Systems Requirements Specification for Anteater Health Portal

By:

Mingkun Liu

Sevag Avedissian

Armen Gadayan

Bryan Matta Villatoro

Table of Contents

1. Introduction

1.1 Purpose

COVID-19 has had a dramatic effect on the mental and physical health of many individuals, especially between ages 18 and 25. A predominant percentage of UCI students are a part of this age group that is facing these challenges due to the pandemic. The pandemic has made more students seek help from the UCI Centers of Health, Counseling, and Wellness which in turn caused these centers to be critically impacted. The Anteater Health Portal (AHP) will create a platform for students to receive help from the three centers offered by UCI. AHP will help reduce the wait time for students to receive care and also will alleviate the burden of the overworked UCI staff. The portal will make it efficient for students to receive answers and guidance for accessing the services provided by UCI centers.

1.2 Scope

The software system to be produced shall be called Anteater Health Portal. The system shall be an integrated health portal of three centers and facilitate easy access to a wide range of health services provided by the three centers. For UCI students, the system shall allow students to access physical, mental, and wellness health services, including chatting with chatbot/staff, making/canceling appointments, and meeting with care providers virtually. For staff from three centers, the system shall allow staff to manage student's cases and care plans, and communicate with other staff. For administrators, the system shall provide a dashboard to monitor AHP-wide data. The system shall be made available as a web application and a mobile application (IOS and Android).

1.3 Definition, acronyms, and abbreviations

UCI	University of California, Irvine
IOS	Apple's mobile operating system
Android	A mobile operating system based on the Linux kernel
AHP	Anteater Health Portal
UCI Net ID	A username for UCI students and staff to log into UCI software and websites.

SHC	UCI Student Health Center
Reference	A provider recommendation from a UCI staff member to a UCI student

1.4 References

- IOS (https://en.wikipedia.org/wiki/IOS)
- Android (https://en.wikipedia.org/wiki/Android_(operating_system))
- UCI Student Health Center (https://shc.uci.edu/)
- UCI Counseling Center (https://counseling.uci.edu)
- UCI Student Wellness & Health Promotion (https://studentwellness.uci.edu/)
- Case Study - The Anteater Health Portal (AHP) Project
- UCI Net ID (https://www.oit.uci.edu/services/accounts-passwords/ucinetids/)
- FERPA (https://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html)
- WebAuth (https://www.oit.uci.edu/services/accounts-passwords/idm/single-sign-on/)

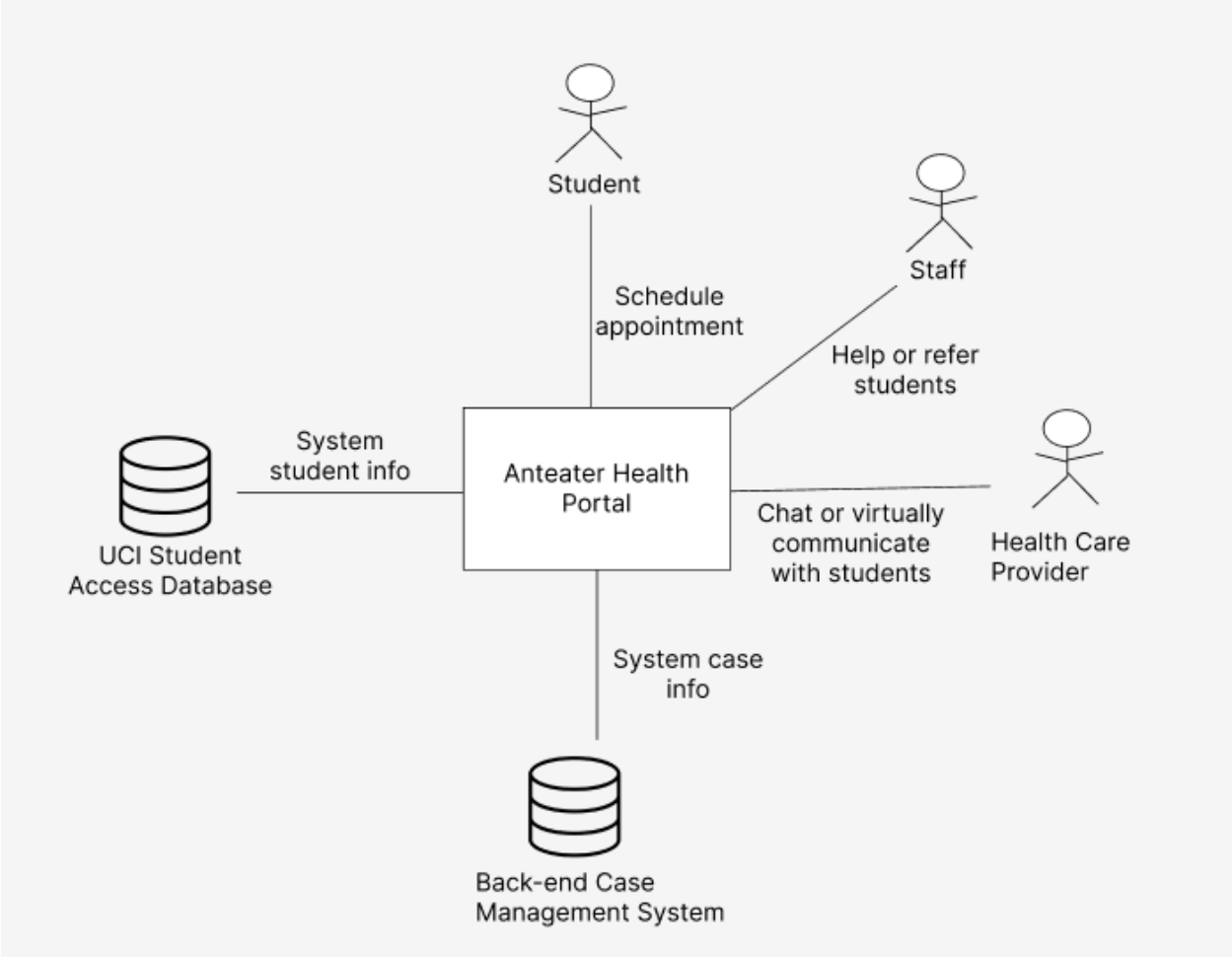
2. General Description

2.1 Product Perspective

UCI students, healthcare providers, and staff will interact with the Anteater Health Portal through the web application or mobile application.

Anteater Health Portal will obtain basic student information from the UCI Student Access database.

Anteater Health Portal will interact with UCI's current back-end case management system that the three centers use.



2.2 Product Functions

Anteater Health Portal shall allow students to access as many of the services of the three centers as possible, if the students do not know which services meet their particular needs, the AHP shall provide a chatbot to guide students to their needs service. It also shall allow students to schedule/cancel in-person and virtual appointments. Students shall be able to conduct virtual Zoom appointments and chat with care providers through AHP. Students also shall be able to view the notification in their inbox.

Anteater Health Portal shall allow staff members to create, edit, share, close, and refer students' cases and care plans. Staff shall be able to conduct virtual Zoom appointments and chat with other staff members through AHP.

Anteater Health Portal shall allow administrators to monitor AHP-wide data such as the number of activity users and unsolved cases.

Anteater Health Portal shall provide a chatbot for students to guide them to their

particular needs service. After students successfully schedule/cancel the appointment, the AHP shall send a notification to the student and staff to show them the meeting information. Anteater Health Portal shall send notifications to students and staff to remind them don't forget the meeting. Students shall be able to turn on/off notification settings and choose whether or not to receive notifications for certain goals.

2.3 User Characteristics

Users of the Anteater Health Portal generally fall into two categories who will be presented with a different view of the application when they log in. The first group of users are UCI students, who are generally 18-24 years old, may not be entirely familiar with medical terminology but possess above-average computer or online expertise, and will have good access to technology. The primary goal of this group is to schedule appointments with providers, view their medical history or information, and find resources through the portal. The second group of users are staff members from the three UCI centers; the Student Health Center, the Counseling Center, and the Center for Student Wellness & Health Promotion, who are generally 35-65 years old, are more familiar with medical terminology and most have a specialty area but may not possess the technical expertise of using computers and software like a college student would. These users are looking to manage their workload using the AHP by viewing their appointments, managing cases, and having the ability to chat with other staff members and students through the portal.

2.4 General Constraints

1. The application can be accessed through web browsers including but not l limited to:
    a. Google Chrome and Chromium-based browsers
    b. Mozilla Firefox
    c. Microsoft Edge
    d. Safari
2. The application requires a constant internet connection to display accurate information that is not outdated.
3. The application requires user authentication via UCI NetID. Users must also be connected to the UCI VPN in order to access most of the applications
4. The application must comply with FERPA regulations regarding users' data privacy and security concerns

2.5 Assumptions and Dependencies

1. The login process should be the same as logging into other UCI services. The system will require students to enter their UCI Net ID and authentication from Duo Mobile.
2. The AHP system and servers must be able to handle all the usage and requests from students and staff with any problems.
3. The AHP system will have access to the UCI Student Access database
4. It is expected from UCI staff members to be active on the AHP to provide students help when student queries are beyond the scope of the chatbot.

2.6 Apportioning of Requirements

The application will provide one portal to access resources and appointments from the current three UCI centers; the SHC, the Counseling Center, and the Center for Student Wellness & Health Promotion, but will have the ability for growth by allowing future services or centers to be added. Support for other languages such as Spanish or Mandarin in accordance with UCI's demographics is also planned but may take additional time to find proper translations and integrate these. English is the main language for the application and other languages will be added as translations are completed. Accessibility for different types of users is also planned such as high-contrast modes, screen readers, and colorblind modes with additional modes or adaptions to be added as needed. In general, the application should have all the necessary features and functionality at launch with the ability to add more as necessary or requested.

3. General Description

3.1 Essential Requirements

3.1.1 Functional Requirements

ID: UL
TITLE: User Login
DESCRIPTION: AHP shall require users to log in with their UCI Net ID and password with the addition of Duo mobile authentication.
PRIORITY: High
SOURCE: Field Notes 8, 15
EVENT/USE CASE: Login using UCI Net ID

RATIONALE: AHP must require a login to prevent nonaffiliated UCI users from accessing the portal.
DEPENDENCIES: AHP must have access to the UCI system database to validate login attempts.
STABILITY: High

ID: SSA
TITLE: Student Schedules Appointment
DESCRIPTION: Students shall be able to schedule either in-person or virtual appointments with UCI staff members from all the UCI centers.
PRIORITY: High
SOURCE: Case Study - The Anteater Health Portal (AHP) Project
EVENT/USE CASE: Schedule Appointment
RATIONALE: Allowing students to schedule an appointment on AHP is the foundation of the application. Students will be able to schedule appointments on the AHP for any center they desire instead of going to each respective website of the UCI centers.
DEPENDENCIES: Students must be logged in to schedule appointments
STABILITY: High

ID: SCA
TITLE: Student Cancels Appointment
DESCRIPTION: Students shall have the option of canceling any appointment they have scheduled.
PRIORITY: Priority
SOURCE: Field Notes 128, 140
EVENT/USE CASE: Cancel Appointment
RATIONALE: Students should have the option of canceling appointments because unexpected events may occur for students or they just may have a change of heart. It is also important to allow appointments to be canceled to not waste the time of staff members and allow other students to fill in those appointment slots.
DEPENDENCIES: A student must be logged in and they must have already made an appointment before.
STABILITY: High

ID: UJZM
TITLE: Users Join Zoom Meeting
DESCRIPTION: Users shall be able to join Zoom meetings that they are a part of.
PRIORITY: High
SOURCE: Field Notes 13, 15
EVENT/USE CASE: Join Zoom Meeting

RATIONALE: Users should easily have access to all their upcoming Zoom meetings instead of searching through their email to find meeting information. This will also reduce the likelihood of either staff members or students missing Zoom meetings.
DEPENDENCIES: Students and Staff members should have at least one upcoming Zoom meeting.
STABILITY: High

ID: UVN
TITLE: Users View Notifications
DESCRIPTION: Users shall have a designated section in the AHP to access notifications. Users shall be able to toggle notifications on and off.
PRIORITY: High
SOURCE: Field Note 140
EVENT/USE CASE: View Notifications
RATIONALE: The AHP will have a lot of communication between students and staff members, so it is important for users to have access to the latest activities on the portal.
DEPENDENCIES: Users must be logged in to access their notifications.
STABILITY: High

ID: SCWB
TITLE: Student Chats with Bot
DESCRIPTION: Students shall be able to resolve simple issues or get answers to simple questions using the chatbot instead of communicating with a staff member.
PRIORITY: High
SOURCE: AHP Functionality Outline 7 and Field Notes 10, 38, 87, 131
EVENT/USE CASE: Chat with Bot
RATIONALE: In order to decrease the workload on staff members, the chatbot feature will be provided so that simple questions can be resolved quickly without the need for a staff member to respond.
DEPENDENCIES: Students must be logged in to access the chatbot.
STABILITY: High

ID: SCWS
TITLE: Student Chats with Staff
DESCRIPTION: Students shall be able to chat with staff members and health care providers on issues that cannot be resolved using the chatbot
PRIORITY: High
SOURCE: AHP Functionality Outline 5 and Field Notes 5, 20, 42, 74, 116
EVENT/USE CASE: Chat with Staff

RATIONALE: In order to decrease the workload on staff members, the chat feature will be provided so that students can get help for any issues that cannot be resolved through the chatbot but also do not require an appointment.
DEPENDENCIES: Students must be logged in to access the chat feature. Students must also initially chat with a bot since the chat feature automatically directs to a bot when it is initially opened up.
STABILITY: High

ID: SCSC
TITLE: Staff Creates Student's Case
DESCRIPTION: Staff shall be able to create students' cases. This may include the student's initial health details, contact information, and basic personal information.
PRIORITY: High
SOURCE: Field Notes 71, and Case Study - The Anteater Health Portal (AHP) Project.
EVENT/USE CASE: Create a student case
RATIONALE: Creating a student's case is essential for staff to manage and refer the student's case.
DEPENDENCIES: Staff must be logged in and must have permission to create the student's case. There must be a standardized template for staff to create student cases.
STABILITY: High

ID: SESC
TITLE: Staff Edits Student's Case
DESCRIPTION: Staff shall be able to update students' cases. This may include updating or adding new health information, and noting the result of the meeting.
PRIORITY: High
SOURCE: Field Notes 71, and Case Study - The Anteater Health Portal (AHP) Project.
EVENT/USE CASE: Edit a student case
RATIONALE: Editing a student's case is essential for staff to keep the student's case accurate and up-to-date.
DEPENDENCIES: Staff must be logged in and the student's case must exist in the AHP database. The staff must have permission to edit the student's case.
STABILITY: High

ID: SSSC
TITLE: Staff Share Students' Case
DESCRIPTION: Staff shall be able to share students' cases with other staff members. Then the other staff members shall be able to view and keep tracking the student's case.
PRIORITY: High

SOURCE: Field Notes 45, 71, and Case Study - The Anteater Health Portal (AHP) Project.
EVENT/USE CASE: Share a student case
RATIONALE: Sharing a student's case is essential for staff to communicate with other staff members about the student's case. It can improve the staff cooperation efficiency.
DEPENDENCIES: Staff must be logged in and the student's case must exist in the AHP database. The staff must have permission to share the student's case. The staff must choose which staff members to share. The sharing of student cases must comply with healthcare privacy and security regulations.
STABILITY: High

ID: SCLOSC
TITLE: Staff Close Student's Case
DESCRIPTION: Staff shall be able to close students' cases once the cases are resolved.
PRIORITY: High
SOURCE: Field Notes, 88, and Case Study - The Anteater Health Portal (AHP) Project.
EVENT/USE CASE: Close a student case
RATIONALE: Closing a student's case is essential for staff to ensure that the student's condition has been treated and the student no longer needs the services from the three centers.
DEPENDENCIES: Staff must be logged in and the student's case must exist in the AHP database. The staff must have permission to close the student's case. The staff must make sure the student's case has been resolved before closing the case.
STABILITY: High

ID: SCR
TITLE: Staff Member Creating a Referral
DESCRIPTION: Staff members shall be able to view a directory of external, non-UCI providers and create a referral for students in accordance with their needs. Students then have the option to accept or decline the referral and will be given the information of the external provider.
PRIORITY: High
SOURCE: AHP Functionality Outline 6, Field Notes: 69, 100, 103
EVENT/USE CASE: Create a referral
RATIONALE: Students may have specific needs that cannot be addressed by providers at UCI or there may not be sufficient availability to see all students. In these cases, referrals are necessary to continue providing care to students.
DEPENDENCIES: Staff members must be logged in and have the ability to manage / edit cases. Referrals are tied to a case to allow for follow-up.

STABILITY: Medium (Outside providers are subject to change and individual health needs may vary.)

ID: SVA
TITLE: Staff Member Views Appointments
DESCRIPTION: Staff members shall be provided a list of their appointments and patients for the day, from which they'll be able to click and view case plans and appropriate medical history.
PRIORITY: High
SOURCE: AHP Functionality Outline 2; Field Notes: 164
EVENT/USE CASE: View appointments
RATIONALE: By providing a list of their appointments for the day, staff have an organized view of their workload for the day which allows them to better manage and coordinate patient care.
DEPENDENCIES: Staff members must be logged in and have the ability to be assigned cases/patients.
STABILITY: Low (Appointments and patient load can vary constantly and throughout the day with each case having specific needs.)

3.1.2 Non-Functional Requirements

ID: RLBY
TITLE: Reliability
DESCRIPTION: The application should be reliable and have the capability to handle a large number of users and their processes. Uptime should be above 95% and alternative contact methods should be displayed so that students can still connect with a staff member.
PRIORITY: Medium
SOURCE: Field Notes: 96, 104
EVENT/USE CASE: N/A
RATIONALE: The application may experience a wide variety of loads throughout the year, with expected use to go up in the winter season when the population is sicker or in times of emergencies.
DEPENDENCIES: N/A
STABILITY: High

ID: ACCS
TITLE: Accessibility
DESCRIPTION: The application should be accessible and usable to a wide range of users on different platforms of varying capabilities. The application should offer

accommodations for users with disabilities, provide help and tutorials, be displayed in different languages, and be available on several platforms.
PRIORITY: High
SOURCE: Field Notes: 7, 56, 94, 117
EVENT/USE CASE: N/A
RATIONALE: UCI has a diverse set of demographics and students from all over the world who may not possess native English speaker skills so displaying the AHP in different languages allows for a wider range of users to understand the portal. Additionally, accommodations should be present to make all users feel like they're receiving the same standard of care.
DEPENDENCIES: N/A
STABILITY: Medium (Translations or accommodations may change as features are added or situations arise.)

