# **Use Cases**

## **Use Case 1: Patient Registration with Health Protect**

## **Objective**

The first use case shows the registration process from start to finish so that the end user can logon and logoff the system. Health Protect uses SSN to authorize the creation of an account and we will do this by validating that the SSN is an original number and not a duplicate. At the Login page, users will have to register with their full name, email address, and SSN. They will also have to create a password to login each subsequent time. The username will be the email address and the password will be user-generated.

## **Primary Actor**

The primary actor is the external user, or the patient being swabbed in the doctor's office. The patient is going register their account with Health Protect using their personal information. Another actor in this use case would be a systems administrator.

#### **Preconditions**

- 1. Patient must have a swab on file for account creation.
- 2. Patient does not have a duplicate account with SSN.

#### **Post Conditions**

- 1. Patient has created an account with Health Protect.
- Patient has received an email about successful account creation.
- 3. Patient can login with email address and password.

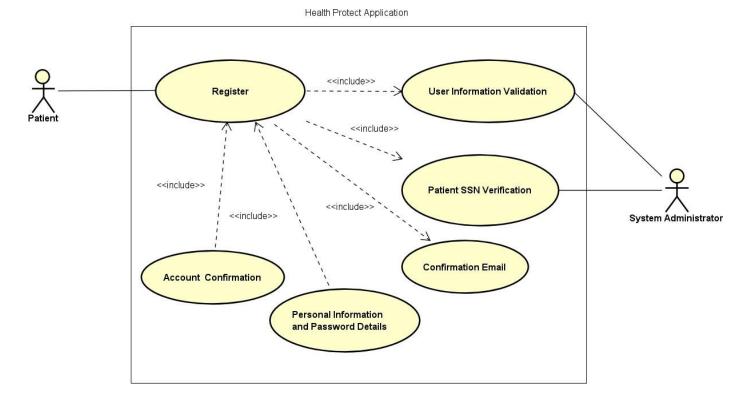
#### **Success Scenario**

- 1. Patient tries to create a new account with Health Protect.
- 2. Patient Inputs first name, last name, email address, date of birth, and SSN.
- 3. Health Protect system checks SSN for duplicate accounts.
- 4. Patient lands on the Account Created page and returns to Login Page.

#### Failure Scenario

- 1. Patient tries to create a new account with Health Protect.
- 2. Patient inputs first name, last name, email address, date of birth, and SSN.
- Health Protect system identifies a duplicate account with the same SSN.
- 4. Patient lands on the Error Page that states "A duplicate account exists with the same SSN".
- 5. Patient returns to Login Page.

## **Use Case 1 UML Diagram**



## **Use Case 2: Patient Viewing Results**

## **Objective**

The second use case shows how a patient would view the result of their analysis after they have been swabbed in the doctor's office. With a swab on file, patients will now be able to login to our Health Protect App and view the results, export the results, and send a copy to their doctor. These results will show the patient their medical and psychological predispositions. For example, if a patient is prone to neurological diseases or heart conditions then the Health Protect App will show them the results of the DNA analysis in laymen terms.

## **Primary Actor**

The primary actor is the external user or the patient. Another actor in this use case is the doctor that is viewing the results of their patients.

#### **Preconditions**

- 1. Patient has an account with Health Protect.
- 2. Patient has an analyzed swab on file.

#### **Post Conditions**

1. Patient has viewed the result of the DNA analysis.

2. Patient has viewed the recommendations for medical predispositions.

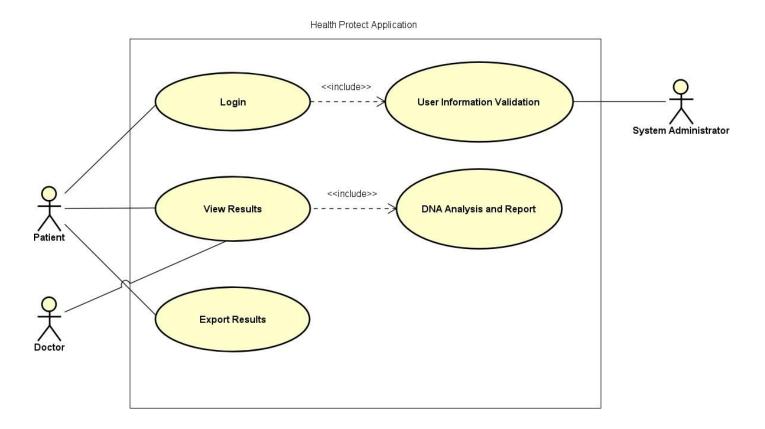
#### **Success Scenario**

- 1. Patient logs into Health Protect using their email address and password.
- 2. Patient clicks on the "View Results" button to view their DNA analysis and report.
- 3. Patient clicks on the "Return to Home" button.
- 4. Patient clicks "Return to Login" to sign off for security.

#### **Failure Scenario**

- 1. Patient logs into Health Protect using their email address and password.
- 2. Patient clicks on the "View Results" button to view their DNA analysis and report.
- 3. Patient lands on an Error page that states "There has been a technical error in your report, please contact us at (415) 819-1857"
- 4. Patient returns to Homepage.

## **Use Case 2 UML Diagram**



## **Use Case 3: Patient Contacting Doctor**

The third use case would be for patients who want to contact their doctor to be advised about their medical predispositions. The patient would be using their primary care physician who would be reinforcing the results of the DNA analysis and make recommendations as they see fit.

#### **Preconditions**

- 1. Patient has an analyzed swab on file with Health Protect.
- 2. Patient has viewed their results and recommendations through Health Protect.
- 3. The patient's primary care physician has received the results and analysis.

#### **Post Conditions**

1. Patient successfully contacts their primary care physician.

## **Success Scenario**

- 1. Patient logs into Health Protect using their email address and password.
- 2. Patient clicks on the "Contact Doctor" button to view their primary care physician's contact information.
- 3. Patient clicks "Return to Home" to go back to the Homepage.
- 4. Patient clicks "Return to Login" to signoff for security.

## **Failure Scenario**

- 1. Patient logs into Health Protect using their email address and password.
- 2. Patient clicks on the "Contact Doctor" button to view their primary care physician's contact information.
- 3. Patient lands on the Error page that states "Your Primary Care Physician has not received your results yet, please wait until further notice."
- 4. Patient clicks "Return to Home" to go back to the Homepage.
- 5. Patient clicks "Return to Login" to signoff for security.

# **Use Case 3 UML Diagram**

Health Protect Application

