Product Requirements

Team: *2 B Determined*

Revision Number	Revision Date	Summary of Changes	Author(s)
0.1	*09/05/2015*	*Creating the Requirements document*	*Everyone in Group*
0.2	10/03/2015	Added Use-Case Diagram to the document for R1	Barry and Raasin
0.3	10/20/2015	Added a new use-case and use-case diagram for csv implementation	Will
0.4	12/6/2015	Changed iCal and printable chart use case to release 3	Barry and Raasin

Brief problem statement

We seek to provide a mechanism that manages employees, gathers statistical data, registers patients, setting up appointments, and allowing the transfer of patients and their information between hospitals on the system. We want our user interface to be easy to interact with and navigate through. Registration should be a minimal process that does not cause the user any stress.

Stakeholders

HealthNet 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.

HealthNet 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. (Read, Martinez and Gonzalez)

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 – "Testing" team from the Software Engineering Team. They will represent the users and admins of the site during the testing process.

Users profile

System Administrator:

- View system logs
- View statistics
- Create users
- Edit patient info
- Have full access to the website (excluding medical info)

Doctor:

- Manages patient test results and medical info
- Can admit/discharge patients from a hospital
- Upload test results including x-rays, other images, as well as comments for those results
- can transfer a patient into their hospital
- can make appointments between them and a patient

Nurse:

- Can admit patients
- Can edit basic patient info
- Can manage appointment info
- Can view/search patient lists

Patient:

- Can admit self
- Can change contact information
- Can view health information
- Can make appointments

The target user must:

- 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

System requirements

At a high-level this project will be source controlled in SVN, run on Django 1.8 using Python 3.4.3, sqlite3 and needs to be compatible with the latest browsers.

Feature requirements (user stories)

No.	User Story Name	Description	Release
1	Patient Registration	Users sign up to become a Patient by providing their personal contact information, proof of insurance and unique login credentials. Additionally, a patient should provide the system with some basic medical profile information, a choice of preferred hospital and emergency contact information (linked to another patient if they are already in the system).	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. (Needs to be done in non-admin website)	R1
3	Update Patient Profile Information (General)	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. If the patient or doctor already has an appointment at the time selected, then the system will not allow for the appointment. (Update from R1 to be more user-friendly)	**R1**
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.	**R2**

		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.	
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.	**R1-post poned: Doctor says we do not need**
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	**R2**

		- most common system activities (or by user) Other important and informative statistics yet to be determined.	
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 - 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.	**R2**
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 patients' medical information.	**R2**
18	Send Private Message	Doctors, nurses, patients and administrators can send private messages of limited length via the system.	**R2**
19	Admin Removal	When a doctor, nurse or administrator is out of the system. Can be done by administrators	**R1**

20	iCal/Google Calendar Integration	Patients will be able to see their appointments on their google calendar or iCal calender on their androids or iPhones.	**R3**
21	Printable Chart	Allow doctors to print out a detailed chart for each patient	**R2**
22	CSV Parsing	Allow admin users to input .csv files with pre-formatted information to populate the system	**R2**

Use case diagram

(attached)

Patient Registration

Use Case Number:	UC-01
Use Case Name:	Patient Registration
Overview:	Users sign up to become a Patient by providing their personal contact information, proof of insurance and unique login credentials. Additionally, a patient should provide the system with some basic medical profile information, a choice of preferred hospital and emergency contact information (linked to another patient if they are already in the system).
Actor(s):	Patient, Nurses, Doctors, System Admin
Pre-condition(s):	Patient does not have an account/isn't in the system

Scenario Flow:	**Main (success) Flow:**
	
	1. User goes to website
	2. User clicks the register button
	3. User enters insurance number
	   a. If insurance number is invalid they re-enter or quit
	   b. User is then taken to information page about how to apply for insurance
	4. User enters personal information (username, password, age)
	   a. If user cancels then cancel the process
	   b. If user is under 18 have an adult continue the process (See Alternative Flow)
	5. User enters additional information (medical records, other tbd requirements)
	6. User verifies information
	   a. Allow user to re-enter information if there are any issues
	   b. Allow user to cancel if he/she chooses
	7. Registration complete

Alternate Flows:	**Alternate Flows:** If a patient is under 18, an adult must register the patient. 1. If the registration process wasn't started, another account must be logged in to register the younger patient a. If the account was logged in and stopped registration due to the age limit, require a login from a verified account 2. Have an adult enter information as above in the general flow 3. Registration complete Registration is canceled (Check for a successful register boolean) 1. If a registration is canceled, a boolean value will prevent the information from being stored on the server. 2. Registration will not be completed. All information will be discarded. User does not have an insurance number (after step 3): 1. User is redirected to info page about insurance and how to apply for it
Post Condition:	The Patient is now registered

