doctor selects a patient form the patient list 2. Nurse wants a different patient and hit back

	3. Nurse selects a patient from the patient list 4. Nurse views prescriptions for patient
Post Condition:	Doctors has successfully viewed/added/removed prescription nurses and patients have successfully viewed the prescriptions

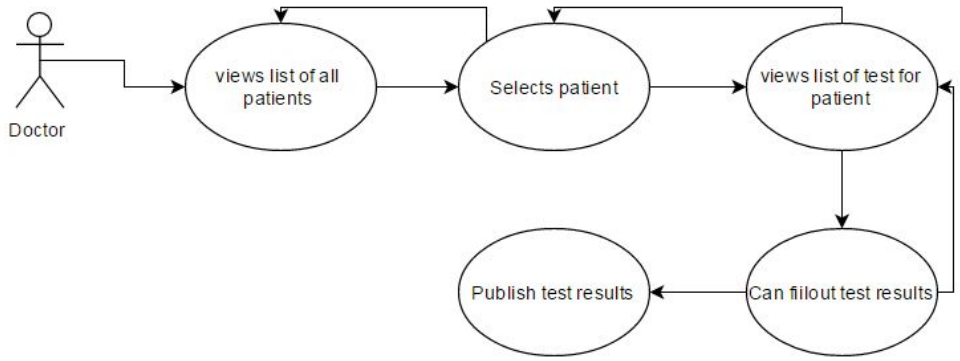
Viewing Patient Medical Information, Prescriptions and Tests and Results UC-10



Use Case Number:	UC-10
Use Case Name:	Viewing Patient Medical Information, Prescriptions and Tests and Results
Overview:	Doctors can view all medical information for any patient in the system (regardless of Hospital). Nurses can only view patient medical information in the hospital they work for. Patients can view their tests (pending or completed) and view the corresponding results for those tests that have been released by the doctor. Prescriptions and other non-sensitive information is viewable by the patient without a need for doctor's release. See UC-09
Actor(s):	Doctor, nurses, patient
Pre-condition(s):	- System has been setup and configured. - User has already registered - User is logged into system - For Doctors/nurses already selected Patients from option menu
Scenario Flow:	Main (success) Flow: Doctor 1. Doctor views list of all patients 2. Doctor selects patient 3. Doctor then sees the patients medical information Main (success) Flow: Nurse 1. Nurse vies list of hospital patients 2. Nurse selects patient 3. Nurse then sees the patients medical information Main (success) Flow: Patient 1. Patient selects view profile 2. Patient selects view medical information 3. Patient views and selects from a list of test 4. If results are published Patient can see results else results are blank
Alternate Flows:	Alternative Flow #1 different patient (Doctor) 1. Doctor views list of all patients 2. Doctor selects patient

	3. Doctor backs out 4. Doctor selects different patient 5. Doctor then sees the patients medical information Alternative Flow #1 different patient (Nurse) 1. Nurse views list of hospital patients 2. Nurse selects patient 3. Nurser backs out 4. Nurse selects different patient 5. Nurse then sees the patients medical information Alternative Flow #1 different test (Patient) 1. Patient selects view profile 2. Patient selects view medical information 3. Patient views and selects from a list of test 4. Selected test wasn't desired test and Patient backs 5. Patient views and selects from a list of test a. If results are published Patient can see results else results are blank
Post Condition:	Doctors have successfully view a patients medical information Nurses have successfully viewed a patient medical information Patients have viewed tests

