Chapter 2 : System Requirement

2.1 Overview

This chapter serves to lay down the functional and non-functional requirements that will be benchmarked against the development of the proposed chatbot system.

2.2 Scope

The chatbot to be built, is a mobile based application that will provide the community of Ashesi and external users with real time, accurate and credible information about Ashesi. Users will submit their queries or questions to the chatting bot, and a response will be rendered to them (users) in a user-friendly interface.

2.3 **Scenario**

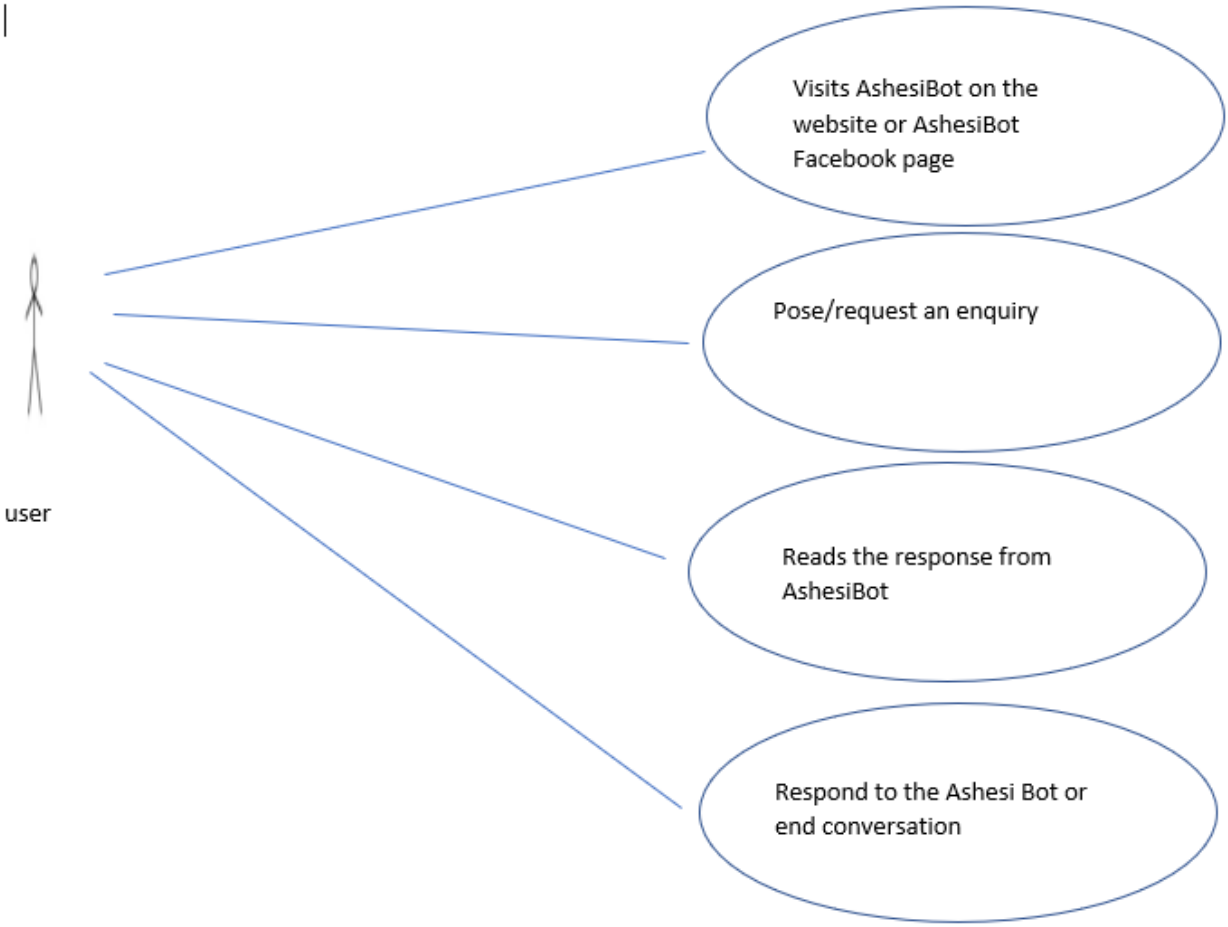
Partson is a freshman at Ashesi University. This is his first week at Ashesi and he does not know the location of his Intro to Computing lecturer's offices. Being an inquisitive and curious student, Partson is always seen asking thought provoking question with his lecturers outside lecture hours. Good thing is, he was told the office is located at the Engineering block, but he doesn't know where exactly. He visits Ashesi website and found AshesiBot. He asked the AshesiBot for the location of Mr. Sampah' s office and the AshesiBot quickly directed him to Engineering block office number 10. Partson quickly moved towards office number 10 and found his lecturer and they begin the session.