Administrator Registration

Use Case Number:	UC-02
Use Case Name:	Administrator Registration
Overview:	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.
Actor(s):	System Administrator
Pre-condition(s):	If there is a new doctor, nurse or system administrator they will need an account, this will allow them to make one. System is up and running. Admin is logged in

Scenario Flow:	Main (success) Flow:
	   1. Syst em Admin logs in and clicks register new employee
	   2. System Admin registers a new doctor, nurse or system admin by adding the new employee's information
	      a. The process may be canceled
	   3. System Admin verifies information
	      a. The process may be canceled
	      b. The Admin my edit information by returning to the previous screen.
	   4. Registration complete

Alternate Flows:	Alternate Flows: None, only system administrators is allowed to register new employees
Post Condition:	New (Doctor/Nurse/System Administrator) has been added

Update Patient Profile Information

Use Case Number:	UC-03
Use Case Name:	**Update Patient Profile Information**
Overview:	Patients can update their profile information.
Actor(s):	Patients
Pre-condition(s):	Patients must have a profile that can be updated.
Scenario Flow:	*Main (success) Flow:* 1. Patient logs in to profile 2. Patient press button to view profile information 3. Patient press edit information button 4. Patient updates profile information and hits save/confirm button 5. System asks patient if the information should be saved 6. Patient hits yes 7. Profile information updated
Alternate Flows:	*Alternate Flows:* Patient may wish to not save the information they inputted. They will press the cancel button or exit the website.
Post Condition:	Patient updated own profile information.

Update Patient Medical Information

Use Case Number:	UC-04

Use Case Name:	Update Patient Medical Information
Overview:	Doctors, Admins, and Nurses can update patient medical information.
Actor(s):	Doctors, Admins and nurses
Pre-condition(s):	The patient must have an profile that can be updated.

Scenario Flow:	*Main (success) Flow:*
	
	1. The user accesses the patient's profile
	2. A form is opened and the user is given the ability to edit or add information to fields
	    a. The process may be canceled at any time
	3. The form information is displayed after being submitted and the system asks the user to verify the correctness of the information.
	    a. The user may edit or cancel the process at any time.
	4. The medical information is updated.

Alternate Flows:	*Alternate Flows:* If the processes are canceled the information should not be entered into the system. If the user decides to edit information they will be taken to a populated form that can be edited
Post Condition:	The patient information is updated

Export Information

Use Case Number:	**UC-05**

Use Case Name:	Export Information
Overview:	Patients will be able to export their information and their test results from the system with relevant privacy warnings.
Actor(s):	Patients
Pre-condition(s):	Patients must have a profile that is updated with the information and test results that they wish to export.
Scenario Flow:	*Main (success) Flow:* 1. Patient logs into profile 2. Patient press button to view profile information 3. Patient hits button to export information 4. System gives patient options to export to Word doc file, export to pdf file, or print friendly page 5. Patient chooses one of the options and exports own information
Alternate Flows:	*Alternate Flows:* None
Post Condition:	Patient's information has been exported.

Create or Update Patient Appointment

Use Case Number:	UC-06
Use Case Name:	Create or Update Patient Appointment
Overview:	Patients, doctors and nurses can create or update an appointment with a doctor and at one of the doctor's available locations.

	If the patient or doctor already has an appointment at the time selected, then the system will not allow for the appointment.
Actor(s):	Admins, doctors, nurses, patients
Pre-condition(s):	Patient must require an appointment to be created or updated.
Scenario Flow:	**Main (success) Flow:** 1. A patient requires an appointment or appointment change 2. A user (admin, doctor, or nurse) is contacted to update the appointment 3. The user clicks on the appropriate appointment date 4. The user enters the time of appointment and other details such as contact information 5. the user links the patient's account with the appointment 6. The patient's appointment calendar is updated. 7. The doctor's appointment calendar is updated 8. Process complete
Alternate Flows:	*Alternate Flows:* The user cancels the appointment making/editing process. 1. All information of the appointment that was added/edited will be discarded. 2. The appointment date will roll back to the previous appointment/time slot that was available at the given time.
Post Condition:	The appointment has been created/edited.