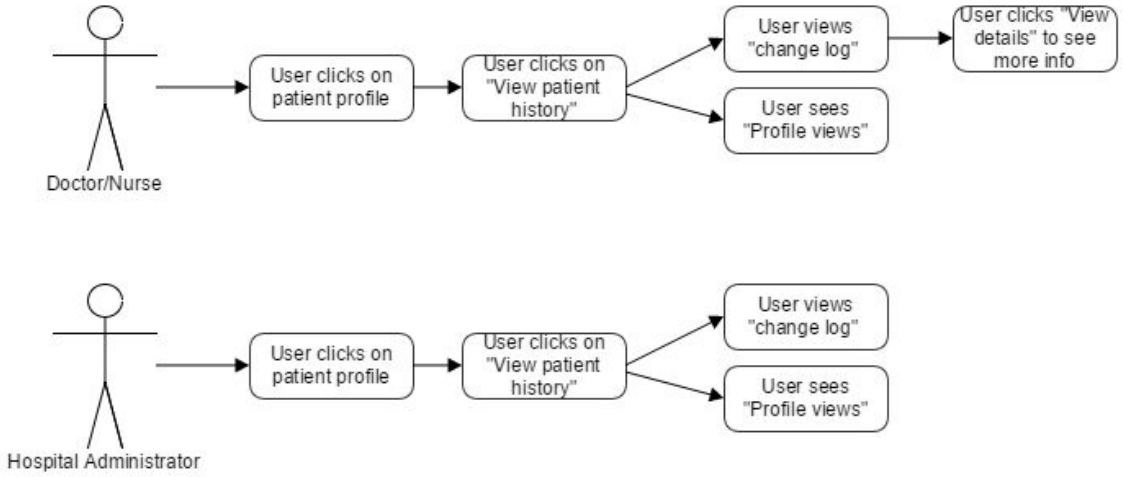
Release Test Results UC-11



Use Case Number:	UC-11
Use Case Name:	Release Test Results
Overview:	Doctors (within the patients hospital) can, upon evaluating a patients' test results, release them for view by that patient.
Actor(s):	Doctor
Pre-condition(s):	- System has been setup and configured. - User has already registered - User is logged into system - For Doctors already selected Patients from option menu
Scenario Flow:	Main Flow 1. Doctor views list of patients 2. Doctor selects patient from list 3. Doctor views pending tests for patient 4. Doctor completes results for test 5. Doctor publishes the test

Alternate Flows:	Alternative Flow #1 1. Doctor views list of patients 2. Doctor selects patient from list 3. Doctor views pending tests for patient 4. Backs out and selects different patient 5. Doctor Selects test from patients pending tests 6. Doctor completes results for test 7. Doctor publishes the test
Post Condition:	Test results have been successfully released

Logging System Activity UC-12



Use Case Number:	UC-12
Use Case Name:	Logging System Activity
Overview:	HealthNet actions will be logged/recorded to ensure proper use of the information when reviewed at a later date.

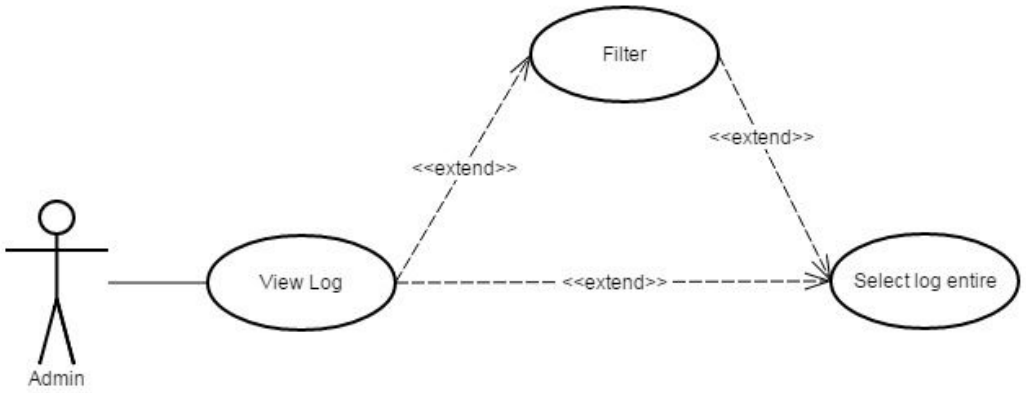
Actor(s):	Hospital administrators, Doctors/Nurses
Pre-condition(s):	Users must have the right privileges to look at confidential medical data Doctors/Nurses must be able to view and change profiles User profiles must be in the system to view/alter
Scenario Flow:	Main Flow - View User History 1. The user clicks on a patient profile. 2. On the profile, the user clicks a “View patient history” 3. Under a “Change log”, the user sees a broad overview of the changes made to a profile WITHOUT sensitive information. Can see a. Who made the change b. When the change was made 4. If a user clicks “details” and they have the right privileges, they can see a. What the changes were b. Who made the changes c. When the changes were made 5. User will also see who has viewed that profile under a “Profile Views” section
Alternate Flows:	Alt Flow #1- Hospital Administrator without Privileges 1. The user clicks on a patient profile. 2. On the profile, the user clicks a “View patient history” 3. Under a “Change log”, the user sees a broad overview of the changes made to a profile WITHOUT sensitive information. Can see a. Who made the change b. When the change was made 4. If a user clicks “details” and they don’t have the right privileges, they see a prompt that they don’t have the privileges to do so. 5. User will also see who has viewed that profile under a “Profile Views” section
Post Condition:	The user will have an understanding of what changes were made to a profile. This information will provide useful for later review.