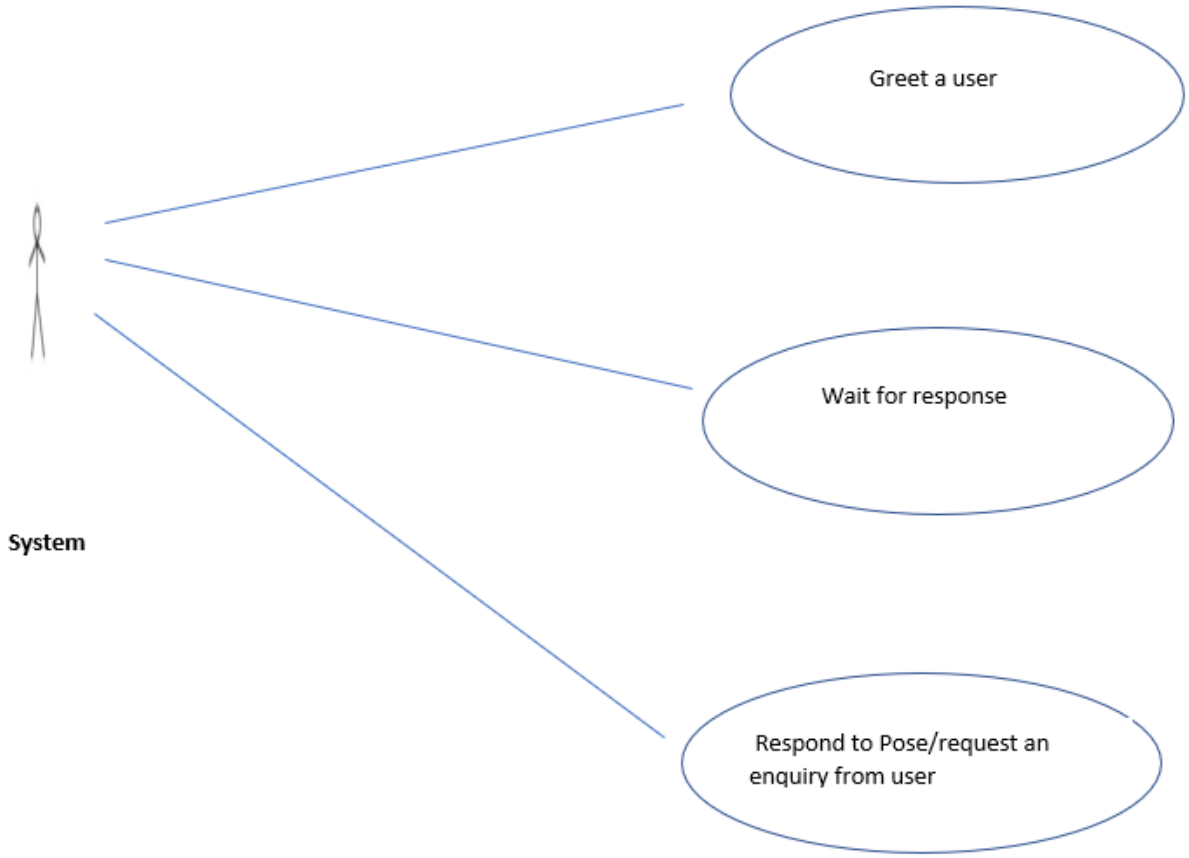
Scenario 2

John is a high school graduate who is looking for a good university to attend in Ghana. He come across Ashesi university website while surfing the internet. John saw many pages with different information about Ashesi. At the far lower right corner of Ashesi website, he found AshesiBot and began engaging in a conversation with the bot about Ashesi, instead of flipping through several web pages. He asked the AshesiBot; "How do I get to apply?". The bot responded with vital information about the application process and was even directed with a URL to read further on this topic. He went further with his conversation with the AshesiBot asking many questions under topics such as Honor Code System, Scholarship. He found that using the AshesiBot was more interactive, timesaving and he felt he was talking to a human being. He wished all universities in Ghana had this software.

2.4 Use Case and Actor Diagram

In this section, diagrams and charts will be used to give a high-level overview of how the various actors of the project interact together.


Visits AshesiBot on the website or AshesiBot Facebook page
Pose/request an enquiry
Reads the response from AshesiBot
Respond to the Ashesi Bot or end conversation
user



2.5 Design Constraints and Assumption

In designing the software, the following assumptions were made:

I. The application will only be accessed on a website

II. It is assumed here that the user is literate; can read and write

III. The user has an adequate internet connection, which will be used to make a request to the chatbot

2.6 **Functional Requirement**: -

This section describes the functional requirements of the AshesiBot. It is divided into two sub categories; user requirements and system requirements.

2.7.1 **User Requirements**: -

- The user should be able to key in or send their request to the system.
- The user should be able to hold a conversation with the chatbot and have their queries responded.
- The user should converse with the system in English only.

2.7.2 **System Requirements: -**

- The system should be able to provide accurate response to each question asked.
- The system should be able to provide useful information required by the user.
- The system should provide support for multiple platforms. Stated differently, the systems should be accessible on different platforms including social media sites.

2.7.3 **Non-Functional Requirements**

- **Performance:** The system should have low latency when communicating with a user.
- **Reliability**: The system should always respond in Natural Language (English) that can be understood by humans.
- **Accessibility**- The system should be accessible to anyone who visits the website and other platforms it is available.