Cancel Patient Appointment

Use Case Number:	**UC-07**
Use Case Name:	**Cancel Patient Appointment**

Overview:	Patients can cancel their existing appointments. Doctors can cancel their existing appointments. Nurses cannot cancel (only modify) existing appointments.
Actor(s):	Patients, doctors
Pre-condition(s):	Patient and doctor must have an appointment to cancel.
Scenario Flow:	*Main (success) Flow:* 1. User logs in 2. User press button to check current appointments 3. User goes to the appointment they wish to cancel and press the button to cancel it 4. System asks user if they really wish to cancel it 5. User hits yes
Alternate Flows:	*Alternate Flows:* When the system asks the user if they really wish to cancel their appointment, the user may hit no. Then the system does nothing.
Post Condition:	Appointment is cancelled.

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):	Doctors and patients must have appointments.
Scenario Flow:	*Main (success) Flow:* 1. User logs in 2. User press button to view appointments in calendar view 3. User is shown calendar of current month with all appointments for that month 4. User will be able to go to next and previous months
Alternate Flows:	*Alternate Flows:* None
Post Condition:	User views all appointments in a calendar view

Add/Remove Prescriptions

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):	Doctors

Pre-condition(s):	Patients must have a prescription that can be added or removed.

Scenario Flow:	**Main (success) Flow:**
	
	1. User clicks the prescribe button
	2. User edits information in a given field (the prescription field)
	    a. Process may be canceled at any time
	    b. While editing the doctor may delete or add new prescriptions
	3. The addition or removal of prescriptions is complete

Alternate Flows:	**Alternate Flows:**
	
	Process may be canceled at any time during the add/remove process
	
	1. if the process is canceled, the information will roll back to the previous setting
	    a. if there was no prescription, the prescriptions field will be empty
	    b. if a prescription was edited the field will be back to what it previously was

Post Condition:	*Prescription Added/Removed*

Viewing Patient Medical Information, Prescriptions and Tests and Results

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.
Actor(s):	Doctors, nurses, patients
Pre-condition(s):	Patient must have medical information that can be viewed.

Scenario Flow:	*Main (success) Flow:*
	
	1. User logs in
	   a. if user is a doctor or nurse, user press button to view all patients
	      i. if user is a doctor, all patients in the system may be viewed
	      ii. if user is a nurse, only patients in the hospital they work for may be viewed
	      iii. in both cases, user press button to view all medical information that would be next to the patient they wish to check
	   b. if user is a patient, user press button to view tests
	      i. user may also press button to view prescriptions

Alternate Flows:	*Alternate Flows:* None
Post Condition:	Patient's information is shown to the user.

Release Test Results

Use Case Number:	**UC-11**

Use Case Name:	**Release Test Results**
Overview:	Doctors (within the patient's hospital) can, upon evaluating a patient's test results, release them for view by that patient. Comments may be added to the specific test result for view by the patient.
Actor(s):	Doctors, patients
Pre-condition(s):	*Patient must exist and the patient took a test and doctor approve for the results to go out*
Scenario Flow:	*Main (success) Flow:* 1. *Doctor hits release test results button* 2. *A sample of the results to be seen by the patient is shown.* 3. *Doctor adds in comments if he/she wishes* 4. *Doctor hits Release button* 5. *Patients receives the test results as soon as possible*
Alternate Flows:	*Alternate Flows: None*
Post Condition:	*Result has been released*

Logging System Activity

Use Case Number:	**UC-12**
Use Case Name:	**Logging System Activity**

Overview:	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 Patient's information, viewing of a Patients information/records, and transfers of a Patient from one hospital to another.
Actor(s):	System admin
Pre-condition(s):	A "System listener" has detected that a field has been changed
Scenario Flow:	*Main (success) Flow:* 1. The event is logged to a file that is named after the current date 2. Depending on the event, a different filter will be associated with the logged event 3. Process complete
Alternate Flows:	*Alternate Flows:* None: This is an automated process that will be done without any user input.
Post Condition:	An event has been logged