ID: PRIV
TITLE: Privacy
DESCRIPTION: The application should keep the user's sensitive information private and only make public information that is necessary. The chatbot should not have access to any personal information. The application should adhere to FERPA's data privacy regulations. By default all user's information is private and users have the ability to make any information public if they wish to do so.
PRIORITY: High
SOURCE: Field Notes 102, 130, 131
EVENT/USE CASE: N/A
RATIONALE: The application handles sensitive data about users' personal and health information therefore it is important to protect the privacy of users by only revealing the necessary amount of information and keeping as much information private as possible.
DEPENDENCIES: N/A
STABILITY: High

ID: SECU
TITLE: Security
DESCRIPTION: The application should ensure the security of all its user's data. The application shall use HTTPS and AES-128 encryption when transmitting any sensitive information including but not limited to the user's personal data, case information, and health records. The application shall require users to answer security questions when accessing sensitive information.
PRIORITY: High
SOURCE: Field Notes 8, 102, 114
EVENT/USE CASE: N/A

RATIONALE: The application handles sensitive data about users' personal and health information therefore it is important to protect the data and ensure that it is secure so that it cannot be leaked or accessed by external attackers.
DEPENDENCIES: N/A
STABILITY: High

3.1.3 External Interface Requirements

User Interfaces

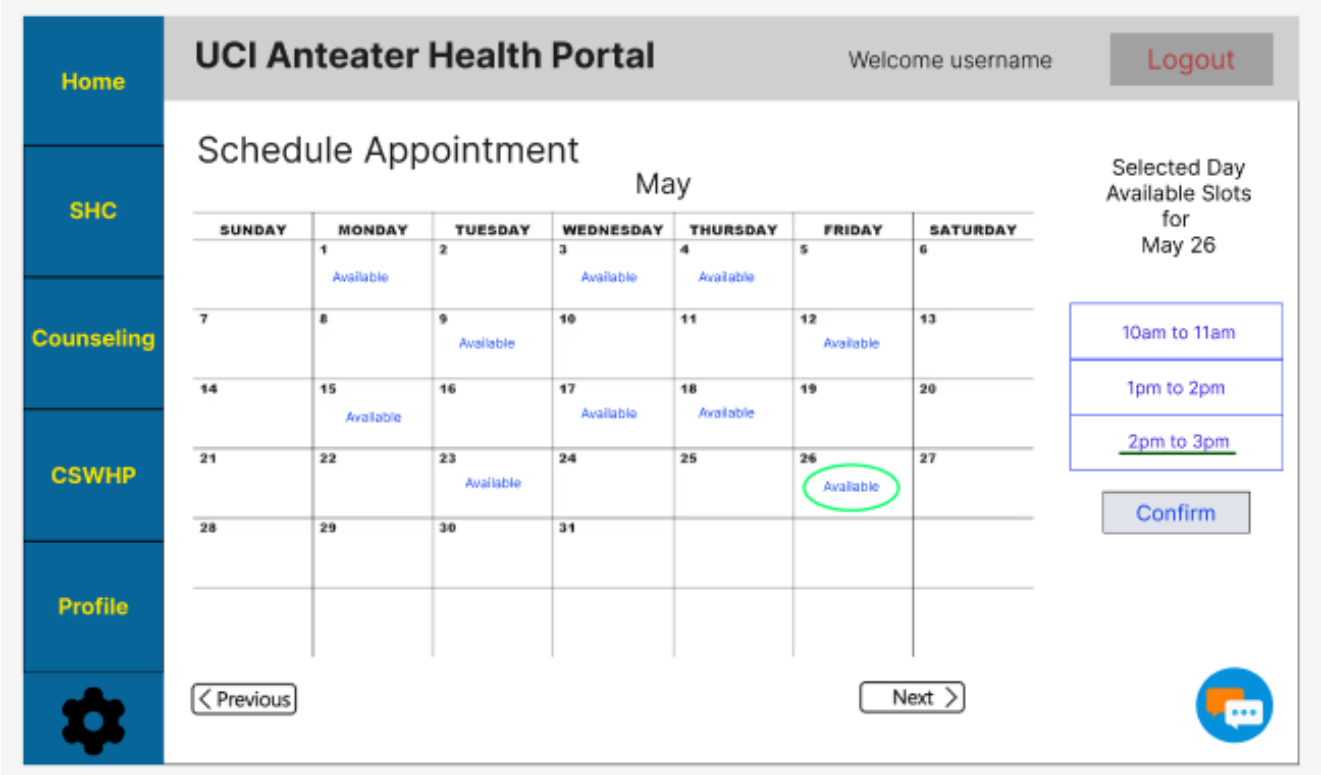


Figure 1 Student's View of Appointment Scheduling Page

The figure above displays a student's view of the scheduling page in the AHP. After logging in, a student can click one of the three center tabs, which will each have a scheduling button. The scheduling button will display the above scheduling page. The page will display a calendar with available appointments having "Available" underneath them. Once a student clicks on one of the available dates, they will see a time slot for that day. They can click on one of the slots and book an appointment.

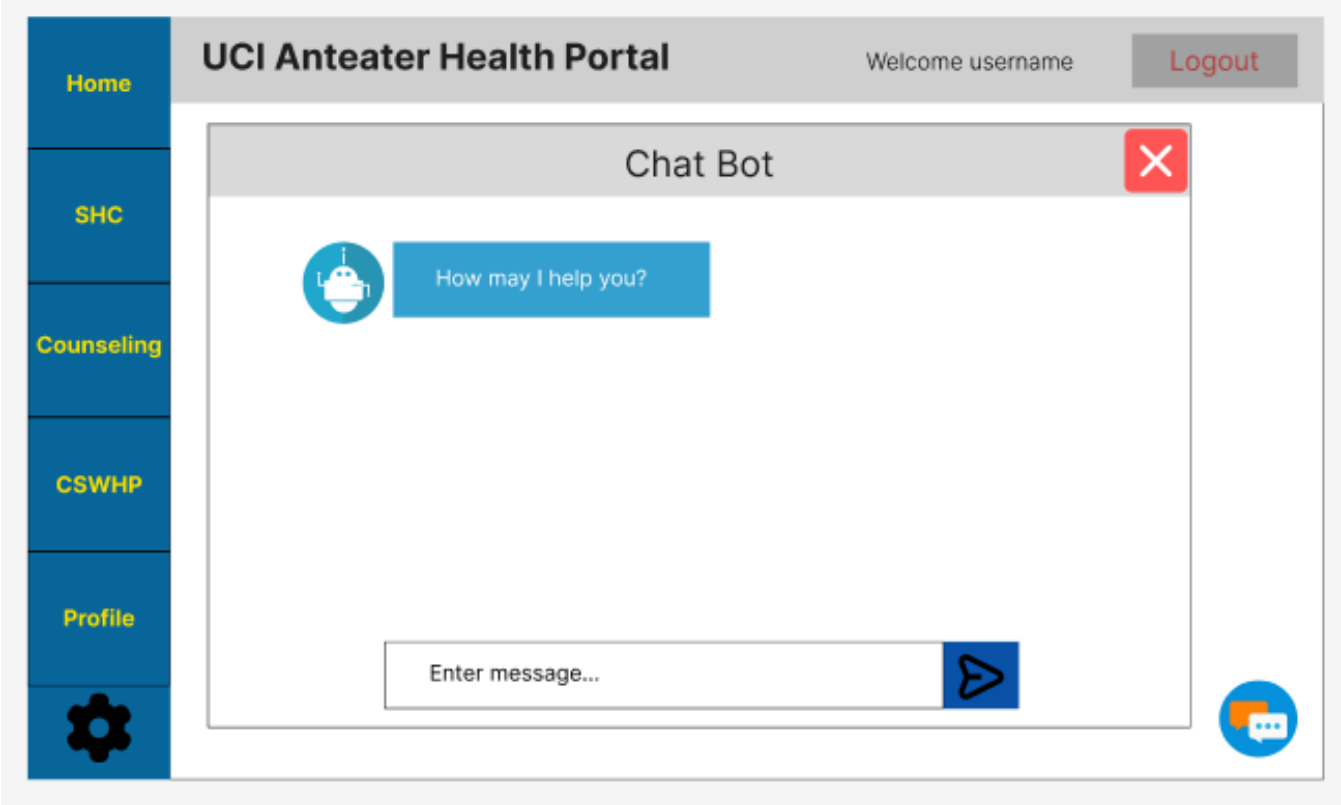


Figure 2 Student's view of chatbot

This figure displays the view whenever a user opens up the chatbot. After logging in there will be a button on the bottom right corner of the screen which shows two chat bubbles. Whenever this button is clicked it will open up this view. The chatbot is similar to a text message conversation which makes it familiar to users. There is a text bot on the bottom where users can type their messages, and there is a send button to the right of the text box.

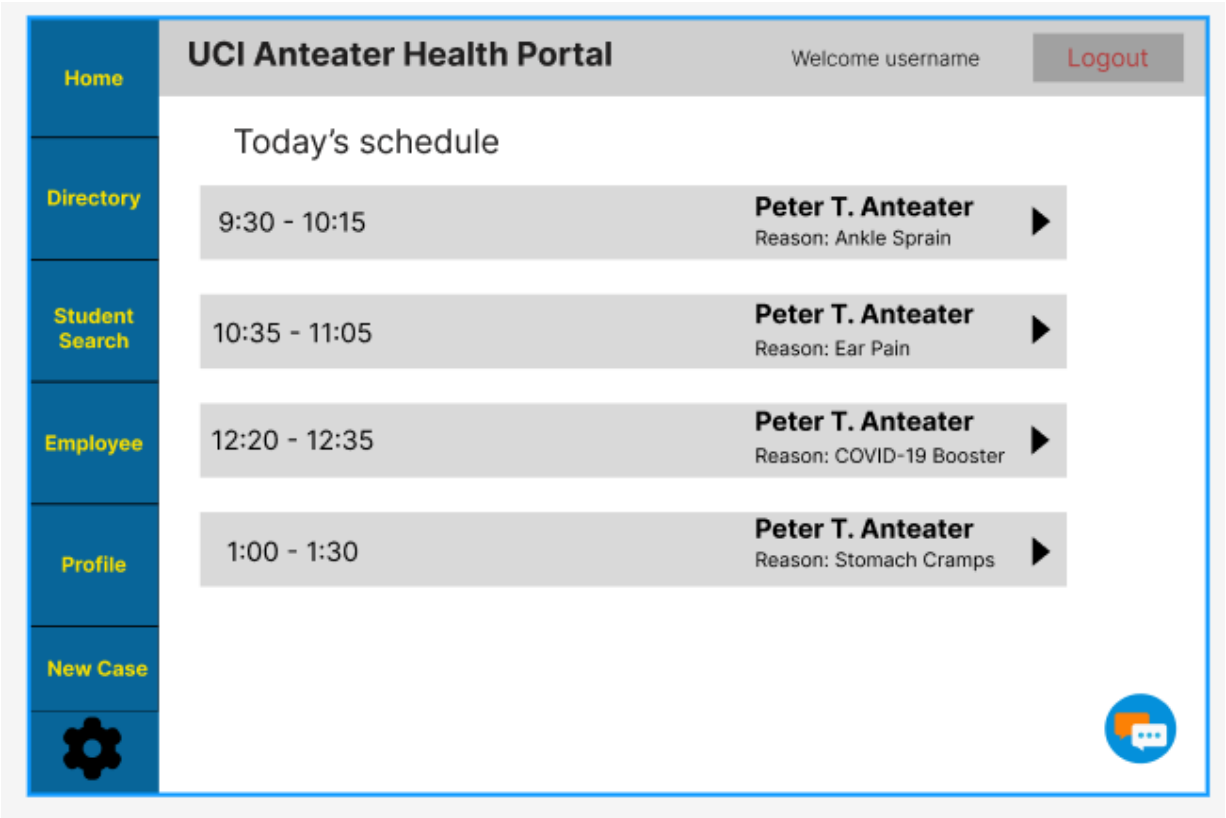


Figure 3 Staff view of appointment schedule
This figure displays the view that staff members see whenever they wish to view all their appointments for the day.

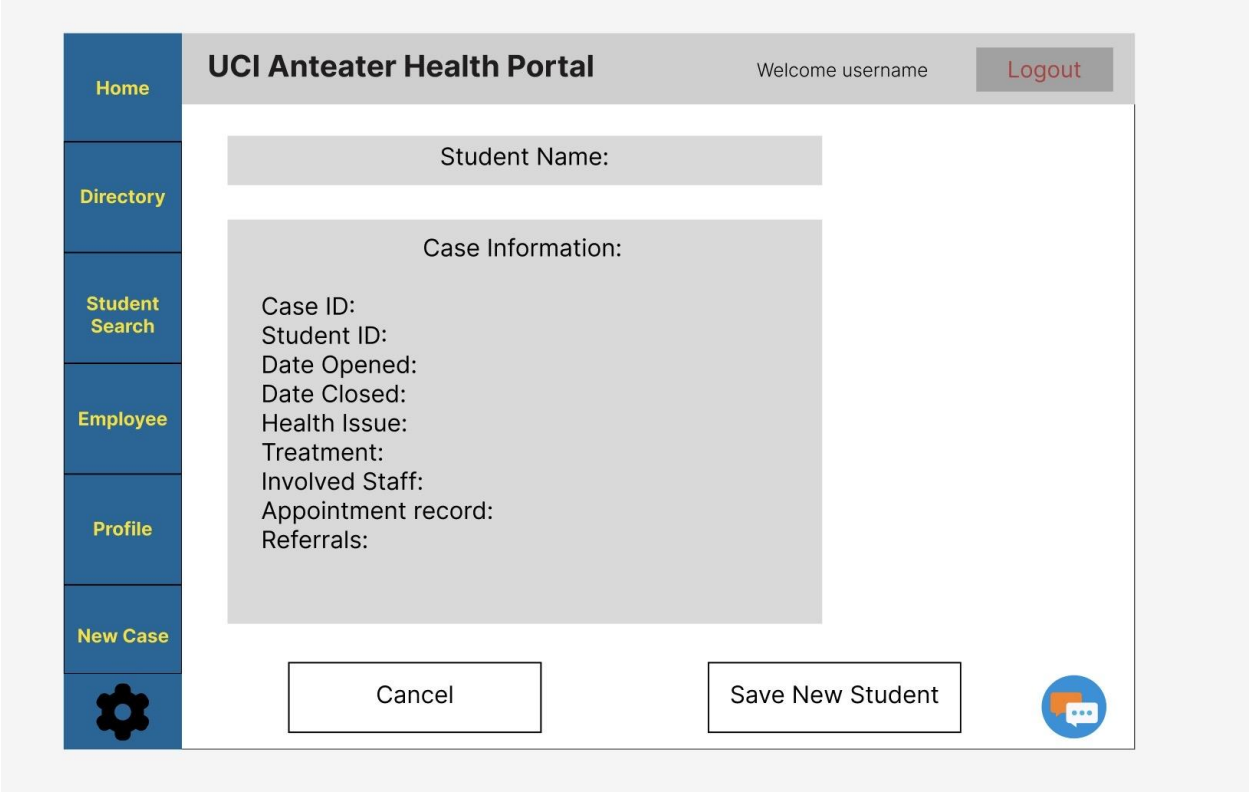


Figure 4 Staff view of creating a student case.
This figure displays a staff member's view of creating a student case. In this page, a staff member can enter the student's name and case information. Then staff can click on the "Save New Student" to save the new student case.

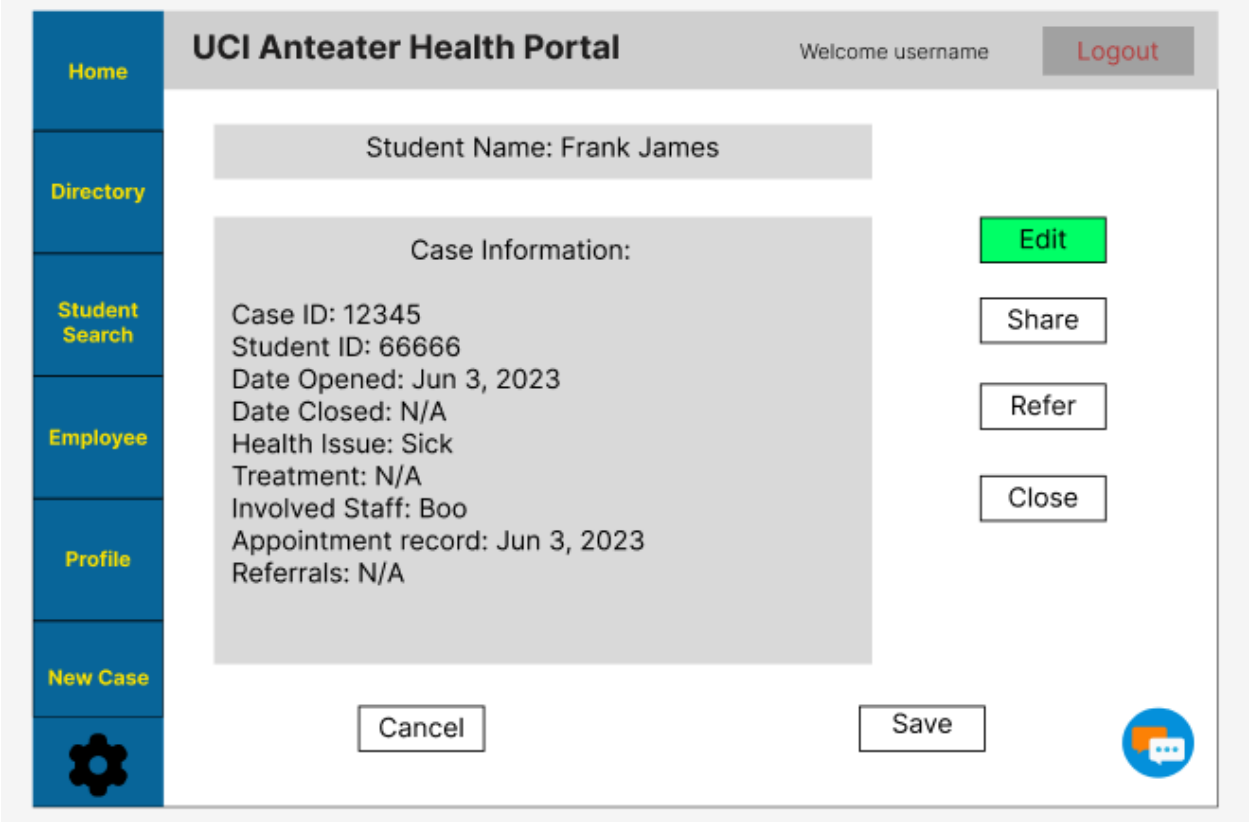


Figure 5 Staff view of a student's case

This figure displays a staff member's view of an opened student case. On this page, a staff member can edit, share, refer, and even close a case. If the staff member decides to edit, they can click the save button to save their changes.

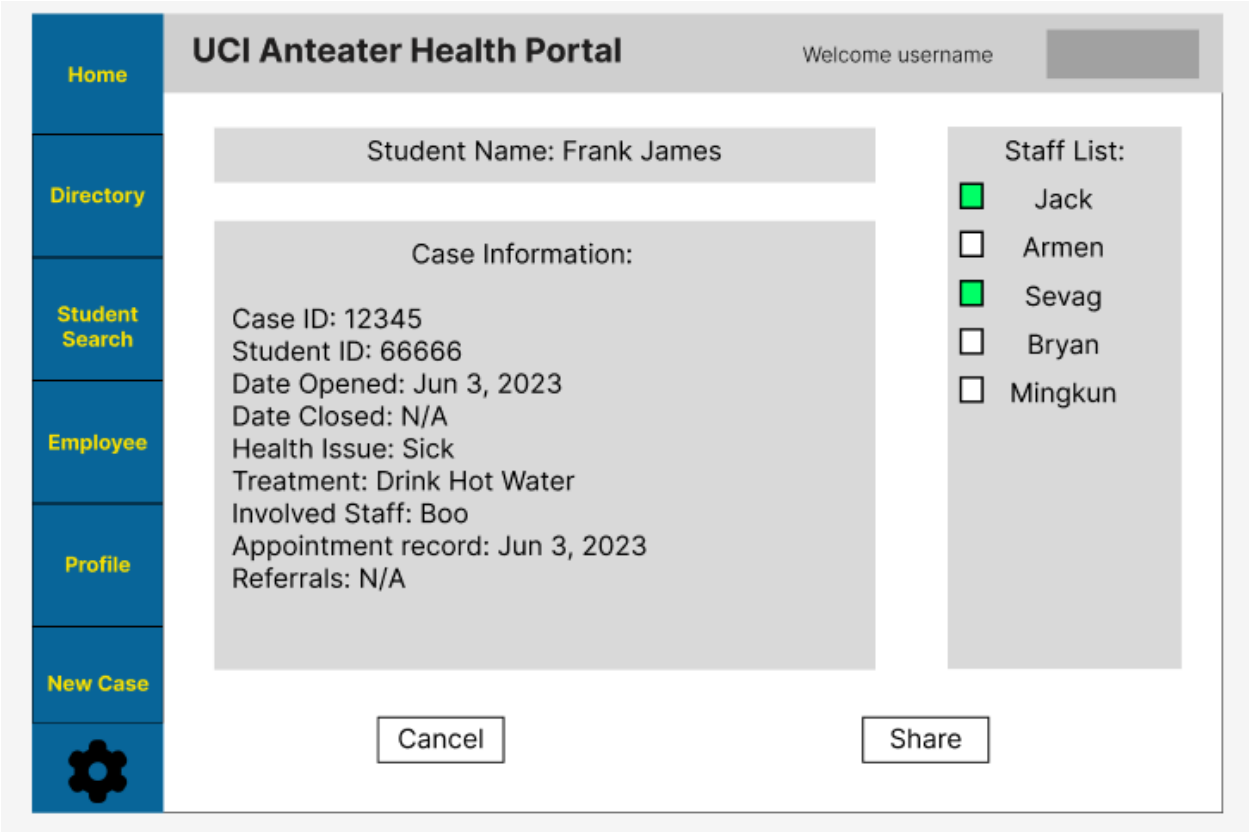


Figure 6 Staff view of a student's case while in the process of sharing
This figure displays a staff member in the process of sharing an open case with other staff members. The staff member can check all the staff members they want to share with. Then the staff member can click on the "Share" button to finish the sharing process.