Admission and Discharge to/from Hospital UC-13

Use Case Number:	UC-13
Use Case Name:	Admit and Discharge to/from Hospital
Overview:	Patients can be admitted and discharged to/from hospitals for extended visits, this adds them to a separate list from that would be listed for an appointment.
Actor(s):	Doctors/Nurses
Pre-condition(s):	Doctor/Nurse is associated with a hospital Doctor/Nurse can admit/discharge at their hospital
Scenario Flow:	Main Flow - Admit a user to the hospital you are employed at 1. Go to HealthNet's site 2. Login to Doctor/Nurse account 3. Go to Hospital page 4. Select "Admit Patient" for that hospital a. Presented with admission form i. (Already connected to hospital) ii. Select Patient iii. Fill in Reason for admission iv. Optionally assign a doctor b. Confirm admission form Main Flow - Discharge a user to the hospital you are employed at 1. Go to HealthNet's site 2. Login to Doctor/Nurse account 3. Go to Hospital page 4. Select "Discharge Patient" for that hospital a. Presented with discharge form i. (Already connected to hospital) ii. Present list of patients currently admitted 1. Select one patient 2. Fill in visit information b. Confirm dismissal form

Alternate Flows:	Alt Flow #1- Admit a user to hospital (Form failure) 4. Select “Admit Patient” for that hospital a. Presented with admission form b. Confirm admission form i. Information is invalid returns to form saying where information is invalid ii. Correct information iii. Resubmit Alt Flow #1- Admit a user to hospital (Form failure) 4. Select “Discharge Patient” for that hospital a. Presented with discharge form b. Confirm discharge form i. Form invalid ii. Correct information iii. Resubmit
Post Condition:	This user will now be admitted or discharged from the selected hospital

Viewing Activity Log UC-14



Use Case Number:	UC-14
Use Case Name:	Viewing System log
Overview:	User with admin privileges and above have access to the system logs where all recent activities on the system are displayed.
Actor(s):	System Admin and/or Root
Pre-condition(s):	- User has Internet access - User have either admin or above privileges - User is logged into system
Scenario Flow:	Main (success) Flow: 1. User selects system log option

	2. System displays entire system log 3. User selects individual entry
Alternate Flows:	Alt #1 Flow: 1. User selects system log option 2. System displays entire system log 3. User filters system log by patient activity 4. System displays system log of patient activity 5. User selects individual entry Alt #2 Flow: 1. User selects system log option 2. System displays entire system log 3. User filters system log based on time, user, frequency, patient activity, and/or system activity 4. System displays filtered system log 5. User selects individual entry Alt #3 Flow: 1. User selects system log option 2. System displays entire system log 3. User filters system log by system activity 4. System displays system log of system activity 5. User selects individual entry
Post Condition:	The user has selected a individual log entire that contains information that is associated with that entire.

Viewing System Statistics UC-15

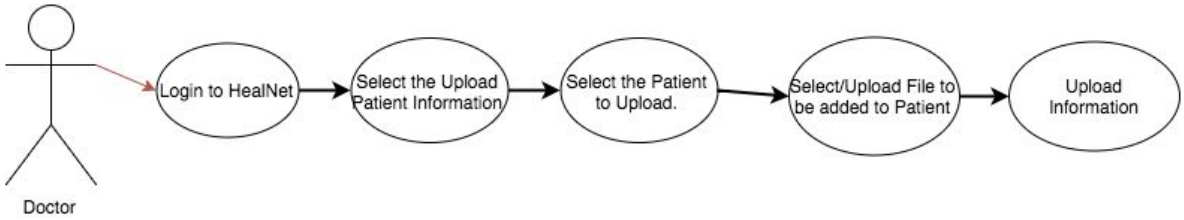
Use Case Number:	UC-15
Use Case Name:	Viewing System Statistics
Overview:	This will allow hospital admins to view stats on the system to see, trends about their hospital
Actor(s):	Primary: Admin Secondary: Root
Pre-condition(s):	Admin account is created and linked to a certain hospital There is some logging information collected
Scenario Flow:	Main Flow - Admin/Root view statistics for the hospital 1. Go to HealthNet's site 2. Login to Admin/Root account 3. Go to Log page 4. Select "Get Statistics" a. Presents pages with statistics i. Unique Users ii. Appointment heavy load times iii. Doctor stats 1. High/Low Dates/Times
Alternate Flows:	Alt Flow #1- Admin/Root filter log and then display related stats 1. Go to HealthNet's site 2. Login to Admin/Root account 3. Go to Log page 4. (Optional) Set filters: Hospital/Date Range/ Doctor 5. Select "Get Statistics" a. Presents pages with statistics i. Unique Users ii. Appointment heavy load times iii. Doctor stats 1. High/Low Dates/Times
Post Condition:	Presents statistics in ratios or graphs

