# HealConn User Requirements Document

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[Date: Mar 26th 2014] [Version: 1.0]

### Introduction:

This User Requirements Document (URD) tries to obtain agreement with the customer regarding the qualitative and quantitative characteristics of the proposed system. The URD avoids technical implementation language, and restricts notations used to those that express functionality from a users' viewpoint.

## System Overview:

The proposed system HealConn is a mobile application to help students make better use of college medical centers' services. Ideally, this mobile application aims to simplify and provide better interaction between students and university health center and primarily to improve the experience from the student's side.

Each student can log into the system using his/her unique university account. Once authentication is completed, students will be able to access different functions of the app. Specifically, they will be able to schedule appointments, view recent health news provided by the university health service, communicate with the health center through a built-in messaging service as well as filling medical forms(including a treatment feedback form). The following diagram shows the four functionality:

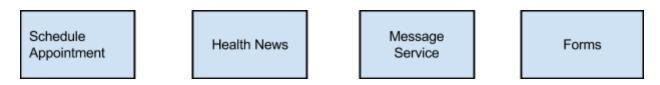


Figure1: Four main functionalities of HealConn

## General Requirements:

The HealConn mobile platform mainly consists of four functionalities, here we describe each of them in detail.

#### 1. Schedule Appointment:

This function lets user(student) to conveniently set up an appointment with the university health center. Once user enters this functionality, app will retrieve available time slots from the server and lets user to select one. First-time visitors to the center can also make use of the map provided to obtain directions. User will also have a chance to fill out a pre-appointment survey form and submit it prior to his/her appointment. App will upload user's choice to the server for update.

#### 2. Accessing Health News:

This function aims to provide user(student) with recent health news content uploaded by the university health center. Everytime user enters this function, application will retrieve the latest content from the server and display it to the user. The university health center is responsible to frequently update these content and try to provide students general but useful health infos.

#### 3. Messaging Service:

This function is essentially a built-in messaging service which allows students to ask health-related questions and check for replies from the university health center. Any medical professional can apply to the user through a shared administrator account. Upon entering this function, the most recent conversation will be displayed.

#### 4. Forms Section:

This function's purpose is to let student fill certain medical forms required from the university health center such as the immunization form and health history form. Additionally, as an evaluation of the medical professional's service quality, students can fill out a post-appointment feedback form and comment on the overall experience. School Health Center can update the required medical forms as needed.

# Use-Case Analysis:

### List of use-cases:

| Use-Case 1  | User logins  |
|-------------|--|
| Use-Case 2  | User selects to schedule an appointment from home screen             |
| Use-Case 3  | User selects a specific date   |
| Use-Case 4  | User selects a specific time   |
| Use-Case 5  | User chooses whether to fill the pre-appointment survey form         |
| Use-Case 6  | User submits the appointment request by clicking the "submit" button |
| Use-Case 7  | User chooses not to complete the pre-appointment survey form         |
| Use-Case 8  | User selects to read H-News from home screen                         |
| Use-Case 9  | User selects to start H-Messenger from home screen                   |
| Use-Case 10 | User chooses to construct a new message                              |
| Use-Case 11 | User chooses one of the messages for detailed view                   |
| Use-Case 12 | User selects to fill forms from home screen                          |
| Use-Case 13 | User selects a particular form to fill out                           |
| Use-Case 14 | User submits the form by clicking the "submit" button                |
| Use-Case 15 | User selects search box to search for news from H-News screen        |
| Use-Case 16 | User selects navigation button to jump to other screens              |

## **Detailed use-case description:**

| Use-Case ID     | 1              |
|-----------------|----------------|
| Use-Case Name   | User Login     |
| Primary Actor   | User (student) |
| Secondary Actor | Server         |

| Description           | User enters username/password, server authenticates and retrieves user profile information.  |
|-----------------------|--|
| Precondition          | None   |
| Normal flow of events | User launches application and sees a login screen     User types in his/her username/password     Server authenticates the username/password and retrieve the user profile information upon successful authentication. |
| Postcondition         | User has successfully logged in  |
| Frequency of use      | Medium   |
| Alternative flows     | None   |
| Exceptions            | Error message displayed if user entered invalid username/password  |

| Use-Case ID           | 2   |
|-----------------------|---|
| Use-Case Name         | User selects to schedule an appointment from home screen  |
| Primary Actor         | User (student)  |
| Secondary Actor       | Server  |
| Description           | User clicks "Schedule Appointment", server retrieve calender and geo information from the server  |
| Precondition          | User clicks "Schedule Appointment"  |
| Normal flow of events | User clicks "Schedule Appointment" from homescreen     Client sends current system time to server     Server queries relevant date information from database and send it to client     Client displays a list(calender view) of available dates for users to choose from.     Client also displays University Health Center's location on integrated Google Map |
| Postcondition         | User can view the location and see the available dates for the coming 7 days  |
| Frequency of use      | High  |
| Alternative flows     | None  |

| Exceptions | None |
|------------|------|
|------------|------|

| Use-Case ID           | 3  |
|-----------------------|--|
| Use-Case Name         | User selects a date  |
| Primary Actor         | User (student)   |
| Secondary Actor       | Server   |
| Description           | User selects a date from the calendar and clicks "Next", app retrieve available time for that day and geo information from the server  |
| Precondition          | User selects a date and clicks "Next"  |
| Normal flow of events | 1. User selects a date and clicks "Next" from Schedule Appointment Screen 2. Client sends date information to server 3. Server retrieves available time information for that day from the database and sents it to client 3. Client displays a select bar of available time in that day for users to choose from. 4. Client also displays University Health Center's location on integrated Google Map |
| Postcondition         | User can view the location and see the available time for the previously picked day  |
| Frequency of use      | High   |
| Alternative flows     | None   |
| Exceptions            | None   |