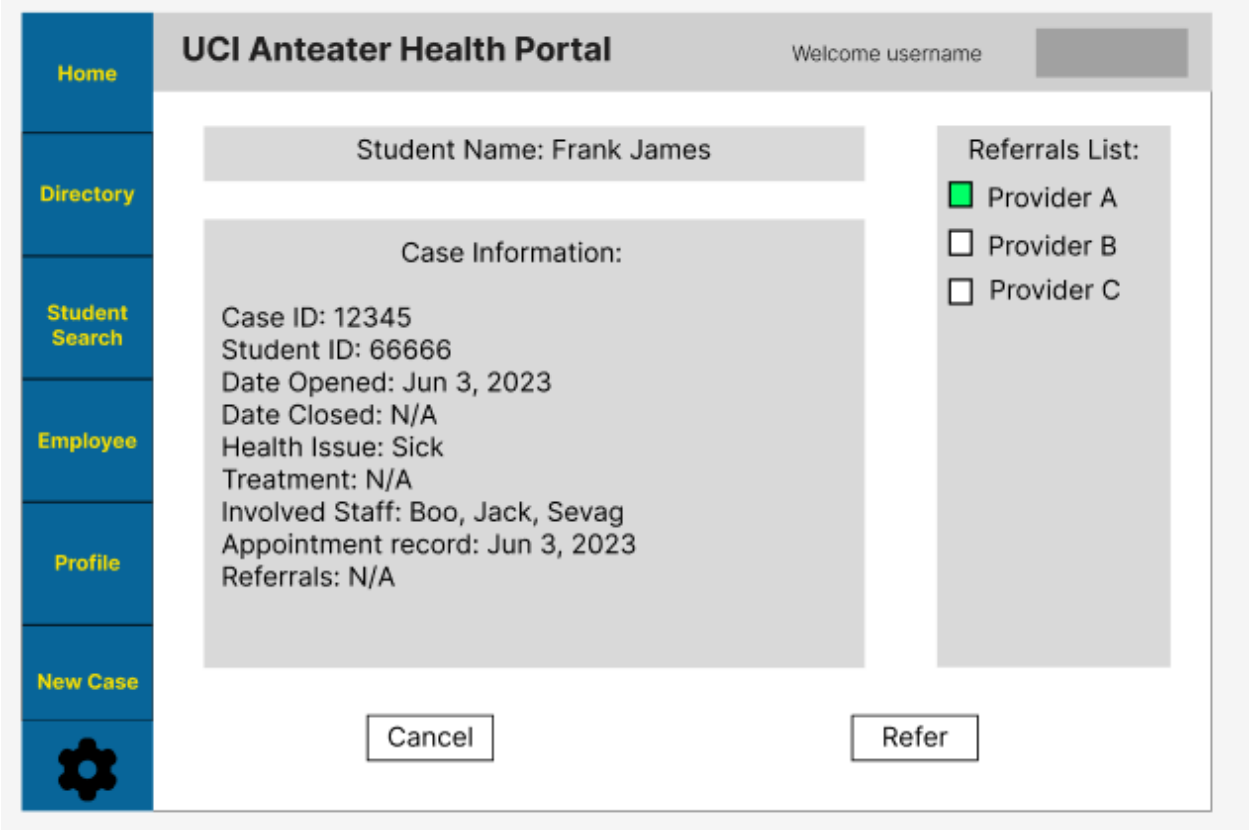


Figure 7 Staff view of a student's case while in the process of referring
This figure displays a staff member in the process of referring an open case with other providers. The staff member can check all the providers they want to refer with. Then the staff can click on the "Refer" button to refer the student's case to providers.

Hardware Interfaces

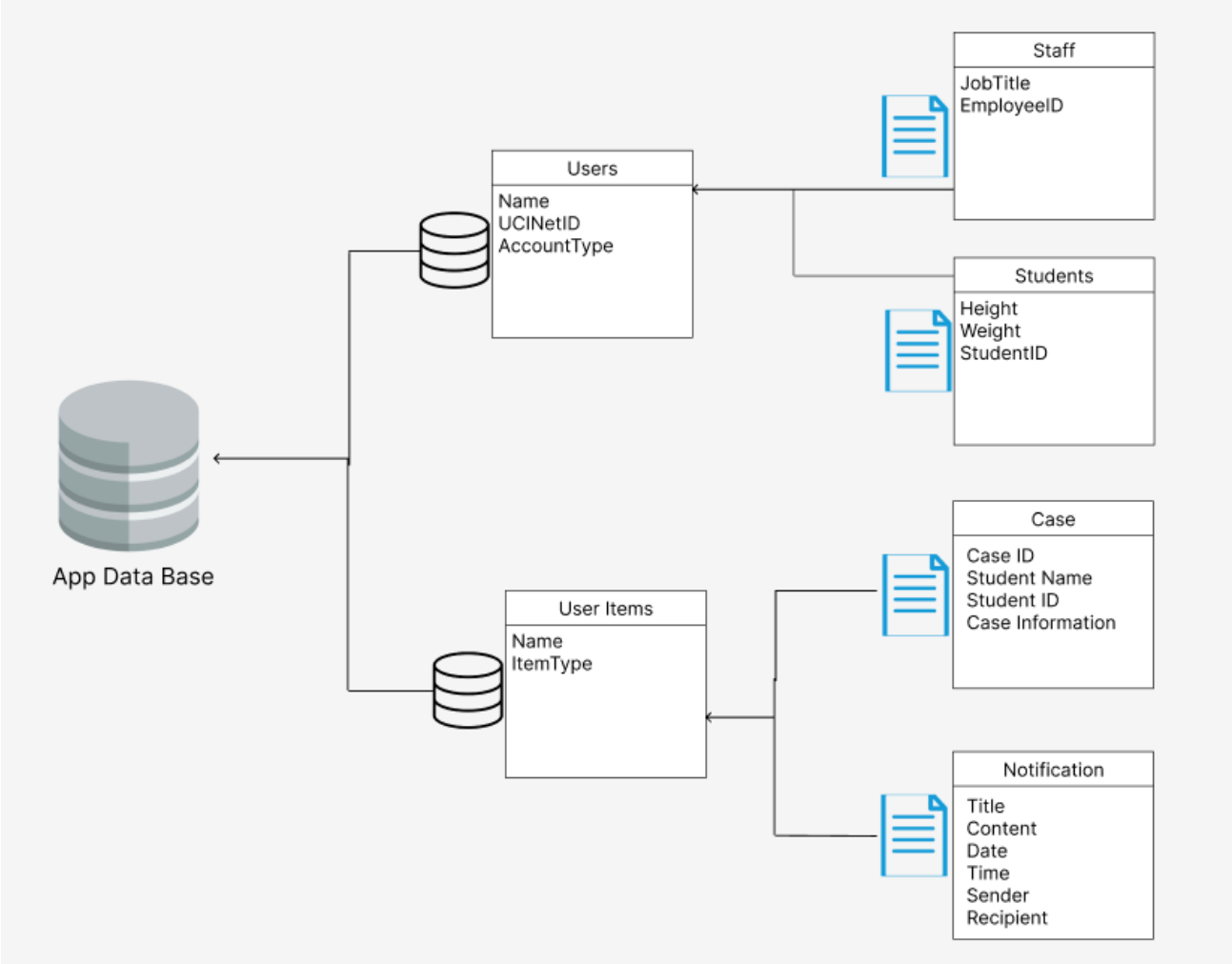
This application will have a web and mobile interface. The web interface will be accessible on desktop and laptop computers through a web browser. The mobile interface will the accessible on Android and iOS devices through their respective mobile applications.

Software Interfaces

Software	**Description**
StudentAccess	AHP will obtain user information from UCI's StudentAccess database using NetID authentication
Back-end case management system	AHP will integrate with UCI's existing back-end case management system that is used at the three centers.

WebAuth	WebAuth is an SSO service that uses UCI NetID to authenticate users
Web browsers (Chrome, Firefox, Safari, Edge)	The desktop version of AHP will be accessed through these supported web browsers

3.1.4 Logical Data Model



The database will contain the following entities:

- Users: Attributes stored are Name, UCINetID, and AccountType. The AccountType can be either Staff or Student
    - Staff will have the attributes JobTitle and EmployeeID
    - Student will have the attributes Height, Weight, and StudentID
- User Items: Attributes stored are Name and ItemType. The ItemType can be either Case or Notification

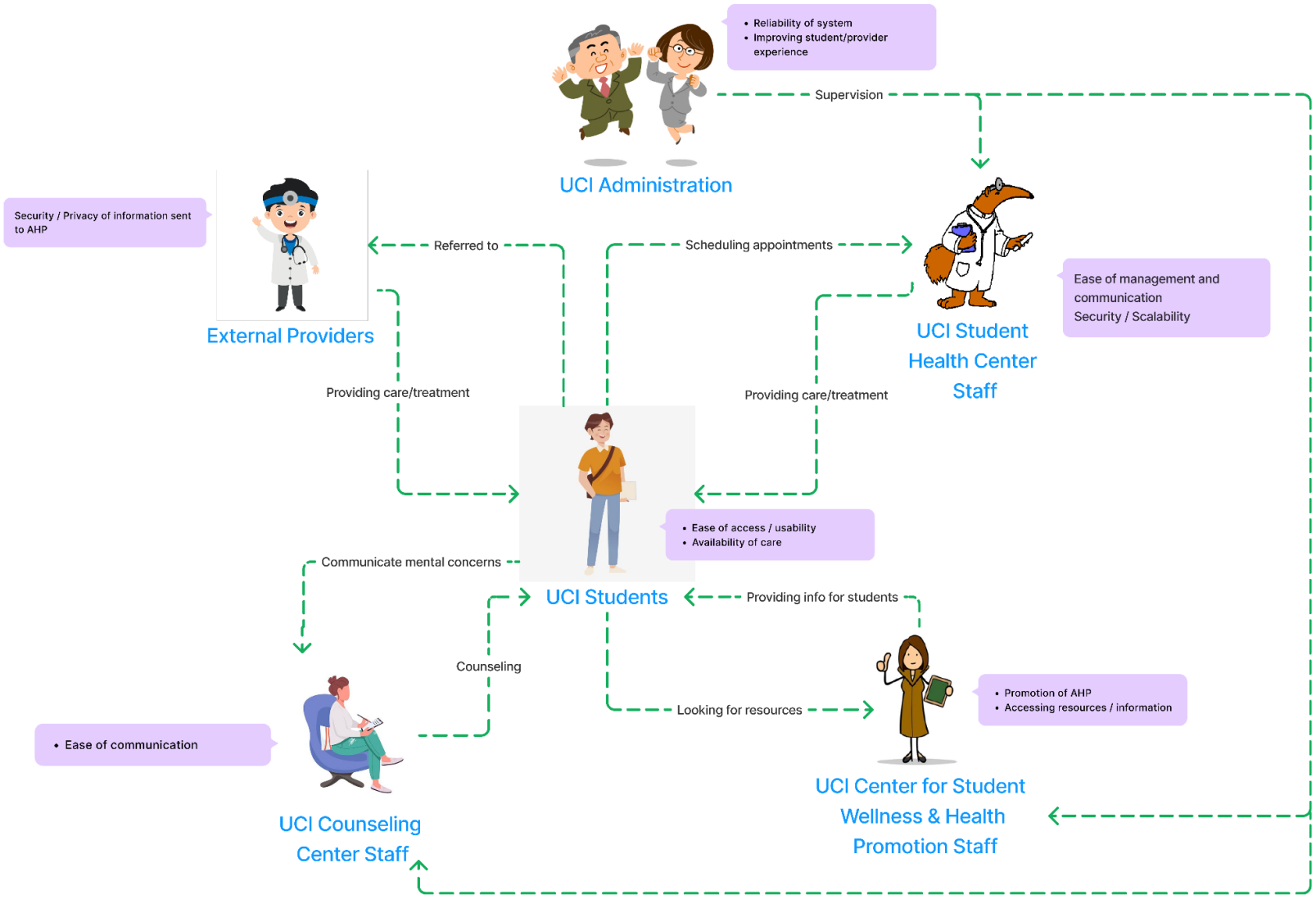
- Case will have the attributes CaseID, StudentName, StudentID, and CaseInformation
- Notification will have the attributes Title, Content, Date, Time, Sender, and Recipient

Appendix

A.1 Analysis Models

HW2: Stakeholder Model

Rich Picture Diagram



Textual Stakeholder Analysis

Stakeholder 1: UCI Students
Priority: High
Relations: Considered one of the main users of the portal, receives care from providers
Expertise: Assumed low expertise in navigating healthcare options
Concerns: Ease of access, reliability, availability

Stakeholder 2: UCI Administration
Priority: Medium
Relations: Holds authority over students and UCI providers
Expertise: High expertise in coordination and communication
Concerns: Reliability, improving student/provider experience

Stakeholder 3: External Providers
Priority: Low
Relations: No relation to UCI but works together with UCI Student Health Center
Expertise: High expertise in healthcare
Concerns: Patient privacy, managing incoming referrals

Stakeholder 4: UCI Student Health Center Staff
Priority: Medium
Relations:
- Provides care to students
- Monitored by UCI Administration
- Refer students to external providers

Expertise: High expertise in healthcare
Concerns: Ease of management and communication, security and scalability

Stakeholder 5: UCI Counseling Center Staff
Priority: Medium
Relations:
- Give counseling to students
- Monitored by UCI Administration

Expertise: High expertise in mental health counseling
Concerns: Ease of communication, appropriate recommendations from chatbot

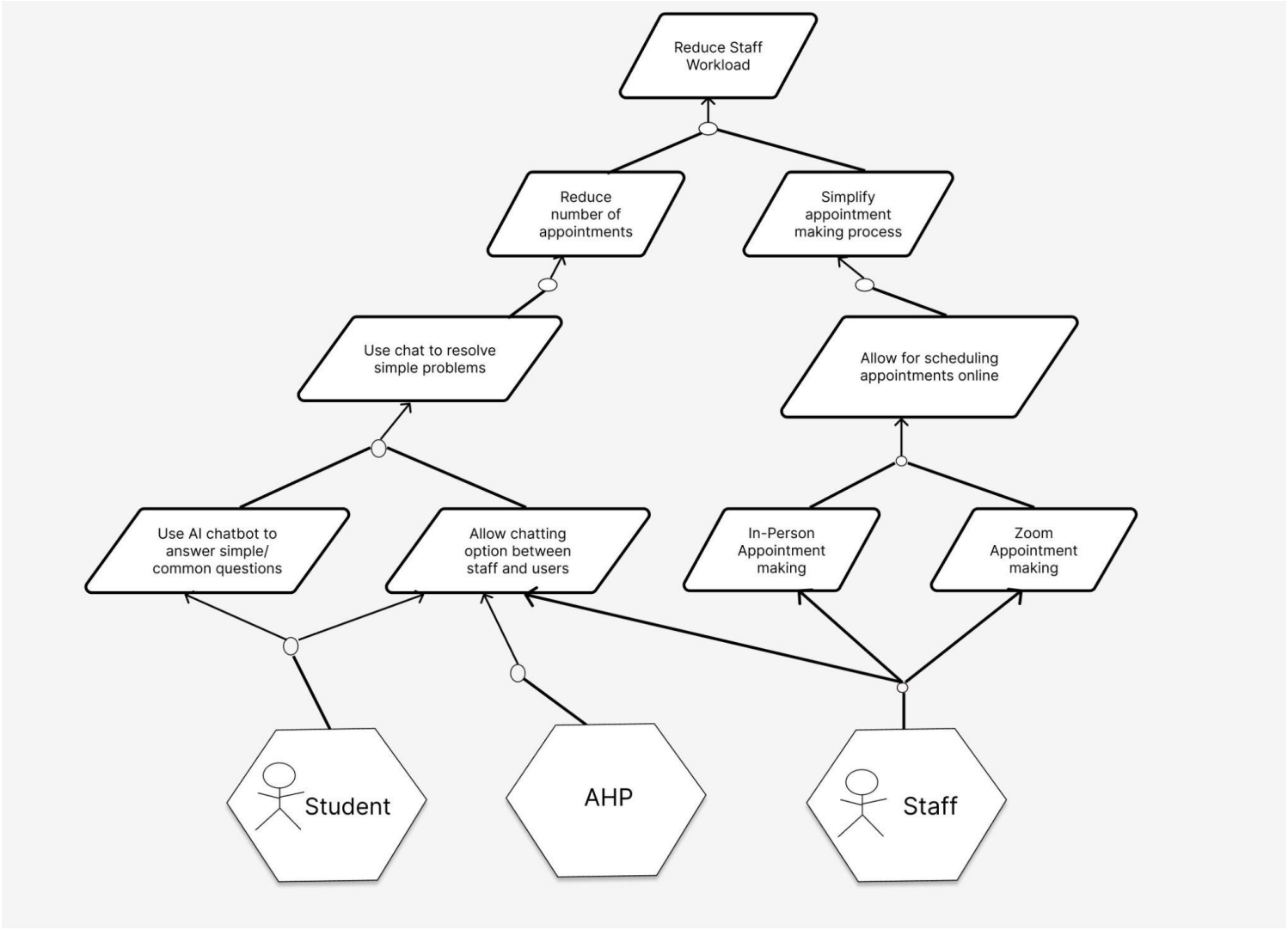
Stakeholder 6: UCI Center for Student Wellness & Health Promotion Staff
Priority: Medium
Relations:
- Provide wellness and health promotion services to students.
- Monitored by UCI Administration
- Communicate with other centers

Expertise: High expertise in health promotion, mental health, and sexual health.

Concerns: Promotion of AHP, accessing resources/information

HW3: Goal Models

Goal 1: Reduce staff workload



Model Explanation:
This model demonstrates how the Anteater Health Portal will reduce the staff workload by reducing the number of appointments and simplifying the appointment-making process. Appointments will be reduced by allowing students to resolve their issues using a chat feature that will either utilize AI or actual staff members. The system will also allow users to schedule appointments online. Appointment types include in-person and Zoom meetings.