Patient Transfer UC-16

Use Case Number:	UC-16
Use Case Name:	Patient Transfer
Overview:	This action moves a patient from one doctor to another
Actor(s):	Primary: Doctor Secondary: Admin
Pre-condition(s):	Patient and Doctors both have accounts Doctor has a patient There are two hospitals (one where doctor works & one other)
Scenario Flow:	Main Flow - Patient is transferred hospitals 1. Go to HealthNet's site 2. Login to Doctor account 3. Go to the patients information view 4. Select "Transfer" (Form) a. Select destination hospital b. Confirm
Alternate Flows:	Alt Flow #1- Transfer failure 1. Go to HealthNet's site 2. Login to Doctor account 3. Go to the patients information view 4. Select "Transfer" (Form) a. Select destination hospital b. Selects current hospital c. Confirm d. Failure returns user to form e. Fix entries f. Confirm

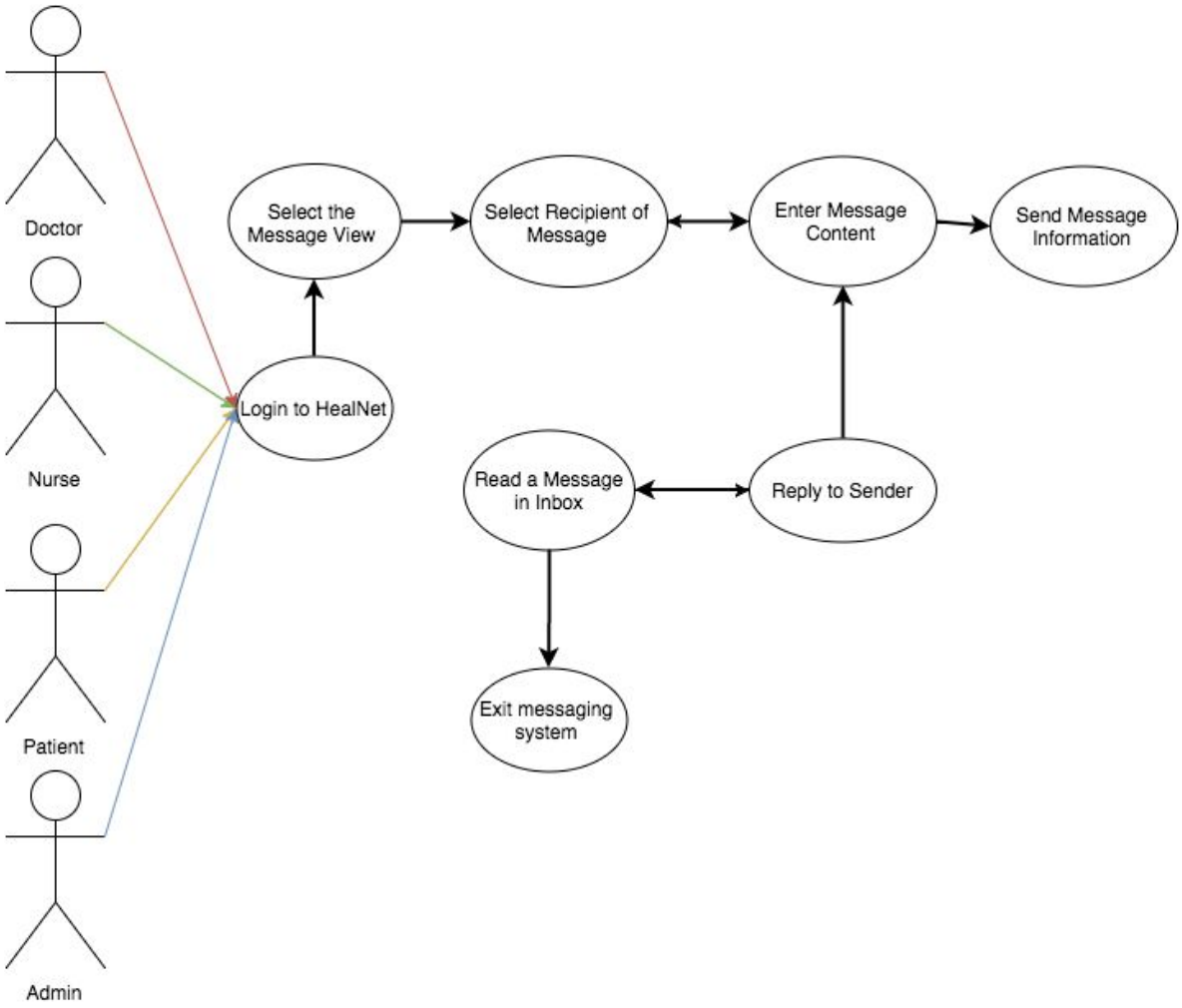
Post Condition:	User is now associated with the other hospital.