Admission and Discharge to/from Hospital

Use Case Number:	**UC-13**
Use Case Name:	**Admission and Discharge to/from Hospital**
Overview:	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 patient's discharge from the Hospital. This event is recorded by the system.
Actor(s):	**Doctor User, Patient User, Nurse User**
Pre-condition(s):	There is a doctor or nurse user that shares a hospital with the patient user
Scenario Flow:	*Main (success) Flow:* 1. The doctor user or nurse user enters the page that lists users 2. From the page that lists users the doctor or nurse user finds the patient user user which they would like to admit into the hospital 3. The doctor or nurse user then begins the process for admitting the patient by requesting the admission on the patient user's profile page 4. The user requesting the admission specifies the hospital that they are admitting the patient user to as well as the room 5. A confirmation dialogue appears to confirm the user's intentions to admit a patient
Alternate Flows:	**Alternate Flows:** Alternate Flow #1: A doctor user wants to discharge a patient user 1. Starting at step 3 the doctor begins the process for discharging the user 2. A confirmation dialogue appears to confirm the doctor user's intent to discharge the patient 3. The patient is discharged Alternate Flow #2: A doctor/nurse user wishes to cancel the admission/discharge 1. At any point during the process the doctor or nurse presses the cancel button a. If the cancel button is not pressed during the process then it is pressed in the confirmation dialogue 2. The doctor/nurse user is returned to the page that lists users
Post Condition:	**The patient user's information is updated to reflect any change made by a doctor user or nurse user**

Viewing Activity Log

Use Case Number:	**UC-14**
Use Case Name:	**Viewing Activity Log**
Overview:	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.
Actor(s):	Administrator User
Pre-condition(s):	-Users exist within the system -Patients exist within the users -System activity has been recorded
Scenario Flow:	*Main (success) Flow:* 1. Administrator user enters the general page for system activity 2. Administrator enters a time frame into a filter within which they would like to view user activity 3. A table containing user activity and information on each piece of user activity in the time frame is displayed
Alternate Flows:	*Alternate Flows:* Alternate Flow #1: At any time during or past step 2 the administrator user wants to view the activity of a specific user 1. The administrator goes to the filter menu for the data and enters a username for which they would like to view the activity of 2. The activity for said user and within said timeframe (if a timeframe is specified) is displayed in a table

Post Condition:	The data that the administrator user wanted from system logs is displayed in table format containing the type of activity that was logged, the time it was logged, and the user that performed the activity

Viewing System Statistics

Use Case Number:	**UC-15**
Use Case Name:	**Viewing System Statistics**
Overview:	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 - 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.
Actor(s):	Administrators
Pre-condition(s):	Hash of patients already exists that holds all patient information including: times visited, length of stay per stay (dates at hospital), reason for admission per stay
Scenario Flow:	1. Admin logs in 2. Admin navigates to page that manages statistics, only visible to admin 3. Admin enters in desired time frame as specific date to another specific date 4. Admin enters which statistic to search for (counting a total, looking for an average, etc.) and hits 'search' 5. Page displays desired statistic 6. Possible to change range of dates and re-search for same statistic 7. Or change statistic to search for under same range 8. Admin exits page

Alternate Flows:	***Alternate Flows: Include the post condition for each alternate flow if different from the main flow.*** Canceling or exiting the search menu at any point before step 4 will take the admin back to their home page
Post Condition:	***Enter the condition that must be true when the main flow is completed.*** Information is found and displayed. User can exit at this point.

Patient Transfer

Use Case Number:	**UC-16**
Use Case Name:	**Patient Transfer**
Overview:	Patient can be transferred between hospitals. Transfers can be carried out by either administrators or by doctors (ones who are at the receiving hospital).
Actor(s):	***System Administrators and Doctors***
Pre-condition(s):	***The patient to exist*** ***There is a hospital in the receiving hospital***
Scenario Flow:	***Main (success) Flow:*** 1. Doctor logs into the software 2. Doctor Search for the Patient 3. If patient exist, then he hits transfer patient info 4. Doctor then gets information of the patient as the doctor from the previous hospital
Alternate Flows:	***Alternate Flows:***

	The transfer process may be canceled at any time. If so the information is discarded and not saved
Post Condition:	***Patient information transfer success.***

Upload Patient Information

Use Case Number:	**UC-17**
Use Case Name:	**Upload Patient Information**
Overview:	Doctors will be able to upload the results of a patient's tests if needed. Doctors will be able to upload images such as those used in X-Rays to update a patient's record. Uploads are considered as updates to a patient's medical information.
Actor(s):	Doctors
Pre-condition(s):	Patient exists and is under the doctor
Scenario Flow:	Main (success) Flow: Steps should be numbered. 1. Doctor signs in 2. Doctor loads the patients page 3. Doctor hits an upload button that asks if they want to upload a test or an x-ray or other type of data/information 4. Doctor can also hit an "edit" button to modify patient information that already exists 5. Doctor hits save in profile 6. Doctor is told if the upload or edit was successful

Alternate Flows:	Alternate Flows: Include the post condition for each alternate flow if different from the main flow. If the upload or edit is unsuccessful, the Doctor is informed and taken back to the patient's profile
Post Condition:	Enter the condition that must be true when the main flow is completed. The profile has been changed or updated.