Goal Annotation: Reduce Staff Workload

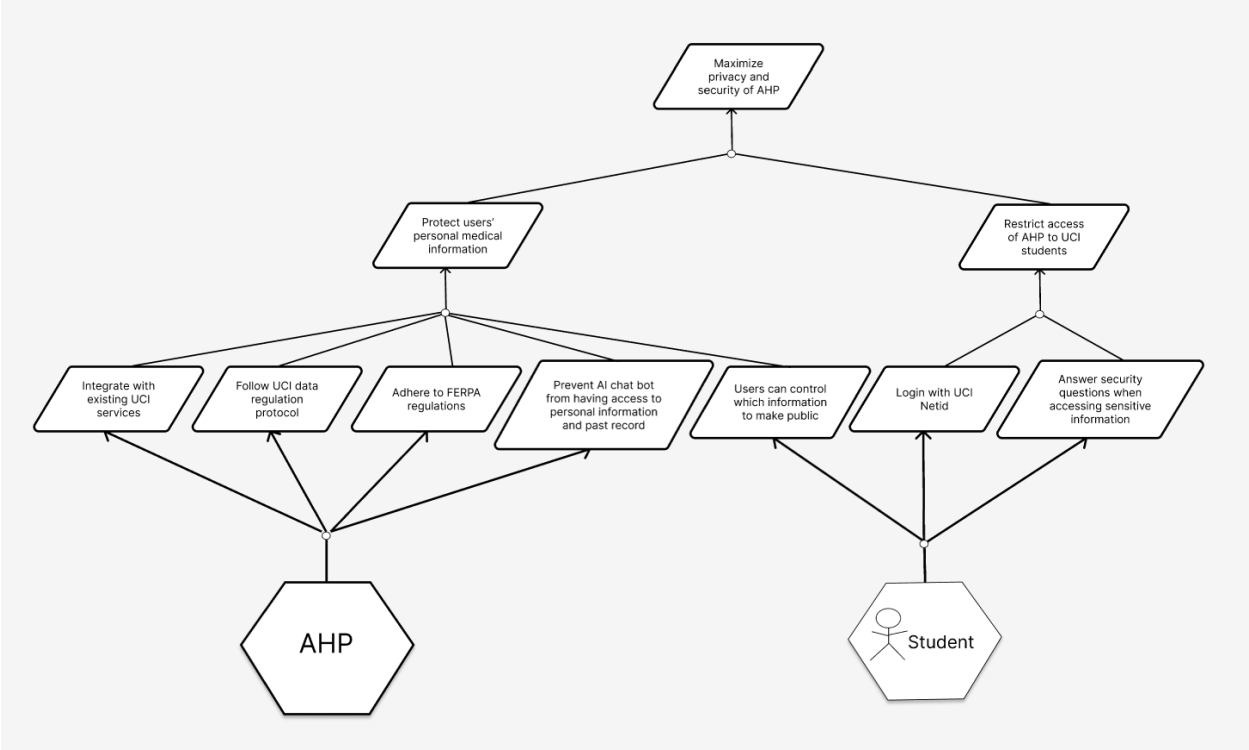
1. **Reduce Staff Workload**
    a. Definition: The AHP portal should help reduce the staff workload
    b. Type: Soft
    c. Source: Case Study - The Anteater Health Portal (AHP) Project
    d. Priority: High
2. **Reduce the number of appointments**
    a. Definition: The AHP portal should be able to reduce the number of in-person appointments since the staff is being overworked and there is no more space in the facilities to accommodate the needs of patients
    b. Type: Soft
    c. Source: Case Study - The Anteater Health Portal (AHP) Project
    d. Priority: High
3. **Use chat to resolve simple problems**
    a. Definition: The system shall allow users to chat with the staff about simple questions
    b. Type: Behavioral (Maintain)
    c. Source: Elicitation Question 10, 27
    d. Priority: High
4. **Use an AI chatbot to answer simple/common questions**
    a. Definition: The system should answer simple or common questions with an AI rather than a staff member
    b. Type: Behavioral (Achieve)
    c. Source: Elicitation Question 10
    d. Priority: Medium
5. **Allow chatting option between staff and users**
    a. Definition: The system should allow users to chat with a staff member whenever the questions cannot be answered by the AI
    b. Type: Behavioral (Achieve)
    c. Source: Case Study - The Anteater Health Portal (AHP) Project
    d. Priority: High
6. **Simplify appointment-making process**
    a. Definition: The system shall direct students to book an appointment with the appropriate provider and availability.
    b. Type: Behavioral (Achieve)
    c. Source: Elicitation Question 36 / 73
    d. Priority: High
7. **Allow for scheduling appointments online**

   a. Definition: The system shall allow students to book an appointment online without the need to call a staff member.
   b. Type: Behavioral (Achieve)
   c. Source: Elicitation Question 3
   d. Priority: High

8. **In-person appointment making**
   a. Definition: The system should allow students to book in-person appointments with staff.
   b. Type: Behavioral (Achieve)
   c. Source: Case Study - The Anteater Health Portal (AHP) Project
   d. Priority: High

9. **Zoom appointment making**
   a. Definition: The system should allow students to book a zoom appointment with staff
   b. Type: Behavioral (Achieve)
   c. Source: Case Study - The Anteater Health Portal (AHP) Project
   d. Priority: High

Goal 2: Maximize privacy and security of AHP



Model Explanation:
This model demonstrates how the Anteater Health Portal will ensure the privacy and security of users' personal information and health record. The system will require login using UCI Netid, restricting access to only UCI students. Furthermore, accessing personal information via AHP will require the user to answer security questions. Since AHP will integrate with existing services, most of the users' personal data won't be stored on the system. Data that is stored on the system will adhere to UCI's data regulation protocol as well as FERPA regulation. Also, the AI chat service will not have access to users' personal information or health record.

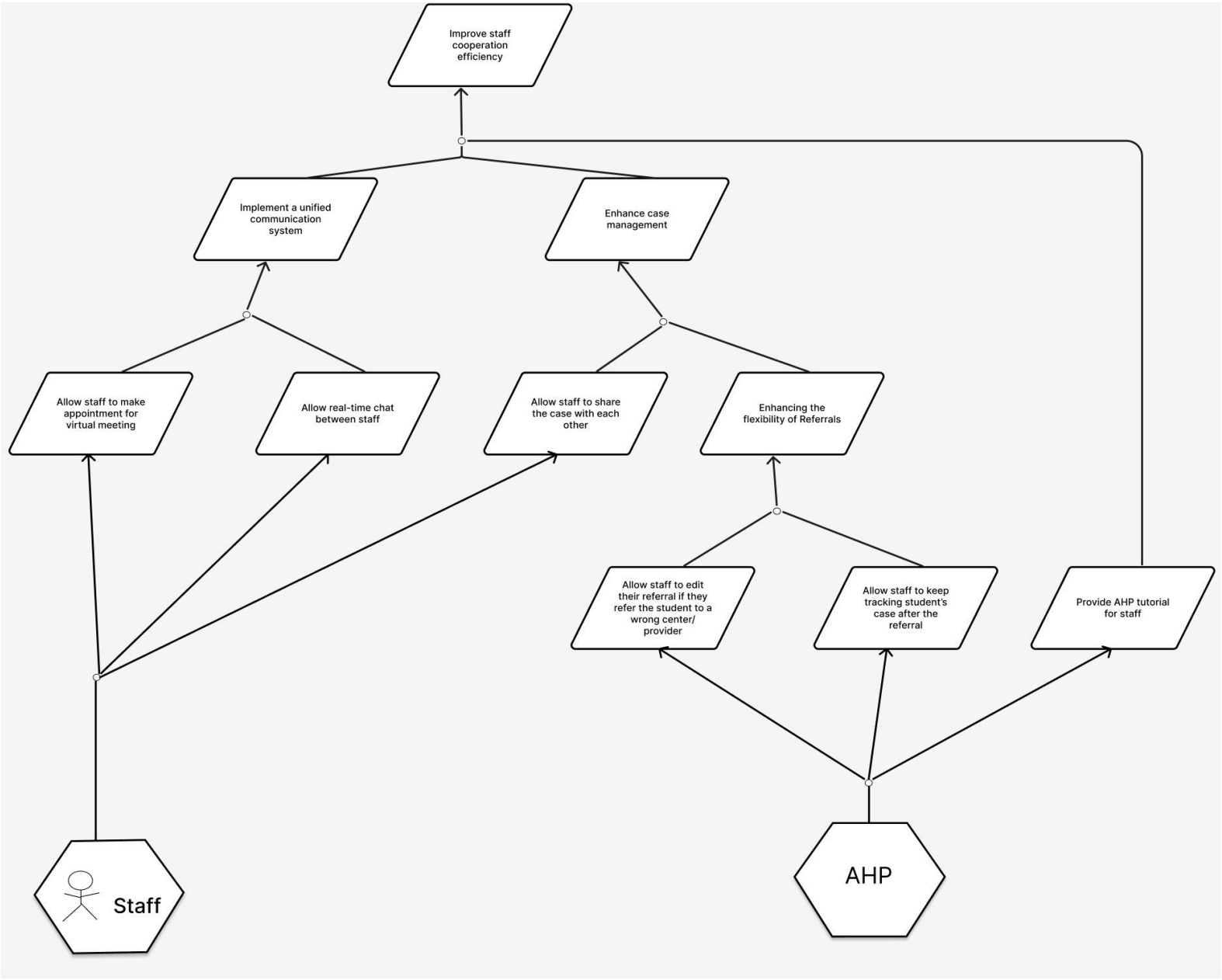
Goal Annotation: Maximize privacy and security of AHP

1. **Maximize privacy and security of AHP**
    a. Definition: The system shall ensure the privacy and protection of users' data as well as the overall security of the system.
    b. Type: Soft
    c. Source: Elicitation Question 102
    d. Priority: High
2. **Protect users' personal medical information**
    a. Definition: The system must protect users' personal information and health records

   b. Type: Behavioral (Achieve)
   c. Source: Elicitation Question 8
   d. Priority: High
3. **Integrate with existing UCI services**
   a. Definition: The system will integrate with UCI's existing API that is used by the three centers
   b. Type: Behavioral (Achieve)
   c. Source: Elicitation Question 46
   d. Priority: High
4. **Follow UCI data regulation protocol**
   a. Definition: The system must follow the guidelines and protocol that UCI defines about data privacy and protection
   b. Type: Behavioral (Maintain)
   c. Source: Elicitation Question 102
   d. Priority: High
5. **Adhere to FERPA regulations**
   a. Definition: The system must adhere to FERPA rules
   b. Type: Behavioral (Maintain)
   c. Source: Elicitation Question 130
   d. Priority: High
6. **Prevent AI chatbot from having access to personal information and past record**
   a. Definition: The system must not allow the AI chatbot to have access to any user's personal information or health record
   b. Type: Behavioral (Avoid)
   c. Source: Elicitation Question 131
   d. Priority: High
7. **Users can control which information to make public**
   a. Definition: The system should allow users to decide which information to make public, by default most information is private
   b. Type: Behavioral (Achieve)
   c. Source: Elicitation Question 8
   d. Priority: Medium
8. **Login with UCI Netid**
   a. Definition: The system should only allow student log in with their UCI Netid.
   b. Type: Behavioral (Achieve)
   c. Source: Elicitation Question 48
   d. Priority: High
9. **Answer security questions when accessing sensitive information**

a. Definition: The system should prompt the user with security questions when accessing sensitive information
b. Type: Behavioral (Maintain)
c. Source: Elicitation Question 114
d. Priority: High

Goal 3: Improve staff cooperation efficiency



Model Explanation:
This model illustrates how AHP will improve staff collaboration. Collaboration among the staff of the three centers is inevitable, so improving the efficiency of collaboration among staff is crucial. AHP will improve staff collaboration efficiency by implementing a unified communication system and enhancing case management.

Goal Annotation: Improve staff cooperation efficiency

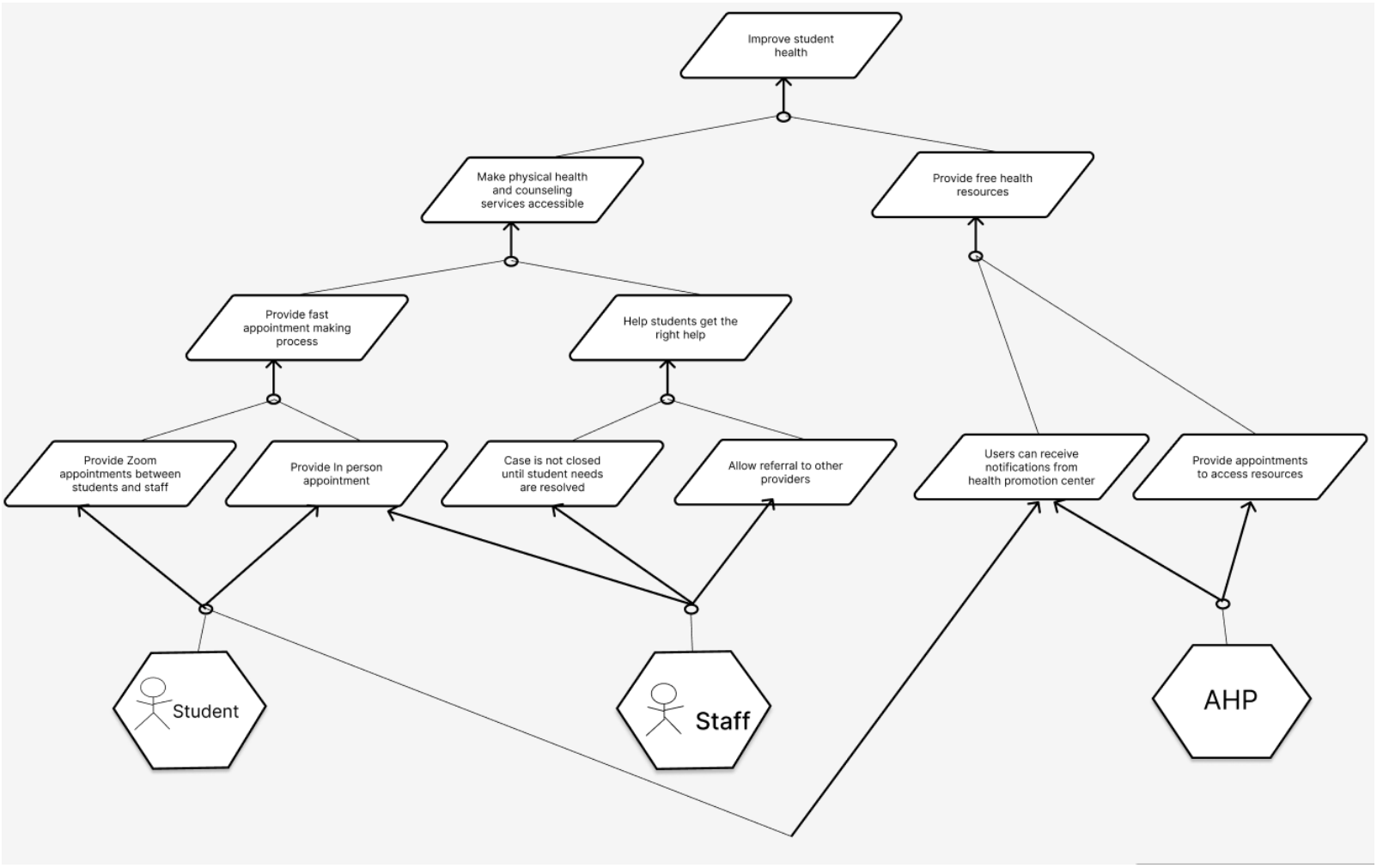
1. **Improve staff cooperation efficiency**
    a. Definition: Ensuring staff can work together effectively by optimizing communication and enhancing case management.
    b. Type: Soft
    c. Source: Case Study - The Anteater Health Portal (AHP) Project
    d. Priority: High
2. **Implement a unified communication system**
    a. Definition: Improve the communication efficiency among the staff of the three centers by implementing a unified communication system.
    b. Type: Behavioral (Achieve)
    c. Source: Case Study - The Anteater Health Portal (AHP) Project
    d. Priority: High
3. **Allow staff to make an appointment for virtual meeting**
    a. Definition: Make communication between staff more effective
    b. Type: Behavioral(Achieve)
    c. Source: Requirements Elicitation - Question 99
    d. Priority: High
4. **Allow real-time chat between staff**
    a. Definition: Make communication between staff more effective
    b. Type: Behavioral (Achieve)
    c. Source: Requirements Elicitation - Question 23
    d. Priority: High
5. **Enhance case management**
    a. Definition: Improve the experience for staff to collaborate with other staff when using AHP to process and track student cases.
    b. Type: Soft
    c. Source: Requirements Elicitation - Question 71
    d. Priority: High
6. **Allow staff to share the case with each other**

   a. Definition: Allowing staff to share cases with each other can help staff better collaborate on student cases, or refer student cases more easily.
   b. Type: Behavioral (Achieve)
   c. Source: Requirements Elicitation - Question 71
   d. Priority: High

7. **Enhancing the flexibility of Referrals**
   a. Definition: Enhancing the flexibility of referrals can improve the tolerance of referrals and help staff from different centers better communicate students' cases.
   b. Type: Soft
   c. Source: Requirements Elicitation - Question 69
   d. Priority: High
8. **Allow staff to edit their referral if they refer the student to the wrong center/provider**
   a. Definition: Allowing staff to edit their referral can avoid causing distress to other staff when they accidentally refer students' cases to the wrong staff.
   b. Type: Behavioral (Achieve)
   c. Source: Requirements Elicitation - Question 91
   d. Priority: Medium
9. **Allow staff to keep tracking student's case after the referral**
   a. Definition: Allowing staff to continue tracking and following up on the progress of a student's case after the student has been referred to another center or provider can make sure original staff can provide suggestions to post-referral staff when needed.
   b. Type: Behavioral (Achieve)
   c. Source: Requirements Elicitation - Question 88
   d. Priority: Medium
10. **Provide AHP tutorial for staff**
   a. Definition: Providing tutorials for staff can help staff better understand how to use AHP to collaborate with other staff.

b. Type: Soft
c. Source: Requirements Elicitation - Question 60
d. Priority: Medium

Goal 4: Improve student health



Model Explanation:
This model demonstrates how the Anteater Health Portal will help UCI students to improve their physical and mental health. The system will allow students to make in-person or Zoom appointments for medical and counseling needs. If none of the UCI providers can fulfill the needs of a student, then the system will allow the provider to refer students to different providers. Also, students will be able to choose whether they would like to receive notifications about health resources.

Goal Annotation: Improve student health

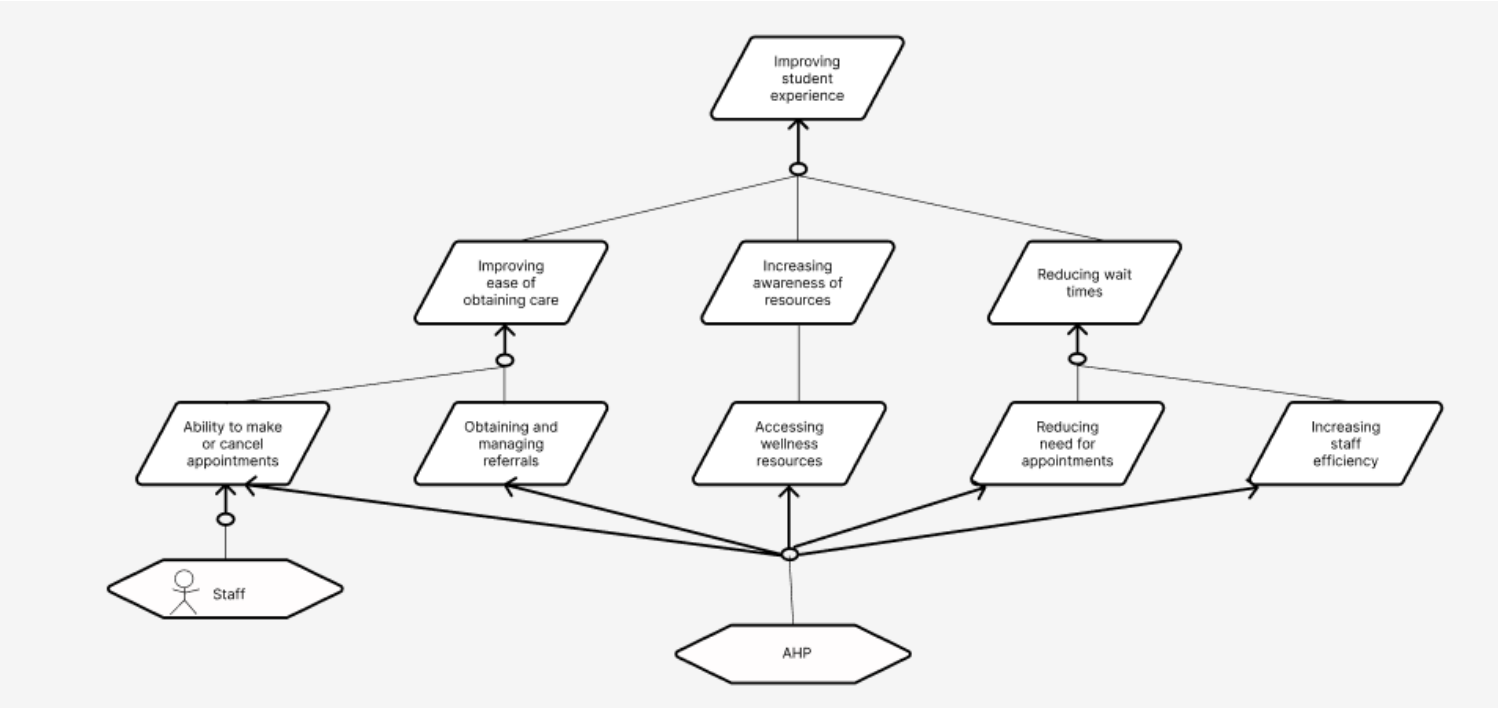
1. **Improve student health**
    a. Definition: The system shall help improve students' physical and mental health.

   b. Type: Soft
   c. Source: Elicitation question 122
   d. Priority: High
2. **Make physical health and counseling services accessible**
   a. Definition: The system shall make it easy for the students to access physical health and counseling services.
   b. Type: Behavioral (Achieve)
   c. Source: Elicitation question 58
   d. Priority: High
3. **Provide free health resources**
   a. Definition: Students shall be able to receive or use free health resources.
   b. Type: Behavioral (Achieve)
   c. Source: Elicitation question 122
   d. Priority: High
4. **Provide a fast appointment-making process**
   a. Definition: Students shall be able to quickly make appointments with little difficulty.
   b. Type: Soft
   c. Source: Elicitation question 50
   d. Priority: High
5. **Help students get the right help**
   a. Definition: Students shall be provided the right health treatments and personnel based on their needs
   b. Type: Behavioral (Achieve)
   c. Source: Elicitation question 100
   d. Priority: High
6. **Provide Zoom appointments between students and staff**
   a. Definition: Students shall be able to make appointments with the staff over Zoom meetings.
   b. Type: Behavioral (Achieve)
   c. Source: Elicitation question 12
   d. Priority: High
7. **Provide In-person appointment**
   a. Definition: Students shall be able to make in-person appointments with the staff.
   b. Type: Behavioral (Achieve)
   c. Source: Elicitation question 12
   d. Priority: High
8. **The case is not closed until student needs are resolved**

   a. Definition: A student's health case shall be active until the student's needs are resolved.
   b. Type: Behavioral (Maintain)
   c. Source: Elicitation question 88
   d. Priority: High

9. **Allow referral to other providers**
   a. Definition: If none of the UCI services can accommodate the needs of a student then the staff must refer the student to another provider.
   b. Type: Behavioral (Achieve)
   c. Source: Elicitation question 69
   d. Priority: High
10. **Users can receive notifications from the health promotion center**
   a. Definition: Users can choose whether to receive notifications about different resources.
   b. Type: Behavioral (Achieve)
   c. Source: Elicitation question 14
   d. Priority: Low
11. **Provide appointments to access resources**
   a. Definition: Users shall be able to make appointments through AHP to access health resources.
   b. Type: Behavioral (Achieve)
   c. Source: Elicitation question 32
   d. Priority: High

Goal 5: Improve student experience



Model Explanation:

This model demonstrates how different software agents of the AHP will come together to improve the student experience by improving the ease of obtaining care, increasing awareness of resources and reducing wait times. Students often feel that obtaining the care they need is a time consuming and potentially frustrating process; by allowing them to book and manage appointments online and reducing the need for appointments, it will be easier for students to see a provider. Students also are often confused about which center to go for help or are unaware of the resources available to them, the AHP will compile this information and help direct students to the appropriate center.