Upload Patient Information UC-17



Use Case Number:	UC-17
Use Case Name:	Upload Patient Information
Overview:	A Doctor can upload files to a Patient's account. These can be image files from an X-ray or related to other medical tests.
Actor(s):	Doctor
Pre-condition(s):	The Doctor must have a Patient they are uploading the information for. Also when uploading information based off a medical test, a Medical Test must previously exist.
Scenario Flows:	Scenario Flow - Imaging/File Upload Flow 1. The Doctor select the patient to upload information to their medical information file 2. The Doctor adds the imaging files to be submitted OR selects another file type to be uploaded 3. The Doctor submits the imaging files to be added to the Patient's Medical Information

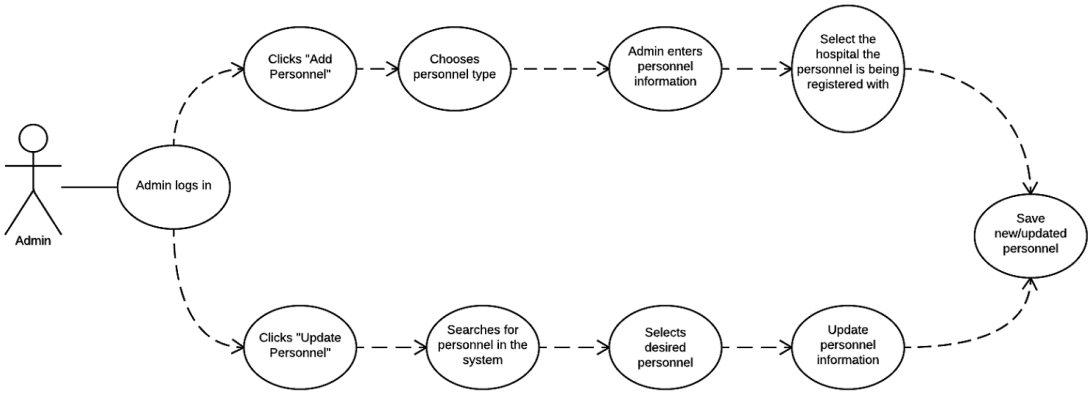
Send Private Message UC-18



Use Case Number:	UC-18

Use Case Name:	Send Private Message
Overview:	Patients, Doctors, Nurses, and Admins at a hospital can communicate with each other via a message on the HealthNet system.
Actor(s):	Doctor, Patient, Nurse, and Admin
Pre-condition(s):	In order to send a message to another Person, they must exist within the HealthNet database.
Scenario Flow:	Main(success) Flow - Typed Data Submission 1. Person logs into the HealthNet System 2. A Person selects another Person to send a message to. 3. The sending Person, creates the message by typing into an input field. 4. The Person sends the message
Alternate Flows:	Alternate Flow - Reply Messaging 1. A Person logs into the HealthNet system 2. A Person sees they have a message in their inbox 3. The person reads the message and replies to the sender 4. Submit the message to be sent back to the original sender. Alternate Flow - Read Message 1. Person Logs into the HealthNet system 2. Receive and Read a message from another Person 3. Do nothing, and exit messaging.