| Use-Case ID     | 4                   |
|-----------------|---------------------|
| Use-Case Name   | User selects a time |
| Primary Actor   | User (student)      |
| Secondary Actor | None                |

| Description           | User selects a time and clicks "Next", app shows the time and date information and asks users whether he/she would like to take a pre-appointment survey  |
|-----------------------|---|
| Precondition          | User selects a time and clicks "Next"   |
| Normal flow of events | 1. User selects a time and clicks "Next" from Schedule Appointment Screen 2. Client displays the time and date information for the appointment 3. Client asks users whether he/she would like to complete a pre-appointment survey 4. Client also displays University Health Center's location on integrated Google Map |
| Postcondition         | User can see the time and date for the appointment and choose whether or not to complete a pre-appointment survey   |
| Frequency of use      | High  |
| Alternative flows     | None  |
| Exceptions            | None  |

| Use-Case ID           | 5  |
|-----------------------|--|
| Use-Case Name         | User selects to complete the pre-appointment survey form   |
| Primary Actor         | User (student)   |
| Secondary Actor       | None   |
| Description           | User clicks "Yes" in order to complete the pre-appointment survey, app shows the pre-appointment survey form to user |
| Precondition          | User clicks "Yes"  |
| Normal flow of events | User clicks "Yes" from Schedule Appointment Screen     Client displays the pre-appointment survey form to user       |
| Postcondition         | User can see and fill in the pre-appointment survey form   |
| Frequency of use      | Medium   |
| Alternative flows     | None   |
| Exceptions            | None   |

| Use-Case ID           | 6  |
|-----------------------|--|
| Use-Case Name         | User completes and submits the pre-appointment survey form   |
| Primary Actor         | User (student)   |
| Secondary Actor       | Server   |
| Description           | User completes and submits the pre-appointment survey form, app shows confirmed information and scheduled nurse to user  |
| Precondition          | User fills in the pre-appointment form and clicks submit   |
| Normal flow of events | User clicks "Submit" from pre-appointment form screen     Client sends the form to server     Server sends the scheduled nurse information to client     Client displays confirmed information, scheduled nurse, and geo information to user |
| Postcondition         | User sees confirmed information  |
| Frequency of use      | Medium   |
| Alternative flows     | None   |
| Exceptions            | None   |

| Use-Case ID           | 7  |
|-----------------------|--|
| Use-Case Name         | User chooses not to complete the pre-appointment form  |
| Primary Actor         | User (student)   |
| Secondary Actor       | Server   |
| Description           | User chooses not to complete the pre-appointment form, app shows confirmed information and scheduled nurse to user |
| Precondition          | User clicks "No, thanks"   |
| Normal flow of events | User clicks "No, thanks" from the Schedule Appointment screen     Client sends confirmed information to server     |

|                   | Server sends the scheduled nurse information to client     Client displays confirmed information, scheduled nurse, and geo information to user |
|-------------------|--|
| Postcondition     | User sees confirmed information  |
| Frequency of use  | Medium   |
| Alternative flows | None   |
| Exceptions        | None   |

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| Use-Case ID           | 8  |  |  |  |
|-----------------------|--|--|--|--|
| Use-Case Name         | User selects to read news related to health from home screen   |  |  |  |
| Primary Actor         | User (student)   |  |  |  |
| Secondary Actor       | Server   |  |  |  |
| Description           | User clicks "H-News" from home screen and app displays health news to user   |  |  |  |
| Precondition          | User clicks "H-News"   |  |  |  |
| Normal flow of events | User clicks "H-News" from home screen     Client sends request information to server     Server sends the News information to client     Client displays News to users |  |  |  |
| Postcondition         | User sees news related to health   |  |  |  |
| Frequency of use      | High   |  |  |  |
| Alternative flows     | None   |  |  |  |
| Exceptions            | None   |  |  |  |

| Use-Case ID   | 9   |
|---------------|---|
| Use-Case Name | User selects "H-Messenger" to read or send message to University Health Service |

| Primary Actor         | User (student)   |  |  |  |
|-----------------------|--|--|--|--|
| Secondary Actor       | None   |  |  |  |
| Description           | User clicks "H-Messenger" from home screen and app displays recent messages to user  |  |  |  |
| Precondition          | User clicks "H-Messenger"  |  |  |  |
| Normal flow of events | User clicks "H-Messenger" from home screen     Client loads recent messages from local database     Client displays messages to user |  |  |  |
| Postcondition         | User sees recent messages  |  |  |  |
| Frequency of use      | High   |  |  |  |
| Alternative flows     | None   |  |  |  |
| Exceptions            | None   |  |  |  |

| Use-Case ID           | 12   |  |  |  |
|-----------------------|--|--|--|--|
| Use-Case Name         | User selects "Forms" to fill in and submit medical or feedback form                        |  |  |  |
| Primary Actor         | User (student)   |  |  |  |
| Secondary Actor       | None   |  |  |  |
| Description           | User clicks "Forms" from home screen and app displays different forms for user to select   |  |  |  |
| Precondition          | User clicks "Forms"  |  |  |  |
| Normal flow of events | User clicks "Forms" from home screen     Client displays option of different forms to user |  |  |  |
| Postcondition         | User sees option of different forms  |  |  |  |
| Frequency of use      | Low  |  |  |  |
| Alternative flows     | None   |  |  |  |
| Exceptions            | None   |  |  |  |