Goal Annotation: Improving student experience

1. **Improving student experience**
    a. Definition: The portal shall improve the experience of students seeking care.
    b. Type: Soft
    c. Source: Case Study - The Anteater Health Portal (AHP) Project
    d. Priority: High
2. **Improving ease of obtaining care**

   a. Definition: The portal shall direct students to the appropriate center through student provided information and surveys.
   b. Type: Behavioral (Achieve)
   c. Source: Elicitation Question 79
   d. Priority: High
3. **Increasing awareness of resources**
   a. Definition: The portal shall promote and improve the resources that are available to students.
   b. Type: Soft
   c. Source: Elicitation Question 106 / 122
   d. Priority: Medium
4. **Reducing wait times**
   a. Definition: Different components of the AHP shall together reduce wait times for students.
   b. Type: Soft
   c. Source: Elicitation Question 24 / Case Study - The Anteater Health Portal (AHP) Project
   d. Priority: Medium / High
5. **Ability to make or cancel appointments**
   a. Definition: The system shall allow students to make and cancel appointments online
   b. Type: Behavioral (Achieve)
   c. Source: Case Study - The Anteater Health Portal (AHP) Project
   d. Priority: High
6. **Obtaining and managing referrals**
   a. Definition: If students need an outside referral, providers shall be able to refer them to a provider and follow up with students.
   b. Type: Behavioral (Achieve)
   c. Source: Elicitation Question 44 / 69 / 100
   d. Priority: High
7. **Accessing wellness resources**
   a. Definition: The portal shall provide mental health and wellness resources such as videos and articles.
   b. Type: Behavioral (Maintain)
   c. Source: Elicitation Question 122
   d. Priority: Medium
8. **Reducing need for appointments**
   a. Definition: Students must be able to chat with providers about issues that may not need an appointment.
   b. Type: Behavioral (Achieve)

c. Source: Case Study - The Anteater Health Portal (AHP) Project
d. Priority: High

9. **Increasing staff efficiency**
    a. Definition: Staff must be able to manage students' cases and care plan, and communicate with other staff members about them.
    b. Type: Behavioral (Achieve)
    c. Source: Case Study - The Anteater Health Portal (AHP) Project
    d. Priority: High

HW4: Scenarios and Use Cases

Scenario 1:

Author: Sevag Avedissian

Sources:

- Goal Model: Improve Student Health
- Case Study: AHP Functionality Outline #1,3
- Field Notes: 11, 13

Ashot is a Ph.D. student at UCI in the field of mathematics. He has been advised to seek AOD Counseling after an incident where he was seen smoking on campus along the Watson Bridge. Ashot visits the Anteater Health Portal Website and navigates to the appointment booking page. He decides to schedule a virtual consultation with the UCI Student Health and Wellness Center at the earliest possible available slot. Upon booking the appointment, Ashot receives a confirmation email stating that he has scheduled an appointment for Wednesday at 12:00 pm. This email also contains a link to the virtual Zoom meeting where the consultation will take place. One day before the appointment, Ashot receives a text notification from AHP of his upcoming appointment. He realizes that he has a job interview for a professor position at the Glendale Community College scheduled at the same time as his AOD Counseling appointment. He visits the Anteater Health Portal Website and navigates to the appointment management page to cancel his appointment and schedules a new one.

Assumptions:

- Students are able to cancel appointments one day in advance
- By default, notifications for upcoming appointments are sent out one day prior
- By default, notifications for upcoming appointments are sent through text

Further Questions/Gap:

- Will the AHP ask for a reason when canceling an appointment

Scenario 2:

Author: Mingkun Liu

Sources:

- Field Notes: Questions 71, 88, 91
- Goal Model 3: “Improve staff cooperation efficiency”
- Case Study - The Anteater Health Portal (AHP) Project

Frank is a staff member of the UCI Counseling Center. He logs into the AHP app to begin his work. He first sees the dashboard and it shows today’s schedule and student cases assigned to him. Then He clicks the first appointment on the schedule to see the information about that appointment. After that, he knows a student named Jack will have an online Zoom meeting with him later. He also check the reason for Jack’s meeting and knowing that Jack wanted to ask some questions about mental health. Then Frank checks Jack’s medical history to prepare for the meeting. At the meeting time, Frank talks to Jack for an hour and he knows Jack feels anxiety about exams and homework. Jack also mentioned that he change the phone number in the meeting. After the meeting, Frank clicks Jack’s case and updates his phone number. Then Frank decide to refer Jack to UCI Student Health Center. So Frank click the refer button and select the UCI Student Health Center. After Jack accepts the referral, Frank still can follow up with Jack’s case to check his progress. After a week, Frank got a notification from a staff member of UCI Student Health Center saying that Jack feels much better and now his case is closed. Then Frank finds Jack’s case to mark as done and closes it.

Assumptions:

- After referral, UCI Student Health Center staff will send back a notification to UCI Counseling Center staff to notify them that the student is cured and his case can be closed.
- The dashboard of the AHP app will show the schedule of the day of the staff and a list of students’ cases.

Further Questions/Gap:

- If the staff does not know where should he refer the student to, can he share the student's case with other staff to discuss the referral?

Scenario 3:

Author: Armen Gadayan

Sources:

- Field Notes: Questions 47, 50, 103, 140
- "Improve student health" Goal Model 4

Maziar is a sophomore UCI physics student who has been having trouble with his classes. His lack of success on exams has been stressing him so he decides to use the AHP app on his phone to make a counseling appointment. Maziar makes an in-person appointment with a counselor 3 days later on Friday at 4 pm. During the meeting day, Maziar attends the counseling session and has an hour talk with a counselor. The counselor tells Maziar that his condition is due to a childhood trauma in which they are not specialized in. The counselor then tells Maziar they will refer him to an outside therapist through AHP. A day later, Maziar opens the AHP app and see's a referral link sent by his counselor. Maziar opens the referral link and makes an appointment with the therapist.

Assumptions:

- UCI staff counselors are not fully capable of handling students with childhood trauma
- UCI staff counselors can give a referral within a day

Further Questions/Gap:

- How long does it take on average for a staff member to find and recommend a referral for a student?

Scenario 4:

Author: Bryan Matta Villatoro

Sources:

- Goal Model: Improve Staff Cooperation & Efficiency
- Case Study: AHP Functionality Outline 2 & 6
- Field Notes: Questions 69, 78, 88, 100, 135

Mateo is a primary care physician at the UCI Student Health Center and begins his shift at the SHC by logging into the AHP and seeing his schedule and list of patients for the day. Mateo sees that he is assigned 14 patients that day. Mateo's coworker asks Mateo through the AHP internal chat system to take over her last 3 patients due to an unforeseen issue. Mateo agrees and she transfers assignments for 3 patients, increasing Mateo's workload to 17 patients for the day. One of these patients transferred to Mateo has an appointment due to a concern regarding an incident where he fell during a soccer match and has reported pain in his knee and possible swelling. Mateo reviews the patient's file before meeting with him to understand his medical history. During the appointment, Mateo thoroughly inspects the knee and confirms that there is an ACL tear. The patient will need to be referred to an orthopedic surgeon for surgery. Mateo enters his description into the AHP and uses the insurance lookup to find an in-network orthopedic surgeon in the area and sends this information over to insurance and an appointment is scheduled with the orthopedic surgeon. A care plan is created with a prescription for pain medication, an appointment with an orthopedic surgeon, and a follow up video appointment. Mateo goes over the referral with the patient and notifies him that the AHP will show the referral for him along with other info to reduce pain and a note to exclude him from sports for the time being. All this information is visible in the patient's updated medical history and also available on the patient's side. After 2 weeks, the AHP sends a notification to remind Mateo to follow up with the patient after surgery through a brief video appointment. After the appointment and Mateo determines that no further follow-up is needed, Mateo can now close the case.

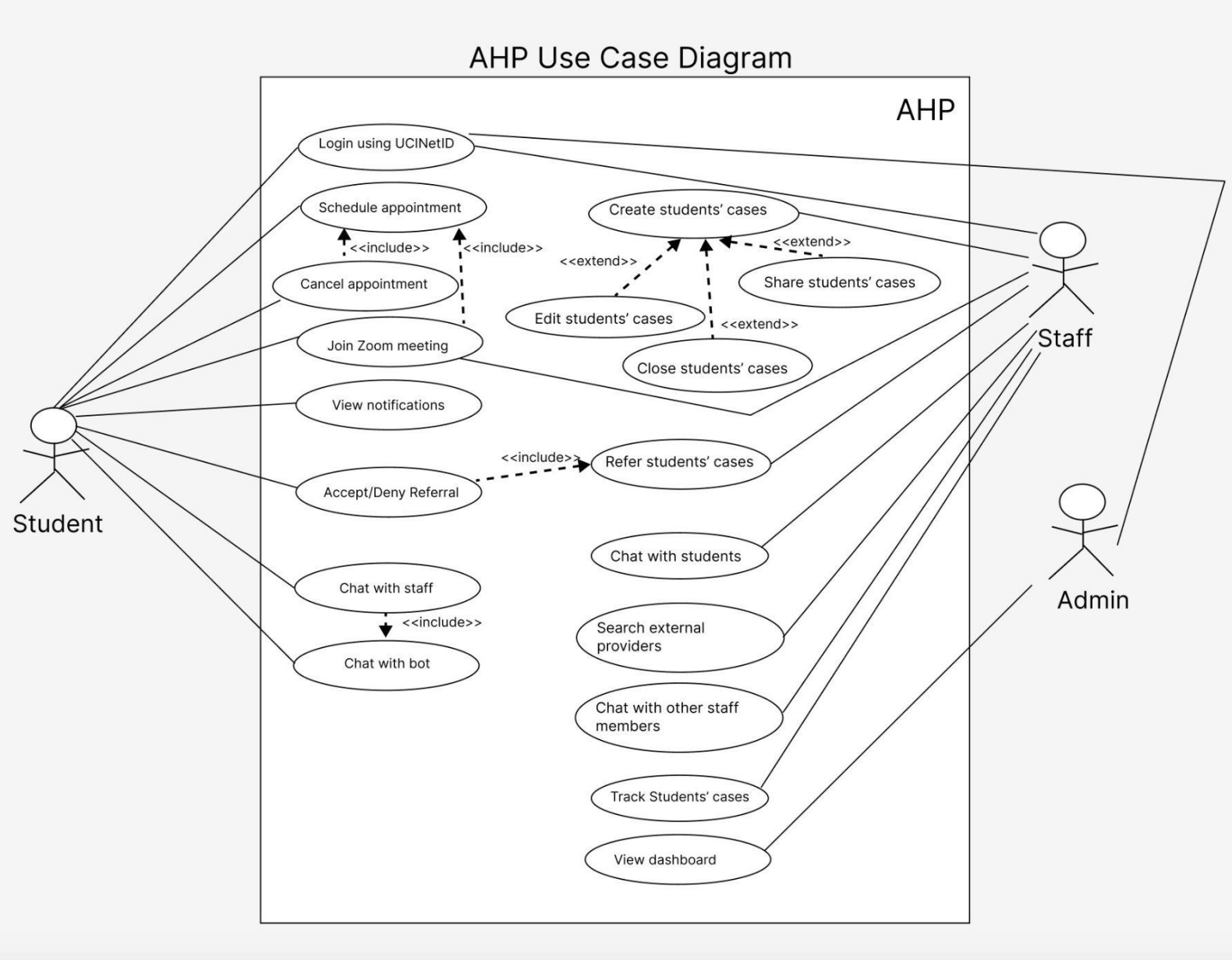
Assumptions:

- There is always an outside provider available and the patient has insurance.
- There is no overlap between Mateo's originally scheduled patients and the ones transferred.
- Insurance approves the referral promptly.

Further Questions:

- How quickly can providers find a referral and receive approval from insurance?
- If the patient cancels the referral for any reason, how will this impact the care plan and follow-up?

Use Case Diagram



Use Case Descriptions

Section	**Content/Explanation**
Use Case Name	Login using UCI Net ID
Author	Armen Gadayan
Priority	High
Source	Field Notes - Questions 8, 15
Short Description	This use case describes users having to log in using their UCI Net ID to access the portal
Goal(s)	This satisfies the goal of “Maxmize privacy and security of AHP” by using UCI Net ID to log in.
Primary Actor	UCI Students
Secondary Actors	Staff, Administration
Preconditions	The actors must be affiliated with UCI (students and staff) to log into the portal.
Success End Condition	The actor’s credentials are recognized by the UCI database and they’re subsequently able to access the portal.
Failed End Condition	The actor enters the wrong credentials or they’re not affiliated with UCI which causes the portal not to approve their login.
Trigger	The actor tries to access the portal.
Basic Flow (Main Success Scenario)	1. The user opens the application 2. The system prompts the user to log in with their UCI Net ID and password 3. The system checks if the user input is valid

	4. The system finds the user's credentials and grants them access to the portal
Alternative Flows	N/A
Exception Flows	1. The user attempts to log in 2. The system rejects the attempt due to incorrect credentials 3. Return to Basic Flow Step 2
Relationship to other use cases	A user must log in before having access to other use cases.
Supplementary Information	N/A
Open Issues	• Should administration users have to log in under a specific VPN configuration?

Section	**Content/Explanation**
Use Case Name	Schedule appointment
Author	Armen Gadayan
Priority	High
Source	Case Study - The Anteater Health Portal (AHP) Project
Short Description	Users must be able to schedule both in-person and virtual Zoom meetings through the portal.
Goal(s)	This satisfies the goal of "Improve student experience" by allowing users to book appointments through the portal.
Primary Actor	UCI Students

Secondary Actors	UCI Staff
Preconditions	The user must successfully log into the portal. The users must select one of the open appointment slots.
Success End Condition	The user is able to successfully book an appointment from one of the open slots. If the user chose the virtual meeting option, then they would receive an email with the Zoom meeting information.
Failed End Condition	The user's attempt to book an appointment fails and they don't receive any confirmation about successfully scheduling an appointment.
Trigger	The user clicks to schedule an appointment
Basic Flow (Main Success Scenario)	1. The user logs into the portal 2. They navigate to one of the three centers 3. The user clicks on scheduling an appointment
Alternative Flows	1. The user logs into the portal 2. The user is not familiar with the application so they open the bot chat 3. They ask the bot how to schedule an appointment with one of the centers 4. The bot directs the user to schedule an appointment with one of the centers 5. The user clicks on scheduling an appointment
Exception Flows	1. The user attempts to schedule an appointment 2. The process fails 3. Return to Basic Flow Step 2
Relationship to other use cases	The user needs to login into the application before scheduling an appointment. Also, before a user can cancel an appointment, they must've already successfully scheduled an appointment.

Supplementary Information	The open scheduling slots for the users will be dependent on the staff's availability which could be subject to change due to events such as emergencies.
Open Issues	N/A

Section	**Content/Explanation**
Use Case Name	Cancel Appointment
Author	Armen Gadayan
Priority	High
Source	Field Notes - Questions 128, 140
Short Description	After users schedule an appointment, they must be able to cancel the appointment for whatever reason.
Goal(s)	This satisfies the goal of "Improve student experience" by allowing users to cancel appointments when an unexpected problem or inconvenience occurs.
Primary Actor	UCI Students
Secondary Actors	UCI Staff
Preconditions	A user must've already made a successful appointment through the portal.
Success End Condition	The user is able to successfully cancel an appointment which also notifies the given staff member that the appointment is canceled.
Failed End Condition	An appointment is not canceled after the user clicks cancel on an appointment due to some error.
Trigger	The user clicks on cancel an appointment in the portal.

Basic Flow (Main Success Scenario)	1. The user logs into the portal 2. Navigate to the section of made appointments 3. Click on cancel appointments on one of the active appointments
Alternative Flows	N/A
Exception Flows	1. The user attempts to cancel an appointment 2. The process fails 3. Return to Basic Flow Step 2
Relationship to other use cases	Before a user can cancel an appointment, they must've already successfully scheduled an appointment.
Supplementary Information	N/A
Open Issues	● After the user cancels an appointment, what process should occur to make that appointment window be made available to others to book?

Section	**Content/Explanation**
Use Case Name	Join Zoom meeting
Author	Armen Gadayan
Priority	High
Source	Field Notes - Questions 13, 15
Short Description	Users must be able to access Zoom meeting links through the AHP application.
Goal(s)	This satisfies the goals of "Reduce staff workload" and "Improve student health" by allowing users to conveniently communicate with staff members about their problems.

Primary Actor	UCI Students
Secondary Actors	UCI Staff
Preconditions	The user must successfully schedule an appointment through the portal before joining a Zoom meeting.
Success End Condition	The user is able to navigate to the appointment section of the portal and click on an active Zoom link and successfully gets navigated to a Zoom meeting with a staff member.
Failed End Condition	The user clicks on a Zoom meeting link on the portal but clicking on the link shows an error.
Trigger	The user clicks on an active Zoom link in the portal.
Basic Flow (Main Success Scenario)	1. The user logs into the portal 2. The user navigates to the appointments section of the portal 3. The user clicks on a Zoom link during the meeting time 4. The user gets prompted to a Zoom meeting
Alternative Flows	The user can join a Zoom meeting by clicking the Zoom link sent to their UCI email.
Exception Flows	If a user clicks on a Zoom link in the portal and an error occurs, the user can return back to the portal since the Zoom meetings don't occur in the portal but in a 3rd party software.
Relationship to other use cases	Before a user can join a Zoom meeting, they must've already successfully scheduled an appointment.
Supplementary Information	Users can join Zoom meetings through the Zoom links sent to their email.
Open Issues	N/A

Section	Content/Explanation
Use Case Name	View notifications
Author	Armen Gadayan
Priority	Medium
Source	Field Notes - Question 140
Short Description	Users can view notifications through the AHP application.
Goal(s)	This satisfies the goal of “Improve student health” by allowing users to have access to important notifications related to their health and appointments.
Primary Actor	UCI Students
Secondary Actors	N/A
Preconditions	A users must be signed into the portal to access their notifications.
Success End Condition	The user is able to view their notifications from the notification section of the portal.
Failed End Condition	The user is unable to access their notifications from the notifications center.
Trigger	The user clicks on the notifications button in the portal.
Basic Flow (Main Success Scenario)	● The user logs into the portal ● The user clicks on the notifications button
Alternative Flows	N/A
Exception Flows	An error occurs for the user after attempting to view their notifications. The use case fails.

Relationship to other use cases	N/A
Supplementary Information	UCI staff will be able to send notifications to the students to view.
Open Issues	● While students can turn off notifications, will important notifications still show up in the notifications center?

Section	**Content/Explanation**
Use Case Name	Create students' cases
Author	Mingkun Liu
Priority	High
Source	Field Note - Question 71
Short Description	This use case describes the functionality of creating cases for students.
Goal(s)	Reduce staff workload - Improve the process of creating a student's case, making it efficient.
Primary Actor	UCI Staff members.
Secondary Actors	UCI students.
Preconditions	The actor must be able to log into AHP as a UCI staff member. The actor must know the student's information in order to create the case.
Success End Condition	The student's case which includes all necessary details is successfully created and saved in the UCI database. The staff can share, edit, refer, or close the case if needed.