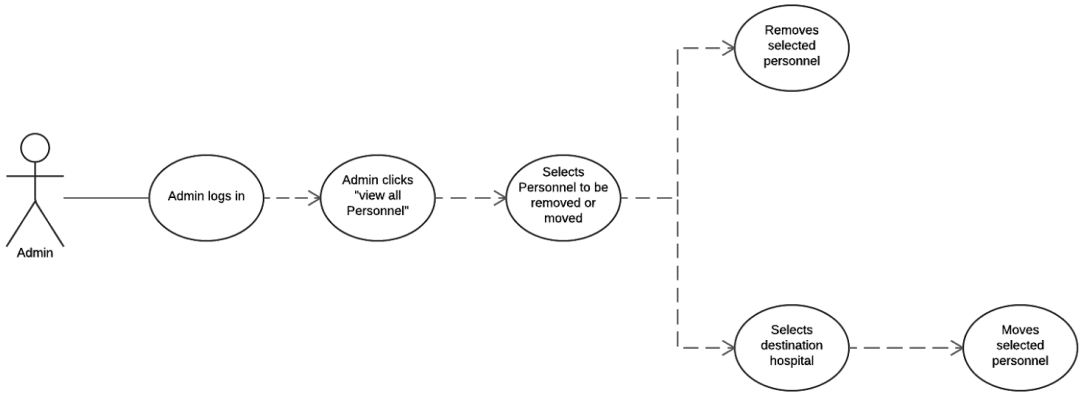
Add/Update Hospital Personnel UC-19



Use Case Number:	UC-19
Use Case Name:	Update/Add Hospital Personnel
Overview:	An Administrator is able to add doctors, nurses and other administrators to the hospital that they are employed at.
Actor(s):	Hospital administrators, Doctors/Nurses
Pre-condition(s):	Root has to be created. The root has to add a Hospital to the system that the acting administrator will be working at. The administrator has to be registered with the healthnet system.
Scenario Flow:	Main(success) Flow - Add Personnel 1. The Administrator logs in to the system 2. Admin clicks “add Personnel” button 3. Admin chooses the personnel type 4. The Admin fills out all personnel info a. If any information is invalid the form will be emptied. The Admin will be notified which input field was invalid.

	. 5. The admin selects the Hospital that the personnel is being registered at. 6. The newly registered personnel is saved in the system.
Scenario Flow:	Main(success) Flow- Update Personnel 1. The Administrator logs in to the system. 2. Admin clicks “update Personnel” button 3. Admin searches for the employee a. admin keeps searching until the employee is found 4. Admin selects the personnel to be updated when they are found 5. The Admin updates necessary personnel info a. If any information is invalid the form will be emptied. The Admin will be notified which input field was invalid. 6. The edited personnel information is saved in the system.
Alternate Flows:	Update Personnel Alt Flow #1- Admin makes typographical error with employee information 1. The Administrator logs in to the system. 2. Admin clicks “update Personnel” button 3. Admin searches for the employee with invalid employee information 4. System notifies the admin that no such employee exists. 5. Admin restarts search for the employee. Update Personnel Alt Flow #2- Personnel has been moved to another hospital or has quit/been fired. 1. The Administrator logs in to the system. 2. Admin clicks “update Personnel” button 3. Admin searches for the employee with invalid employee information 4. System notifies the admin that no such employee exists.
Post Condition:	An administrator would have successfully added a new employee to the system

Remove/Move Hospital Personnel UC-20



Use Case Number:	UC-20
Use Case Name:	Remove/Move Personnel
Overview:	An Administrator is able to move doctors, nurses and other administrators to other hospitals. Also, if an employee gets fired/quits then that employee will be removed from that hospitals system.
Actor(s):	Hospital administrators.
Pre-condition(s):	Root has to be created. The root has to add the current Hospital and the destination Hospital to the system that the acting administrator will be working at and sending personnel to respectively. The administrator has to be registered with the healthnet system. The employee has to exist in the system already. If the employee is being removed they have been fired or quit before hand.
Scenario Flow:	Main(success) Flow - Remove Personnel

	1. The Administrator logs in to the system 2. Admin clicks “view all Personnel” button 3. Admin selects personnel to be removed 4. The Admin clicks the “remove personnel” option
Scenario Flow:	Main(success) Flow- Move Personnel 1. The Administrator logs in to the system. 2. Admin clicks “view all Personnel” button 3. Admin selects personnel to be moved 4. The Admin selects the destination for the personnel 5. Admin clicks “move personnel” b. If any information is invalid the form will be emptied. The Admin will be notified which input field was invalid. 6. The edited personnel information is saved in the system.
Alternate Flows:	
Post Condition:	An administrator would have successfully moved/removed an employee from the system.