Send Private Message

Use Case Number:	**UC-18**
Use Case Name:	**Send Private Message**
Overview:	Doctors, nurses, patients and administrators can send private messages of limited length via the system.
Actor(s):	Doctors, nurses, patients and administrators
Pre-condition(s):	the person sending and the receiver exist in the system
Scenario Flow:	***Main (success) Flow:*** 1. Sender hits send message button 2. Sender types the name of the receiver 3. If the receiver exist, the sender is able to type the message to the receiver 4. when the sender finishes typing the message, the sender hits send
Alternate Flows:	***Alternate Flows:*** The process may be canceled at any time. If canceled the information will be discarded and not saved on the server.

Post Condition:	*Message Send*

Admin Removal

Use Case Number:	**UC-19**
Use Case Name:	**Admin Removal**
Overview:	**Administrators can remove any user from the system if needed**
Actor(s):	**Administrator User**
Pre-condition(s):	- **The user seeking to remove a user must be an administrator** - **There must be an account for the administrator to remove**
Scenario Flow:	*Main (success) Flow:* 1. Administrator user finds user they wish to delete from the system 2. Administrator enters the profile page for said user 3. Administrator begins deletion process by navigating to a "delete user" button in a menu/sidebar 4. System confirms that the administrator wants to delete the user using a confirmation dialogue a. If the administrator decides not to delete the user at this step the administrator is redirected back to the page that lists users 5. System deletes user as requested then brings administrator back to page that lists users
Alternate Flows:	*Alternate Flows:* The admin cancels at any point during the process
Post Condition:	The user that the administrator was seeking to remove from the system is no longer present in the system

iCal/Google Calendar Integration

Use Case Number:	**UC-20**
Use Case Name:	Patients and doctors will be able to see their appointments on their google calendar or iCal calender on their Androids or iPhones.
Overview:	In this use case, patients and doctors can download their appointments schedule in a iCal file so that the patient or doctor can have a copy of their schedule without going to the website. It is efficient and "smart".
Actor(s):	Patients and Doctors
Pre-condition(s):	- User needs a mobile device - User must exist
Scenario Flow:	*Main (success) Flow:* 1. User logs into the system 2. User go into the view appointment tab 3. User hits download schedule 4. System automatically gives user an iCal file
Alternate Flows:	*Alternate Flows:* N/A
Post Condition:	The user gets an iCal file containing all their appointments in a calender. Will give out future appoints, not past appointment.

Printable Charts

Use Case Number:	**UC-21**

Use Case Name:	Allow doctors to print out a detailed chart for each patient
Overview:	Doctor will modify a chart to get relevant information to look at and get a printout of the patient medical information.
Actor(s):	Doctor
Pre-condition(s):	- Patient exists - Patient has medical information
Scenario Flow:	*Main (success) Flow:* 1. Doctor logs in 2. Doctor looks up patient 3. Doctor hits patients medical info 4. Doctor checks chart types. 5. Doctor edit relevant information
Alternate Flows:	*Alternate Flows:* N/A
Post Condition:	Doctors receives a readable chart of the patients medical information.

CSV Parsing

Use Case Number:	UC-22
Use Case Name:	CSV Parsing

Overview:	Allow admin users to input .csv files with pre-formatted information to populate the system
Actor(s):	Admin User
Pre-condition(s):	- Admin User has a .csv file saved and properly formatted
Scenario Flow:	**Main (success) Flow:** 1. Admin User requests to populate system with data from a .csv file 2. System requests .csv file 3. Admin User uploads .csv file 4. System parses .csv file and checks to make sure the inputted data is valid (ints for int fields, dates for date fields, etc.) 5. System runs through .csv file again inserting the data line-by-line into the system (i.e. one hospital/patient/etc. at a time) 6. System relays success to admin user
Alternate Flows:	**Alternate Flows:** Alternate Flow #1 (after main flow step #4): 1. System rejects .csv file for improper data/ data formatting 2. System relays failure to import to admin, redirects admin to resource for how to properly format data (i.e. inform user of which section of the readme or other resource they could find how to properly format)
Post Condition:	The system is populated with the data given by the inputted .csv file