Failed End Condition	The UCI staff member inputs incorrect information or missing information. System error.
Trigger	The UCI staff members try to create the case for students.
Basic Flow (Main Success Scenario)	1. The UCI staff member logs into AHP 2. The UCI staff member clicks the “Create case” button. 3. The AHP displays a form for staff to fill in the student’s case information. 3. The UCI staff member inputs all the needed information. 4. The UCI staff member clicks the “Submit” button. 5. The case is received by the AHP. 6. The AHP begins to process the case. 7. The AHP successfully saves the new case to the UCI database.
Alternative Flows	4.a. The UCI staff member clicks the “Cancel” button to cancel the case creation and go back to the homepage.
Exception Flows	3. a. The UCI staff member inputs the wrong information or misses the information. Then the system notifies the staff that the creation failed and the reason for the failure. After that, go back to the case creation page.
Relationship to other use cases	Includes “Edit students’ cases” since students’ information may change in the future. Includes “Share students’ cases” since staff may need to share students’ cases with other staff. Includes “Close students’ cases” since staff needs to close students’ cases if students are cured.
Supplementary Information	N/A
Open Issues	Can staff create more than one case for a student?

Section	Content/Explanation
Use Case Name	Edit students' cases
Author	Mingkun Liu
Priority	High
Source	Field Note - Question 71
Short Description	This use case describes the functionality of editing cases for students.
Goal(s)	Reduce staff workload - Improve the process of editing students' cases, making it efficient.
Primary Actor	UCI Staff members.
Secondary Actors	UCI students. Other staff members.
Preconditions	The actor must be able to log into AHP as a UCI staff member. The actor must know the student's new information in order to edit the case. The student's case must exist in the UCI database.
Success End Condition	The student's case is successfully edited and saved in the UCI database. The staff can view, share, refer, close, or edit it again if needed.
Failed End Condition	The UCI staff member inputs incorrect information or missing information. System error.
Trigger	The UCI staff members try to edit the case for students.
Basic Flow (Main Success Scenario)	1. The UCI staff member logs into AHP 2. The UCI staff member navigates to the particular student's case they want to edit. 3. The UCI staff member selects the student's case. 4. The AHP load and display the current case of that student.

	5. The UCI staff member clicks the “Edit case” button. 6. The UCI staff member edits the student’s current case. 7. The UCI staff member clicks the “Submit” button. 8. The edited case is received by the AHP. 9. The AHP begins to process the case. 10. The AHP successfully saves the changes of the student’s case to the UCI database.
Alternative Flows	6. a. The UCI staff member clicks the “Cancel” button to cancel the case edit and go back to the homepage.
Exception Flows	5. a. The UCI staff member updates the wrong information. Then the system notifies the staff that the edit failed and the reason for the failure. After that, go back to the case creation page.
Relationship to other use cases	Extend by “Create students’ case” because if a student’s contact information or case changes in the future, the staff can edit the case for that student.
Supplementary Information	N/A
Open Issues	What fields are allowed to be edited in a student's case? What permissions are needed for a staff member to edit a case?

Section	**Content/Explanation**
Use Case Name	Share students’ cases
Author	Mingkun Liu
Priority	High
Source	Field Note - Question 45, 46, 71

Short Description	This use case describes the functionality of sharing students' cases with other staff.
Goal(s)	Improve staff cooperation efficiency - Allowing staff to share cases with each other can help staff better collaborate on student cases, or refer student cases more easily.
Primary Actor	UCI Staff members.
Secondary Actors	UCI students, UCI Administration.
Preconditions	The actor must be able to log into AHP as a UCI staff member. The staff must have permission to share the student's case. The student's case must exist in the UCI database.
Success End Condition	The selected student's case is successfully shared with other staff members. The other staff can view it.
Failed End Condition	The student's case shared failed due to insufficient permissions or system error.
Trigger	The UCI staff members try to share the student's case with other staff.
Basic Flow (Main Success Scenario)	1. The UCI staff member logs into AHP 2. The UCI staff member navigates to the particular student's case they want to share. 3. The UCI staff member selects the student's case. 4. The AHP load and display the current case of that student. 5. The UCI staff member clicks the "Share case" button. 6. The AHP verifies that the staff member has permission to share the student's case. 7. After permission is confirmed, the AHP prompts the staff member to select the staff member they want to share the case. 8. The UCI staff member clicks the "Share" button. 9. The AHP sends the share link to the other Staff and they will receive the notification.

Alternative Flows	8. a. The UCI staff member clicks the “Cancel” button to cancel the case sharing and go back to the homepage.
Exception Flows	6. a. If the UCI staff member does not have permission to share the student's case, then the AHP alerts the staff member that they lack the necessary permissions. After that, go back to the homepage.
Relationship to other use cases	Extend by “Create students’ case” because if the staff wants to discuss the student’s case, they need to share the student’s case with other staff.
Supplementary Information	N/A
Open Issues	What information can be shared with other staff? What will the AHP do if staff try to share a student’s case with other staff who have already been shared with?

Section	**Content/Explanation**
Use Case Name	Close students’ cases
Author	Mingkun Liu
Priority	High
Source	Field Note - Question 88
Short Description	This use case describes the functionality of closing students’ cases.
Goal(s)	Reduce staff workload - Improve the process of closing a student's case, making it efficient.
Primary Actor	UCI Staff members.

Secondary Actors	UCI students, UCI Administration.
Preconditions	The actor must be able to log into AHP as a UCI staff member. The student's case must exist in the UCI database. The actor must have permission to close the student's case.
Success End Condition	The selected student's case is successfully closed.
Failed End Condition	The student's case closed failed due to insufficient permissions or system error.
Trigger	The UCI staff members try to close the student's case.
Basic Flow (Main Success Scenario)	1. The UCI staff member logs into AHP 2. The UCI staff member navigates to the particular student's case they want to close. 3. The UCI staff member selects the student's case. 4. The AHP load and display the current case of that student. 5. The UCI staff member clicks the "Close case" button. 6. The AHP verifies that the staff member has permission to close the student's case. 7. After permission is confirmed, the UCI staff member clicks the "Close" button. 8. The close case request is received by the AHP. 9. The AHP begins to process the close case request. 10. The AHP successfully marks the case as closed in the UCI database.
Alternative Flows	7. a. The UCI staff member clicks the "Cancel" button to cancel the case closing and go back to the homepage.
Exception Flows	6. a. If the UCI staff member does not have permission to close the student's case, then the AHP alerts the staff member that they lack the necessary permissions. After that, go back to the homepage.

Relationship to other use cases	Extend by “Create students’ case” because if the students are cured, the staff needs to close the students’ cases.
Supplementary Information	N/A
Open Issues	After the staff closes the students’ case, will the students’ case be deleted from the UCI database? Can the staff reopen the case?

Section	**Content/Explanation**
Use Case Name	Refer students’ cases
Author	Mingkun Liu
Priority	High
Source	Field Note - Question 88
Short Description	This use case describes the functionality of referring students’ cases.
Goal(s)	Improve staff cooperation efficiency - Make collaboration between different centers or providers more effective and ensure that students receive the most appropriate services.
Primary Actor	UCI Staff members.
Secondary Actors	UCI students, UCI Administration. Other staff members. External Providers.
Preconditions	The actor must be able to log into AHP as a UCI staff member. The actor must have permission to close the student’s case. The student’s case must exist in the UCI database. The student must agree with the referral.

Success End Condition	The selected student's case is successfully referred to another center. The staff can follow up student's case after referral. The staff from another center can manage the student's case.
Failed End Condition	The student deny the referral. The staff lacks permission to refer student's case.
Trigger	The UCI staff members try to refer the student's case to other centers/providers.
Basic Flow (Main Success Scenario)	1. The UCI staff member logs into AHP 2. The UCI staff member navigates to the particular student's case they want to refer. 3. The UCI staff member selects the student's case. 4. The AHP load and display the current case of that student. 5. The UCI staff member clicks the "Refer case" button. 6. The AHP verifies that the staff member has permission to refer the student's case. 7. After permission is confirmed, the UCI staff member clicks the "Refer" button. 8. The close case request is received by the AHP. 9. The AHP sends the notification to the student to ask if he accepts the referral or not. 10. The student accepts the referral. 11. The AHP sends the notification to the staff to tell him the student accepted the referral. 12. The AHP refers the student's case to another center and notifies the staff from that center. 13. Now the staff can follow up student's case and other staff can manage the student's case.
Alternative Flows	7. a. The UCI staff member clicks the "Cancel" button to cancel the case referring and go back to the homepage.

Exception Flows	6. a. If the UCI staff member does not have permission to refer the student's case, then the AHP alerts the staff member that they lack the necessary permissions. After that, go back to the homepage. 9. a. The student denies the referral. Then the AHP sends a notification to the staff.
Relationship to other use cases	Extends by “Create students’ case” because if the student needs the service from another center, then the staff needs to refer the student’s case to another center.
Supplementary Information	N/A
Open Issues	What will happen after the student denies the referral?

Section	**Content/Explanation**
Use Case Name	Track students’ cases
Author	Bryan Matta Villatoro
Priority	High
Source	Case Study: AHP Outline 2 Field Notes: Question 88
Short Description	This use case allows UCI providers to manage and track the progression of a student’s case as long as it stays open.
Goal(s)	The goal that will be satisfied by this use case is improving student health. This involves the AHP making physical health and counseling services accessible and that a case isn’t closed until a student’s needs are resolved.
Primary Actor	UCI SHC and Counseling Center Staff

Secondary Actors	Permission verification system, Case database
Preconditions	The actor must be able to log in to the AHP as a staff member. The actor must have the necessary clearance to view a student's case. The case must be previously established.
Success End Condition	The staff can view the current state of a case and any relevant information.
Failed End Condition	The case did not load due to a database error or insufficient permissions.
Trigger	Staff member selecting to view an active case from a list.
Basic Flow (Main Success Scenario)	1. Staff member logs into the AHP using their UCInetID. 2. Staff member navigates to their list of assigned cases 3. Staff member selects a student from their list 4. AHP displays that case's information and status.
Alternative Flows	2a. Staff member manually searches for a student's case. 3a. Staff member selects a case from search results.
Exception Flows	4b. AHP determines that the staff member does not have sufficient permissions to view the case. 5b. AHP displays a message stating that the staff member does not have access and has a button to request access along with a text box.
Relationship to other use cases	Dependent on "Create students' case" since a case must be preexisting to track.
Supplementary Information	There should also be a section where providers are reminded of follow-ups on cases with referrals or secondary visits.
Open Issues	How are cases stored and how can they be searched?

Section	**Content/Explanation**

Use Case Name	Search external providers
Author	Bryan Matta Villatoro
Priority	High
Source	Case Study: AHP Outline 6 Field Notes: Question 90
Short Description	This use case presents UCI staff with a directory of nearby external providers and allows staff to create and attach a referral to a case.
Goal(s)	The goal that will be satisfied by this use case is improving student health. This involves the AHP making physical health and counseling services accessible and allowing for referrals to outside providers.
Primary Actor	UCI SHC and Counseling Center Staff
Secondary Actors	Referral management system, external directory
Preconditions	The actor must be able to log into the AHP as a staff member to view this directory.
Success End Condition	The AHP presents a list or map view of external providers that meet a specified criteria.
Failed End Condition	The AHP presents a screen stating that there are no providers that meet the criteria.
Trigger	Staff member going to the external provider section of the AHP.
Basic Flow (Main Success Scenario)	1. Staff logs into the AHP using their UCInetID. 2. Staff navigates to the external provider directory. 3. Staff inputs criteria (name, specialty, insurance, location, etc.) 4. AHP presents a list or map view of external providers that meet the search criteria.

	5. Staff have the option to create a referral when viewing the provider's info.
Alternative Flows	N/A
Exception Flows	4a. No providers meet the criteria so AHP returns an empty search result screen.
Relationship to other use cases	Can be used with the "Refer students' cases" use case to create a referral.
Supplementary Information	Assumption of some database with external providers' information.
Open Issues	Will some internal databases need to be created with external providers' info? How will the AHP connect to an external database if that is needed?

Section	**Content/Explanation**
Use Case Name	Chat with students
Author	Bryan Matta Villatoro
Priority	High
Source	Case Study: AHP Outline 5 Field Notes: Questions 42, 76, 156
Short Description	This use case describes how staff members will chat with students using the chat feature.
Goal(s)	The goal satisfied by this use case is reducing staff workload by reducing the number of appointments by providing a chat system to answer simple questions.

Primary Actor	UCI SHC, Wellness Center, or Counseling Center Staff
Secondary Actors	Students
Preconditions	The actor must log into the AHP during hours of active chat and have staff permissions.
Success End Condition	The staff member can actively chat with students using an SMS-like interface.
Failed End Condition	The AHP will present an error screen detailing the reason why the chat system is unavailable.
Trigger	The staff member clicks on the student chat section of the AHP.
Basic Flow (Main Success Scenario)	1. Staff logs into the AHP using their UCInetID. 2. Staff clicks on the student chat section. 3. AHP confirms that the staff member wants to begin receiving chats from students. 4. AHP presents an SMS-like interface for chatting with students.
Alternative Flows	N/A
Exception Flows	3a. AHP returns an error screen if it is outside of chat hours or for other reasons why the chat feature is unavailable. 4b. Staff denies the confirmation screen from the AHP. 5b. AHP returns the staff member to their previous screen.
Relationship to other use cases	Staff can create/cancel appointments for students using this chat.
Supplementary Information	N/A
Open Issues	How will the system assign students to a staff member?

Section	Content/Explanation
Use Case Name	Chat with other staff members
Author	Bryan Matta Villatoro
Priority	High
Source	Case Study: AHP Outline 2 Field Notes: Question 23
Short Description	This use case describes how staff members will communicate with other staff members.
Goal(s)	The goal satisfied by this use case is improving staff cooperation & efficiency by implementing a unified communication system allowing real-time chat between staff.
Primary Actor	UCI SHC, Wellness Center, or Counseling Center Staff
Secondary Actors	Receiving staff member
Preconditions	The actor must be able to log into the AHP as a staff member.
Success End Condition	The AHP presents a minimal chat interface and can chat with other staff members.
Failed End Condition	The chat interface minimizes into a small floating button.
Trigger	The actor clicks on the small floating internal chat button.
Basic Flow (Main Success Scenario)	1. Staff logs into the AHP using their UCInetID. 2. Staff clicks on a floating button located in the lower right of the AHP. 3. Staff searches for a staff member to begin a chat and the AHP will indicate if a staff member's status (Online, Away, Do Not Disturb, Offline)

	4. AHP presents a chat interface for the staff members.
Alternative Flows	2a. A staff member receives a chat from another staff member and AHP presents a notification. 3a. Staff clicks on notification.
Exception Flows	3b. The chat interface displays an error if unavailable.
Relationship to other use cases	This chat system allows for staff members to share students' cases.
Supplementary Information	N/A
Open Issues	Will staff members be allowed to add attachments?

Section	**Content/Explanation**
Use Case Name	Accept/Deny Referral
Author	Sevag Avedissian
Priority	High
Source	Field Notes 44, 100, 103
Short Description	Staff can make referrals in cases where the center cannot provide adequate care. It is up to the student to decide whether they wish to accept the referral or deny it.
Goal(s)	Receiving referrals helps achieve the goal of improving student health since the three UCI centers cannot provide the care needed for every possible situation.
Primary Actor	Student
Secondary Actors	Staff

Preconditions	• Student already met with a care provider from one of the three centers • Staff member concluded that they cannot provide adequate care and referred the student to an external provider
Success End Condition	Student accepts the referral and seeks care from external provider
Failed End Condition	Student denies the referral and doesn't seek recommended care
Trigger	Staff member initiates referral
Basic Flow (Main Success Scenario)	1. Student chats with staff member 2. Staff members decided that they cannot provide the necessary care and issued a referral to the student 3. Student accepts the referral and seeks the recommended care 4. Students fill out a follow-up survey about the services they received
Alternative Flows	1. Student chats with staff member 2. Staff members decided that they cannot provide the necessary care and issued a referral to student 3. Student denies the referral and doesn't seeks the recommended care 4. Returns to Basic Flow Step 4
Exception Flows	**Student does not complete follow-up survey** 1. Student chats with staff member 2. Staff members decided that they cannot provide the necessary care and issued a referral to student 3. Student denies the referral and doesn't seeks the recommended care 4. Student ignores the follow-up survey

Relationship to other use cases	Includes Refers Student's Case because a staff member must first issue refer for the student to accept/deny it
Supplementary Information	N/A
Open Issues	N/A

Section	**Content/Explanation**
Use Case Name	Chat with staff
Author	Sevag Avedissian
Priority	High
Source	AHP Functionality Outline 5 Field Noted 5, 20, 42, 74, 116
Short Description	Students are able to chat with care providers about issues that may not rec an appointment
Goal(s)	Allowing a chat feature helps achieve the goal of reducing staff workload since care providers can quickly resolve situations rather than allocating time for an appointment
Primary Actor	Student
Secondary Actors	Staff
Preconditions	● Student has logged in with their UCI Netid ● Student has initially chatted with AI bot and the bot couldn't sufficiently answer the student's questions
Success End Condition	Student is able to find answers to their questions

Failed End Condition	Student is not able to find answers to their questions
Trigger	User logs in to AHP
Basic Flow (Main Success Scenario)	1. Student logs in to AHP with their UCI Netid 2. AI chat feature automatically pops up and a student asks their questions 3. AI cannot answer students' questions and they are connected with a staff member 4. The staff member is able to answer the student's questions
Alternative Flows	1. Student logs in to AHP with their UCI Netid 2. AI chat feature automatically pops up and a student asks their questions 3. AI cannot answer students' questions and they are connected with a staff member 4. There are no available staff members and the student has to wait in a queue 5. Return to Basic Flow 4
Exception Flows	**Student tries to chat with staff outside the hours of service** 1. Student logs in to AHP with their UCI Netid 2. AI chat feature automatically pops up and a student asks their questions 3. AI cannot answer students' questions and they are connected with a staff member 4. It is outside the hours of service, therefore the student cannot chat with a staff member
Relationship to other use cases	Includes chatting with a bot because the chat service initially takes place with an AI bot. If the bot cannot answer the questions, then the student is connected with a staff member

Supplementary Information	• The chat feature automatically pops up when a student logs in to AHP • If there are no staff members available to chat, the student is placed in a queue and they are shown an estimated wait time • Students must be logged in to access chat feature but can chat anonymously
Open Issues	N/A

Section	**Content/Explanation**
Use Case Name	Chat with bot
Author	Sevag Avedissian
Priority	High
Source	AHP Functionality Outline 7 Field Noted 10, 38, 87, 131
Short Description	Students are able to chat with the bot to answer simple questions
Goal(s)	Allowing a chat feature with a bot helps achieve the goal of reducing staff workload since care providers don't need to spend time simple answering questions.
Primary Actor	Student
Secondary Actors	N/A
Preconditions	• Student has logged in with their UCI Netid
Success End Condition	Student is able to find answers to their questions

Failed End Condition	Student is not able to find answers to their questions
Trigger	User logs in to AHP
Basic Flow (Main Success Scenario)	1. Student logs in to AHP with their UCI Netid 2. AI chat feature automatically pops up and a student asks their questions 3. AI bot answers students' questions
Alternative Flows	N/A
Exception Flows	**AI bot cannot answer students' questions** 1. Student logs in to AHP with their UCI Netid 2. AI chat feature automatically pops up and a student asks their questions 3. AI bot cannot answer students' questions
Relationship to other use cases	Includes chat with staff because the chat service initially takes place with an AI bot. If the bot cannot answer the questions, then the student is connected with a staff member
Supplementary Information	● The chat feature automatically pops up when a student logs in to AHP ● The AI bot should not have access to students' personal information
Open Issues	● Can chat with bot be accessible without logging in?

Section	**Content/Explanation**
Use Case Name	View Case Statistics

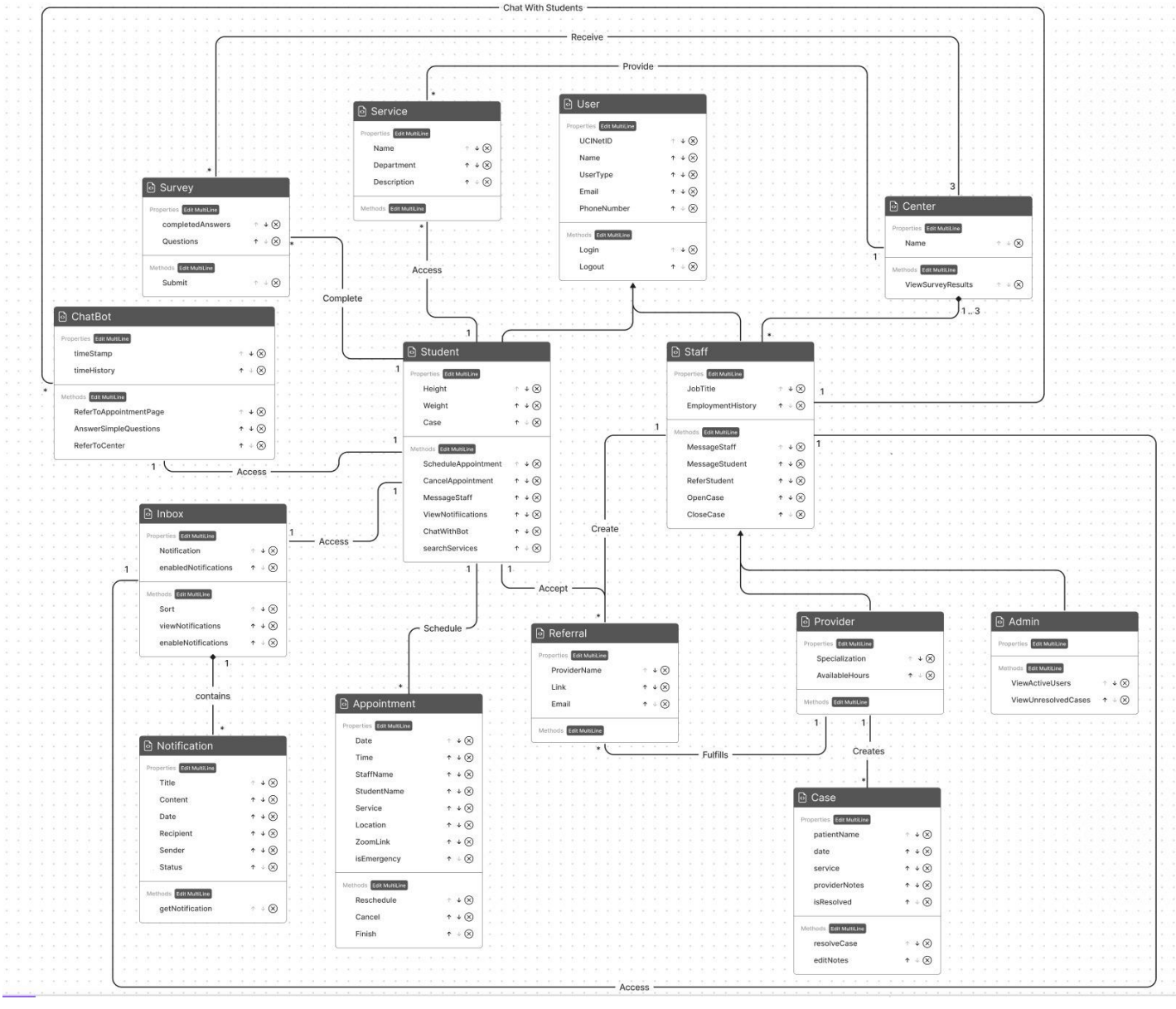
Author	Sevag Avedissian
Priority	Medium
Source	Field Noted 157
Short Description	Administrators have access to a dashboard that displays system-wide statistics
Goal(s)	Implementing an admin dashboard will give UCI administrators a good understanding of the effectiveness of the Anteater Health Portal.
Primary Actor	Administrator
Secondary Actors	N/A
Preconditions	N/A
Success End Condition	Admin is able to view dashboard
Failed End Condition	Admin is not able to view dashboard
Trigger	Admin logs into AHP dashboard
Basic Flow (Main Success Scenario)	1. Admin logs in to AHP with their UCI Netid 2. Admin views dashboard
Alternative Flows	N/A
Exception Flows	**Admin is not able to log into dashboard** 1. Admin tries to log into the dashboard and fails
Relationship to other use cases	N/A

Supplementary Information	N/A
Open Issues	Besides viewing active users and the percentage of unresolved cases, what other information should be displayed on the dashboard

HW4: UML Class Diagram

UML Diagram Link:

https://www.figma.com/file/GMeuYfnKTrP8i8FjLLfCbw/Homework-5?type=whiteboard&node-id=0%3A1&t=PnKEH3bCKwzzz2E1-1



UML Class Diagram Descriptions

User

A User is an individual that will be interacting with the Anteater Health Portal. These individuals include students, health center staff members, health care service providers, and UCI administrators. All users will have these attributes that make them unique: UCI NetID, name, user type, email, and phone number. These users all share the same operations of logging in and logging out.

Sources:

- Use Case Diagram: Student, Staff, and Admin Actors

Student

A Student is a UCI student that receives health care services through AHP. A Student is a User, therefore it inherits all the attributes and operations of the User class. A Student extends these attributes by adding height, weight, and case attributes. Operations that a Student can perform include scheduling appointments, canceling appointments, messaging staff, viewing notifications, chatting with a bot, and searching for services.

Sources

- Use Case Diagram: Student Actor
- AHP Functionality Outline: 3, 5, 7

Staff

A Staff is an employee of the University of California, Irvine who is the main user of the AHP following the student. This includes UCI Providers and Administrators. All staff will have the following attributes in addition to the attributes they inherit from the User class: job title and employee history. Staff users can also perform the following operations: message staff, message students, refer students, open cases, and close cases. Each Staff has their own inbox and can create 1 or more referrals for Students.

Sources

- AHP Functionality Outline: 2, 6
- Field Notes: Questions 15, 16, 23
- Goal Models: Staff Agent
- Use Case Diagram: Staff Actor

Chatbot

A Chatbot is an AI bot in the AHP that can answer simple questions from student users. If the questions asked by students are above the knowledge of the Chatbot then the bot will forward

the student to a staff member. A Chatbot can perform the following operations: refer students to the appointment page, refer students to one of the centers, and answer simple questions. Every student has access to a Chatbot to ask questions.

Sources

- Field Notes: Questions 10, 38, 74, 120
- Use Case Diagram: “Chat with bot” use case

Inbox

An inbox is a folder associated with each UCI student, staff, and administrator. It can store all the notifications sent to them. Inbox has attributes: notification and enabled notifications. Notification is a Notification object and enabledNotifications is a boolean variable. This class has an operation sort() that allows the user to sort the Notifications in their inbox, viewNotifications() that allow users to view the details of the Notification, enableNotifications() will set enabledNotifications to be true and allow notifications to be received by the user. Every UCI student, staff, and administrator can access their inbox, and an Inbox has an aggregation relationship with Notification because it can contain zero or more Notifications because Notifications will still exist if there has no inbox.

Sources:

- Field Notes: Question 47

Notification

A Notification is an alert or a message sent by AHP and staff. It can store all the details about notifications. Notification has attributes: Title, Content, Date, Sender, Recipient, and Status. Title, Content, Date, Sender, and Recipient are string that indicates the title, content, date, sender, and recipient of a notification. Status is a string that indicates whether the Notification has been read. This class has an operation getNotification() to return all the attributes of a Notification. Since an Inbox contains Notifications, there is an aggregation relationship between them.

Sources:

- Field Notes: Question 140

Admin

An Admin is a UCI staff member who has the additional privileges of making decisions to change the portal and accessing data and statistics about the portal. Admin has two operations: view active users which allows the administrator to view a list of currently active users in the

AHP and view unresolved cases which allows the administrator to view a list of all unresolved cases. An admin can also access an inbox due to its inheritance from the Staff class.

Sources

- Field Notes: Questions 157, 161, 168
- Use Case Diagram: Admin Actor

Service

A service is a categorical organizer that is based on the type of service rendered to a patient which is accessed by students and provided by an individual center. A service has three properties; Name, Department, and Description. These are strings that provide additional info on the service and can be used to connect them with other sources of information. There are no methods associated with this class.

Sources:

- Field Notes Question 58

Survey

A survey is the initial intake questionnaire that students fill out to guide them to the correct center to receive the appropriate care. A survey has two properties; completedAnswers and Questions. Questions are what is presented to students while completedAnswers are their recorded responses to each Question. There is a connection between Surveys and Centers since Centers receive Surveys and can access the results from surveys.

Sources:

- AHP Outline: 7
- Field Notes Question 28
- Use Case Diagram: Improve student health

Appointment

An Appointment is a meeting between a student patient and a provider to discuss their health needs. An Appointment has several descriptive properties such as Date, Time, StaffName, StudentName, Service, Location, ZoomLink, and isEmergency. These properties describe the date, time, and location of the appointment, the names of the student and provider who are meeting, the service being provided, Zoom links for applicable telehealth meetings, and the status of whether the appointment is for an emergent situation. There is a direct connection to the Student class as students can schedule appointments. Other methods associated with the Appointment class are rescheduling, canceling, and finishing appointments.

Sources:

- AHP Outlines: 3
- Field Notes Questions 36, 73, 113, 128
- Use Case Diagram: Improve student experience

Referral

A referral is a request for treatment outside of the UCI centers that are created by Staff and can be accepted by Students. Students are also notified in their inbox if they receive a referral from a staff member. Referrals are created when the UCI centers either do not have the capacity to treat a student or if the student needs to meet with a specialist for their needs. Referrals have three properties describing information about the outside provider such as their name, links, and email address. There are no methods for the Referral class.

Sources:

- AHP Outline: 6
- Field Notes Questions 69, 103
- Use Case Diagram: Improve student health

Center

A center is an organization of UCI staff members that provide a common type of care. Currently, the three centers are the UCI Student Health Center, UCI Counseling Center, and UCI Student Health & Wellness Center. There is one method for Centers and that is accessing the survey results that are submitted by students. There is one property for Centers and that is their name. Centers are composed of Staff members, receive results from Surveys, and provide Services.

Sources:

- AHP Outline: 1
- Field Notes Question 78

Provider

A Provider is a type of staff member that is the main person a student will see during their appointments. Providers receive notifications in their inboxes about appointments with students and correspondence from other staff members. A Provider has two properties, their specialization and their available hours which are submitted by the Provider. A provider inherits properties from the Staff class and has the additional functionality of creating patient cases. The provider class has no methods.

Sources:

- AHP Outline: 2
- Field Notes Question 84

Case

A case is a collection of information pertaining to a student's health request. Cases are created by providers and are tied to a student, a provider, and an appointment. Cases remain open until marked as resolved. The information a case stores includes the patient's name, date, type of service provided, any provider notes, and whether or not the case has been resolved. The methods associated with a case are marking the case as resolved and editing or adding notes from providers.

Sources:

- AHP Outline: 2
- Field Notes Questions 71, 110, 133, 135, 138, 164, 165

A.2 Team Meeting Minutes

Team Name/Number: 10 am Team 4 **Date:** 4/24/2023 (6 pm)

Team Members in Attendance	**Role**
1. Armen Gadayan	Developer
2. Sevag Avedissian	Developer
3. Bryan Matta Villatoro	Project Manager
4. Mingkun Liu	Tester

List of agenda items for this meeting

1. Complete a list of 60 elicitation questions

Takeaways/Action Items/Responsibilities Assigned	**Team Member Responsible**
15 questions	Armen Gadayan
15 questions	Sevag Avedissian
15 questions	Bryan Matta Villatoro
15 questions	Mingkun Liu

Next meetings(s) date(s)/time(s):	**Next meeting purpose(s):**
2. 4/25/2023 at 6 pm	Create Stakeholder Model

Meeting Day 2 **Date:** 4/25/2023 (6 pm)

List of agenda items for this meeting

1. Create a Stakeholder Model and Analysis

Takeaways/Action	**Team Member Responsible**

Items/Responsibilities

Assigned

1. Contributed model and analysis — Armen Gadayan
2. Contributed model and analysis — Sevag Avedissian
3. Contributed model and analysis — Bryan Matta Villatoro
4. Contributed model and analysis — Mingkun Liu

Meeting Day 3 **Date:** 5/08/2023 (6:30 pm)

List of agenda items for this meeting

1. Complete goal model diagram

Takeaways/Action Items/Responsibilities **Team Member Responsible**

Assigned

1. Created models/annotation for models 1 and 4 — Armen Gadayan
2. Created models/annotation for models 1 and 2 — Sevag Avedissian
3. Created models/annotation for models 1 and 5 — Bryan Matta Villatoro
4. Created models/annotation for models 1 and 3 — Mingkun Liu

Next meetings(s) date(s)/time(s): **Next meeting purpose(s):**

1. 5/09/2023 at 6:30 pm — Finish additional requirements for HW 3

Meeting Day 4 **Date:** 5/09/2023 (6:30 pm)

List of agenda items for this meeting

1. Compile field notes and missing information

Takeaways/Action Items/Responsibilities Assigned	**Team Member Responsible**
1. Contributed to missing information section	Armen Gadayan
2. Contributed to missing information section	Sevag Avedissian
3. Contributed to missing information section	Bryan Matta Villatoro
4. Compiled notes from discussion	Mingkun Liu

Meeting Day 5 **Date:** 5/17/2023 (6:30 pm)

List of agenda items for this meeting

1. Discuss scenarios

Takeaways/Action Items/Responsibilities Assigned	**Team Member Responsible**
1. Developed scenario 3	Armen Gadayan
2. Developed scenario 1	Sevag Avedissian
3. Developed scenario 4	Bryan Matta Villatoro
4. Developed scenario 2	Mingkun Liu

Next meetings(s) date(s)/time(s):	**Next meeting purpose(s):**
1. 5/18/2023 at 12:30 pm	Finish additional requirements for HW 4

Meeting Day 6 **Date:** 5/18/2023 (12:30 pm)

List of agenda items for this meeting

1. Use case models/descriptions

Takeaways/Action Items/Responsibilities Assigned	**Team Member Responsible**
1. Contributed to use case model/descriptions	Armen Gadayan
2. Contributed to use case model/descriptions	Sevag Avedissian
3. Contributed to use case model/descriptions	Bryan Villatoro
4. Contributed to use case model/descriptions	Mingkun Liu

Meeting Day 7 **Date:** 5/24/2023 (6:30 pm)

List of agenda items for this meeting

1. Discuss UML class diagram

Takeaways/Action Items/Responsibilities Assigned	**Team Member Responsible**
1. Contributed to UML diagram	Armen Gadayan
2. Contributed to UML diagram	Sevag Avedissian
3. Contributed to UML diagram	Bryan Matta Villatoro
4. Contributed to UML diagram	Mingkun Liu

Next meetings(s) date(s)/time(s):	**Next meeting purpose(s):**
1. 5/25/2023 at 4 pm	Finish UML class descriptions

Meeting Day 8 **Date:** 6/2/2023 (7 pm)

List of agenda items for this meeting

1. Discuss the Introduction of Homework 6

Takeaways/Action Items/Responsibilities Assigned	**Team Member Responsible**
1. Contributed to Introduction of Homework 6	Armen Gadayan
2. Contributed to Introduction of Homework 6	Sevag Avedissian
3. Contributed to Introduction of Homework 6	Bryan Matta Villatoro
4. Contributed to Introduction of Homework 6	Mingkun Liu

Next meetings(s) date(s)/time(s):	**Next meeting purpose(s):**
6/3/2023 at 12 pm	Finish the rest part of Homework 6

Meeting Day 9 **Date:** 6/3/2023 (12 pm)

List of agenda items for this meeting

1. Discuss the rest part of Homework 6

Takeaways/Action Items/Responsibilities Assigned	**Team Member Responsible**
1. Contributed to rest part of Homework 6	Armen Gadayan
2. Contributed to rest part of Homework 6	Sevag Avedissian
3. Contributed to rest part of Homework 6	Bryan Matta Villatoro
4. Contributed to rest part of Homework 6	Mingkun Liu

A.3 Field Notes

Added 4/17/23

1. What info is needed to use the app?
    - Can sign in with UCI info but need height weight if asked

2. What kinds of devices are supported by this system?
    - Mobile, mobile web, desktop web

3. What are the current limitations of the existing reservation management system?
    - Must book appointments in person
    - Three centers are providing the same services

4. When is the deadline for the portal?
    - 3 months

5. How many people do we anticipate to be using the portal at any given time?
    - Be able to handle the maximum number of students at peak time (load balancing, vertical scaling, horizontal scaling)

6. Should any of the services be prioritized so that when a user opens the application, they are immediately prompted with that given service?
    - Based on students' demand, previously used services
    - Give initial guidance

7. How will the portal ensure accessibility for students with disabilities or who speak languages other than English?
    - Use best practices/basic accessibility guidelines
    - Use different languages based on UCI demographics

8. How should privacy be addressed? How will the application make sure that all information about the user is private and not spread?

- UCInetID SSO
- Build similar to existing UCI services
- Users can choose which info to make public but most info should be private
- Data privacy law of state and federal, and UCI data laws

9. What services should be included in the integrated portal? It says "as many as possible" in the instructions, but which services in specific?
    - All the important services from the three centers

10. Should we include a chat pop-up the moment they open/log into AHP?
    - Yes, the initial chat should be AI bot, when the AI bot can't answer questions, forward them to professionals

11. What is the most common reason for students to miss/cancel their appointments?
    - Cancellation policy
    - 1 hour before
    - Design by me

12. How would you like to connect and communicate with other staff members through AHP?
    - Zoom, in-person, chat

13. How will the students and staff access the Zoom appointments? Will the portal email them the Zoom link to join or what other way will the portal communicate the Zoom appointment for users to access?
    - Email sent to user and staff, or page in the portal that shows upcoming appointments with links
    - The link opens up the Zoom desktop app if the user has it installed, if not open Zoom in the browser

14. Besides accessing the services from the three centers, should the users also have access to the announcements from those services?
    - Yes but the user can check or uncheck which announcements you want, should have emergency announcements

15. Do students need to provide their UCI authentication in order to join the Zoom meetings with staff?
    - Yes, use UCI net id.
    - Uci net id for zoom

16. Will different types of staff members have distinct levels of authorization to access student health information?
    - yes, different levels of authorization based on hierarchy, rule-based access control

17. Are students allowed to record their Zoom meetings with Staff? Will the Staff record their Zoom meetings with students?
    - Students can't, staff can, and staff needs to ask students for recording.
18. What do students/staff use in the event Zoom services become down / unavailable?
    - Reschedule

19. What if we implemented a "chat appointment" feature for students who can't or do not want to do verbal communication?
    - Yes, needs to be a verification process

20. If a student wants to use the chat box but there's currently a wait time, will a student be provided with an approximate wait time? Is there some sort of queue/ticketing system?
    - Yes

21. Even though we utilize the same case management systems in the back end, should we refactor some of the software to make things run smoother?
    - no, you don't know those APIs

22. In regards to managing student cases, care plans, and communication with staff, does the staff get any access to specific techniques that will allow them an easier time to do the following things?
    - Figure it out

23. Should the portal have a chat system that is specifically designed for users who are staff members?
    - Yes

24. Would the chat feature be based on a first-come-first-serve basis when waiting for a representative? Are there any students who would have priority over others in the queue?
    - Yes, when joining chat it should give the option to click on emergency
    - Emergency appointment slot, and a regular slot for all types of communication i.e. in person, virtual, chat

25. What is the expected lifetime of AHP?
    - Do not know, depends on features, and user feedback.

26. What types of staff or student errors should the AHP detect and handle?
    - Give guidelines if there's a mistake on the app

27. What kind of issues should be resolved with the chat feature?
    - Basic Q/A about services, no actual counseling

28. Will there be a questionnaire/survey with questions regarding their particular needs that must be answered before directing students to a specific center?
    - yes because the student doesn't know which service is best for them

29. Should there be a limit to the number of times a student can schedule an appointment through the application per day?
    - 2 sessions per week percenter
    - If you need more, the staff will book for you

30. Should in-person scheduling be prioritized over virtual appointments by making it the default option or vice versa?
    - The default can be in person, but students should be able to choose

31. Will students have the option of a group Zoom session or will it only be individual?
    - No, should be private
    - There can be an exceptional case in sending emails to staff

32. If a student decides to schedule an appointment over the phone, will they be able to see the appointment they schedule in the AHP?
    - Yes

33. Will there be support for multiple languages?
    - Yes, look at UCI demographics to make a decision

34. Should the three centers share one backend?
    - Yes

35. Should the chat have a queue?
    - Yes but you decide

36. Approximately how many steps should a student or patient go through when trying to make an appointment through a portal?
    - In an emergency, you do not need many steps. If confused, leave the chat feature to them.

37. Will there be a live chat system, or will the chat only take place over the phone?
    - yes, it should also be on the phone

38. Would having a chatbot answer basic questions before transferring to a human helper be useful?
    - Yes

39. Can students and staff use other methods of communication other than Zoom to conduct virtual meetings?
    - No, zoom is the only one they can use for virtual meetings.

40. Will students have the option to choose the care provider they want to chat with, or will the system make that decision?
    - The student will choose based on their providers or insurance.
    - If a student doesn't then the system can make that decision

41. Should there be a search bar for students to look up what they are looking for on the portal?
    - Yes, search for services

42. Should this chat feature be restricted to specific hours or days?
    - Yes something like 8 am to 8 pm
    - There should be emergency contact as well though

43. What training and support will be provided to staff to ensure they are able to effectively use the portal and provide quality care to students?

- Make a table guide for both students and staff on how to use the portal
- The portal should be different for both users

44. What are the different steps of the referral process for students to other providers?
    - The students can ask the providers for a recommendation through chat

45. What constitutes a “staff”? For a specific case/care plan, should employees not working at the associated center also have access to that information?
    - Staff means any staff in 3 centers. Basic info share, some info not be shared, only share by link. Design by me how to handle the cases.

46. How will the referring information be transferred from the three UCI centers to other providers and centers?
    - Integrate the API from the three centers
    - All information should be available from API
    - The public information from students will be shared with other providers

47. Should students have an inbox for providers to send them messages about referrals?
    - Yes(in the case that the inbox is the chat inbox), we can have some referrals for the inbox.

48. Will users need to provide any additional information in order to access the integrated portal between all three centers?
    - Don’t need extra info since signing in with UCI net id
    - Depending on the service might ask for more info

49. Can the Anteater Health Portal be integrated with other third-party systems or platforms, such as online payment gateways?
    - Answer next week

50. How early in advance should a student be able to schedule an appointment? Does it depend on which center they schedule an appointment with?
    - At Least 3 days before
    - Depends on availability

51. What current server is in use for the back-end case management system for each of the centers, are we using MongoDB, MySQL, or something else? Are we willing to combine them together using one?
    - Don’t need this info since working with API
    - Up to you

52. Can anyone create an account on the system or is it limited to only students, if so, will students be provided an access code to create an account?
    - You do not need any access code, only UciNetID needs to be used for creating an account.

53. What types of referral services are currently offered by any of the centers?
    - You can check yourself

54. What types of tests and validation will be needed to ensure that the system is working as desired?
    - Test Up to me, TA does not know, need an app that is bug-free, no fault.
    - Many kinds of testing we can use for different parts.

55. Does the system need to incorporate billing? If not, does it have to interoperate with current billing systems?
    - Does not have info
    - If there exists a payment system then use the current system

56. What forms of accessibility features would best suit the needs of students with disabilities?
    - Best practices for the industry
    - UCI standards

57. Is there a need to account for any scaling of the application?
    - Yes
    - Two way
    - One in the code
    - Implement the system.

58. How can the system be designed to help students navigate the different centers and services available, should we separate the different branches of health services?
    - Identify common services from all the centers
    - Three other tabs for each specific center

59. How will staff communicate about specific students' cases? Should they use the general system or a messaging system dedicated specifically to students' cases with detailed information?
    - Student to staff from a specific center
    - Staff to staff
    - Think about the life cycle

60. Will staff need training or tutorials for using the system?
    - Yes. get feedback from staff and students.
    - Provide training
    - Tell them how to use
    - Show them how to use

61. Being a system involving multiple branches, could either of the branches modify information of another branch not related to their own branch?
    - No, you can’t change info in the branch

62. How will staff be able to communicate amongst themselves using the system?
    - Look at examples such as Amazon

63. Will there be any plans for integrating other third-party applications besides Zoom into the system?
    - Integrate in a way to add more third-party apps in future

64. Can modifications be made to the current back end in order to comply with future developments?
    - No
    - Search adaptor design pattern

65. Will there be different interfaces for students, staff, providers, and other inquiries?
    - Yes,
    - If a student login, there are some more specific features
    - Common features will be the same such as profile

66. How will students receive the Zoom join link? Will it be through the portal itself or will it be emailed to them sometime before the scheduled appointment, like a day perhaps?
    - You’ll get an email as an option
    - Up to you

67. Is the chat accessible only to students with an active account or can guests use the chat for means of obtaining information?
    - Yes

- Some services will need validation or sign in

68. Regarding the system's chat feature, what other notable features besides scheduling appointments and speaking with providers should the chat be capable of providing students?
    - You can ask basic questions to chat
    - These 4-5 services are fine

69. In regards to referring students to other providers, how does the staff make sure the individual is going to the right care and their insurance will cover the costs?
    - The staff will make the decision
    - The staff will have a list of referrals
    - The staff will let you know that your insurance doesn't cover

70. What do you mean by redirecting? Should the portal redirect the student to the websites of the centers?
    - Redirecting to the care provider
    - Once the portal redirects to the care provider, the AHP portals job is done

71. What are the different actions staff take when managing a student's case and care plan? Creating a new one? Editing? Sending an entire case to another staff member?
    - Creating, editing, sharing, tagging

72. Should unavailable appointments be displayed along with the available appointments? Are appointments grouped by a staff member, by earliest to latest date/time, or by some other order?
    - Sorting depends on the user
    - Don't show unavailable appointments

73. What information is needed to schedule the appointments (staff's schedule, health insurance, etc.)? Will there be an option for students to briefly describe their concerns?
    - When scheduling there will be a text box to write your concerns
    - Basic info is already in the portal coming from student services
    - Depends on the case

74. How important are system responsiveness and real-time communication for the chat functionality? Would the initial chat be done with a bot, or wait in a queue for a staff member to become available?
    - If the bot doesn't have an answer, it will create a queue with staff
    - Depends on your implementation, but responsiveness is important
    - Showing waiting time to student

75. Are cameras mandatory during virtual Zoom appointments?
    - Not mandatory but expected
    - If a student doesn't want to show face then there must be a way to verify the student

76. Will different centers have different chat queues, or will it be one mainstream where people will be sorted based on their responses?
    - Chat will be a single entity for all services

77. Could a feedback feature be implemented into the system in order to monitor user experience regarding the performance and ease of use of the system?
    - Yes to improve the app in the future

78. Will there be a universal built-in way to refer students to other centers (with the necessary information and such), or will it be a case-by-case approach (email, text, business card, etc)?
    - Staff will assign you to service

79. How would students be “guided” to the correct service? Would you prefer to answer a series of questions to determine the best option, or to browse through a list of options with descriptions?
    - Particular questions for different services
    - Staff will prepare the meeting base on the student’s provided information

80. In the future, would you also like to add in other center/provider services on top of the AHP ones, if a student has a need that can’t be fulfilled by the services here?
    - Develop a way to add future services
    - Solid principle

81. What language/frameworks do the existing backend systems use?
    - Doesn’t know

82. What back-end information from the three centers should the portal be restricted from accessing?
    - The backend will retrieve basic information
    - Maybe if the student information is private then it should not be shown to a regular staff

83. Is data stored locally on campus, or is there a cloud service involved?
    - Thinks it’s UCI local

84. Will providers be expected to create and maintain profiles on the system in which they can provide details of their practices or will this task be placed on AHP staff?
    - There should be monitoring before posting
    - Staff should verify provider information before posting

85. Is the number of external providers fixed or do they vary

- Initially assume a number like 10 but be open to expanding

86. In the extreme case that a student cannot be helped by physical, mental, or wellness health services, what should be done to help the student?
    - The staff will look for services from providers
    - Staff will redirect the student to provider

87. For the bot, would you want to implement something like chatgpt?
    - You don't need chatgpt
    - You can make your own bot
    - Don't use their API because you are providing info to the third party

88. Should the staff members be able to keep track of the student's progress after referring to other centers?
    - Staff will redirect to the provider
    - Once a case is closed the staff's job is done
    - Staff closes case

89. Time, budget, team
    - 75k dollar
    - 4 months
    - 4 team member
    - 1 project manager, 2 developers, and 1 tester.

Added 4/24/23

90. Should the AHP have a directory of outside providers where staff can send their info to students?
    - Yes, the App should include all the staff info.

91. If the staff accidentally refers a student to the wrong provider/center, can the staff edit their referrals and notify the student about the edit/mistake?

- Yes.

92. How far in advance should students make appointments? 24 hours before? 72 hours before?
    - Normal situation 72 hours
    - Emergency situation 24 hours or 48 hours

93. How frequently should the chat feature be available to students?
    - Define down to and let users know

94. How will the health portal provide accessibility for students with disabilities or special needs?
    - Wants this
    - Start with the baseline that's available with UCI services

95. Can students access the AHP from anywhere? Do they have to use the UCI campus network to access the AHP?
    - Distinguish services by restrictions such as requiring UCI network

96. What should be done if an emergency case happens during downtime?
    - Students can call center

97. How long do staff-recorded Zoom meetings stay in the cloud? Does it get deleted after a certain time for privacy reasons?
    - Doesn't know
    - Retrospective backup
    - If the case is not resolved then the video stays in the cloud
    - After 3 months of the case being resolved, you can delete the video

98. Can the Anteater Health Portal be integrated with other third-party systems or platforms, such as online payment gateways?

- No

99. What types of communication will be available in the portal for staff members to communicate with each other?
    - Zoom

100. How will the portal ensure that students receive appropriate follow-up care and support, such as reminders for follow-up appointments or referrals to other services?
    - Answer Follow-up question
    - Follow-up call, appointment
    - Depends on the staff

101. What data should be collected by the portal to track student health trends and improve services?
    - Ask for feedback survey
    - Health trends are not the goal of the app

102. What privacy and security requirements should the portal follow to protect student health information?
    - Follow the UCI code of conduct
    - Ensure services are secure to work with UCI services
    - Follow UCI data regulation rules

103. Since staff members can refer students to other providers and other centers when needed, Can the student decline the referral?
    - Staff can give recommendations but users can choose

104. What measures should be taken to make sure that the online health portal is scalable in order to manage a large volume of appointment scheduling requests without experiencing downtime?

- Load balancing, vertical scaling, horizontal scaling
- Deploy multiple services to replicate services
- Or you can scale your hardware
- Suggestion: research ramp-up, ramp-down
- Some kind of sleeping server to provide on-demand (aws lambda)

105. What should be the protocol for when technology for one or more of the three AHP centers malfunctions and appointments can't be properly scheduled?
    - Make a call to the center and make an appointment

106. Do students first choose the center they want to visit and then choose the services that the center can provide or can students just choose a certain service without choosing a center?
    - Up to the students
    - Integrate all the information together

107. Do we have a notification or reminder system built into the portal as reminders to attend appointments?
    - Yes, the user can define the time
    - Text or email reminders

108. Will students be automatically assigned a care provider based on expertise/availability or will they have the ability to choose specific care providers?
    - Yes they can choose specific care providers from a list of available

109. If the portal is down, should students be directed to a screen that instructs them how to make an appointment without using the portal?
    - Yes
    - Can have a dummy server to provide enough information to guide
    - Separate different types of downtime

- Make definitions for different types

Added 5/1/23

110. Is there a template for students' cases/care plans?
    - Staff is responsible for student case life cycle
    - No set template

111. When making an appointment, are students required to log in with their UCI account beforehand?
    - Yes, because UCI net id is required

112. What if there are delays in the software development process due to unforeseen circumstances? How flexible are you if we have to deploy the software at a later date?

113. How should the portal determine the location for in-person appointments?
    - Based on the center.
    - Students will have information about the location of their in-person appointment.

114. When accessing private information, should the student have to answer additional security questions to authenticate?
    - Yes

115. What are the specific criteria to qualify a provider or center with being a referral candidate?
    - The provider must be a formula group and need to ask UCI.

116. Are UCI affiliates able to chat anonymously with the staff, if they just want to seek advice?
    - Yes but cannot ask sensitive questions anonymously

117. Should the AHP accommodate all users including non-English speakers and those with disabilities?
    - Yes app should be localized to multiple languages

118. Should the AHP support text-to-speech functionality to accommodate users with vision impairments?
    - Yes, follow the guideline in policy

119. Can AHP staff chat with external healthcare professionals through the AHP chat service?
    - Optional, not part of AHP

120. When the user is using the live chat, if the user can not find their answer with the bot, will they be prompted to make an appointment or be directed to a representative?
    - If the representative is available, students can be directed to them, if not students can make an appointment.

Added 5/8/23

121. On the homepage of AHP, should there be a calendar with important events from the three centers?
    - Yes, the calendar should show upcoming appointments, and notifications are opt-in

122. Will the portal offer resources for mental health and wellness, such as self-help articles and videos?
    - Yes

123. Will the UCI Staff (AHP) be able to view all their meetings in their own portal? Do the UCI Affiliates also view something similar on their end or just receive a confirmation email?
    - Yes

124. Should the staff put their available dates and times ahead of time for UCI affiliates to book their appointments?
    - Of course.

125. Other than UCI NetID and Two Factor, is there any use of a VPN like Cisco AnyTime Connect which is used for the Prerequisite clearance form currently by UCI?
    - Basic pages can be viewed from anywhere, logging in requires UCI VPN

126. When appointments are made, what is the UCI staff able to see beforehand? Like documents, name, reason for the appointment?
    - Students' past appointment record and health history is stored

127. In the case in which a student fails to show up to their scheduled appointment, what sorts of notifications will the AHP system present the student with within the system?
    - Staff can give some feedback to that student like the remainder.
    - Staff will handle the situation, and send the notification to the student.

128. If someone wants to change/cancel the appointment, would they email the other person or should there be a function where you can create, change, and cancel the appointment?
    - The feature should be built in

129. What kind of data storage does AHP use? What information does it keep in its databases?

- TA does not know.
- Try to use existing services.

130. Does AHP need to meet FERPA regulations for privacy and security concerns of UCI affiliates?
    - Yes

131. Should the chatbot be able to access some of the information students have such as past records, to better accommodate the QnA process and give more personal responses?
    - No, we should not give bot access to students' private information.

132. Do students have an area to provide reviews about different service providers/care providers they have visited for other students to view?
    - Yes, after an appointment students can give feedback

Added 5/15/23

133. Should information about past cases that have been marked as resolved be deleted? Or should the student and staff member involved in the past case be able to view it?
    - Yes
    - Resolved, not deleted
    - Make information invisible to the user, but don't delete (soft delete)

134. What will the portal recommend when the user has various needs that are all different from each other? In this case, can the portal recommend more than one service/center?
    - Yes, but the recommendation system should consider all aspects and try to recommend the base choice

135. After an appointment, should the AHP prompt the staff member to schedule another appointment/mark case as resolved/refer to another staff member?

- Depending on the situation,
- If the staff thinks the student needs it, he can do that.

136. How does AHP handle data breaches, and what steps are taken to notify users and mitigate potential damage?
    - Follow regular practices such as encryption
    - Notify users if any breaches happen through email
    - The developer is responsible for making the application secure

137. Will AHP host conferences or events to expose students to its services? If so, how or where will the events be displayed in the portal?
    - Can have a section or banner for students to view events

138. Are student concerns expressed during online chats with staff members used to instantiate cases or are cases only begun after an appointment is scheduled?
    - Keep the chat for small problems
    - Staff start cases

139. In emergency situations, AHP would have a separate help page with appropriate steps. What would these be? Will there be a response team available at all times? How much should AHP provide in an emergency?
    - There will be staff available at all times
    - Give priority to the highest emergency situations

140. Should the user have a place to view their notifications on the AHP site, for example, notifications about successful appointments, cancellations, referrals, etc. (besides just getting emails)?
    - Yes
    - Students can turn on/off notifications

141. Will the AHP have informative health articles that get posted to the site for students to view?
    - Yes, but do not overfill the portal
    - Can have a separate section
    - Be responsible for the articles that are being displayed (valid information only)

142. Will AHP allow students and staff to give feedback on the portal to make improvements and add new features?
    - Yes

143. What kind of training and support will be provided to staff members to ensure they are comfortable using the AHP system and can effectively manage student cases and care plans?
    - The document, video tutorial, a workshop

144. What type of information will a student profile have? Which of these is editable?
    - UCI info data (UCI student access database)
    - Can go on the UCI access website to change information which will update the portal
    - Can only update health info

145. Is the chat conversation logged for future reference?
    - Yes.
    - The system will keep the chat information.
    - Archive after 6 months

146. If a user initially uses the robot chat box when trying to make an appointment, but it determines that their situation cannot be resolved by one of the three centers, what should happen next?

- Chatbox is for simple queries
- The chat box will refer you to make an appointment and the staff will do the rest

147. (from the emergency question before) Besides the next-day appointments and written steps on the help page, will there be other services? Example: live-calling/emergency hotline.
    - Yes, you can book an appointment in emergency slot

148. How are students notified of the cost of their appointments?
    - You will get an automated email that states how much you have to pay
    - A text will be received if enrolled
    - Distinguish between paid and free appointments

149. Should the AHP provide information about what qualifies as an emergency?
    - Human judgment
    - The staff then will consider if a situation is an emergency

150. Will AHP display the balance that students owe for services in order to remind them to pay or will students have to go to their Zot account to see their transactions/balance?
    - The Zot account will have this information for you
    - Can show the balance in the AHP portal
    - Redirect to the Zot account to pay

151. Will AHP accept sponsors from external sources and businesses to promote their services to students in the portal?
    - Yes but the sponsor should be deemed ok by UCI

152. Should the AHP auto-suspend users for inappropriate language/harassment in the chat?

- Yes but if you use a 3rd party tool, it’s not 100% accurate

153. What role will the OIT have in maintaining the system?
    - Will provide all infrastructure and network-related issues
    - Depends on how developers decide

154. Can you walk us through the security/privacy level selection process?
    - Take action from design and development
    - Follow best practices

155. What primary role does the UCI administration have, if any? Is it mainly just business funding related?
    - Also, execution-related
    - Administration decides changes for the portal
    - Feature selection is up to them

156. Will the chat support services be 24/7, and will the chat be AI or AHP staff?
    - Combination of both
    - Start with the bot then the staff
    - Not 24/7 for staff but the bot will take note of the staff
    - Classify downtime for different scenarios

157. Should there be an administration dashboard that monitors AHP-wide data (# of active users, % of cases unresolved, etc.)
    - Yes

Added 5/22/23

158. How will AHP handle inaccuracies found in a student’s profile? Will AHP use an A.I. system to check for them and notify the student/staff?
    - The student’s profile comes from StudentAccess, AHP doesn't handle this

159. What happens if there is no availability for the type of healthcare professional needed within the next 72 hours?
    - If there is no availability at UCI, refer to an outside provider

160. Will there be a help page/document to assist the student having trouble navigating the portal?
    - Yes

161. Should an administrator have different credentials from normal users for logging in?
    - No, role-based access control

162. What does the portal look like on the care provider’s side (or staff)? Are there added features for them like a dashboard?
    - Yes,

163. Is the assignment of healthcare professionals only based on the facts about the illness, or are additional considerations taken into account (such as the patient's prior interactions with them)
    - Yes, after each appointment staff makes a summary, future appointments can refer to this summary and make decisions

164. Should staff members be able to view a page that lists all of their cases?
    - Yes

165. Can only one staff member be able to manage a case at a time?
    - Yes

166. How can a student select his/her external healthcare provider?
    - Staff will make recommendations

167. Should there be a role of a receptionist (doesn't provide medical care, but simply makes appointments for students when they call)?
    - No

168. Will AHP collect statistics to see how much help is being provided? If so, where would you like the portal to display this information for staff and UCI? What kind of statistics would be collected?
    - Number of users, number of appointments, time and dates of most appointments, number of requests, etc
    - Information is available to admin and staff

169. Will AHP be open source?
    - Make a decision

170. When a staff member schedules an appointment for a student, how do they "select" that student? Do they need their UCInetID?
    - Yes

171. What information does a staff member's profile contain?
    - Uci NetId, basic information, area of expertise, employment history

172. When a student calls a center to make an appointment, the person they call will make an appointment for them using AHP. Is this role distinct from a staff member providing medical services?
    - Up to you
    - Any staff member should be able to book appointments

A.4 Missing Information

Gaps in information

- Information about how surveys are received by UCI
- Specific attributes of admins

Assumptions

- Users can sort the notifications in their inboxes.
- The survey results go to one of the Centers instead of a specific staff member

Additional elicitation questions

- Should the inbox of AHP have a send feature to allow students to send messages to staff?
- Can students delete the notifications in their inboxes?
- What information can be shared with other staff?
- What will the AHP do if staff try to share a student's case with other staff who have already been shared with?
- After the staff closes the students' case, will the students' case be deleted from the UCI database?
- Can the staff reopen a case?
- What will happen if a student denies a referral?