

Criterion A: Planning

Customer Chat Bot

Defining the Problem

The client is **Mr. X**, an entrepreneur who sells industrial products such as barite, on his website for his own company "XCOMPANY". **Mr. X** has only recently moved his **business online** and is working on ways to **improve his website**, especially its **interactions with customers**.

Currently, the website displays information about his products and takes in orders by asking customers to contact him directly. This means Mr. Wang **must read each email and find the necessary information about the order and customer**, which sometimes is incomplete.

As the client deals with increasing amounts of orders and transactions, it became increasingly frustrating for the client to manage these orders in his current method. The client also believes that the current form of ordering on the website is unfriendly. The client **wants a program to help process these orders**, as well as a direct way for customers to place orders, helping customers input the information needed. The program must allow the customer to **input details** such as **email, product, and extra details** about their order and allow the client to **access this data**.

After consulting with the client¹, I offered to help the client create a **web service** to help manage this aspect of their business, to take orders and to interact in a **friendlier manner** with customers.

(Appendix A)¹

The Rationale for the Proposed Solution

I plan to create a web service with a **chatbot interface**. Chatbots are currently used to make ordering more faster and appear more friendly for customers. This program will create a responsive ordering process, prompting customers for information about their order, reducing incorrect information by the customers and making. This program will prompt and parse information from the customer's input and organize it for the client and allow them to access it.

I plan to create the backend of this web service using **Python**, a language commonly used for application backend development, with many relevant libraries and frameworks for backend web development and natural language processing. Also because I am familiar with its usage in such a context. **Javascript** will be used as the frontend because it is universally used by browsers. I plan to use **Heroku** as a host for the product while it is in **development**, as it allows developers to deploy web services without worrying about managing hardware.

Word count: 377

Stating Success Criteria

- The program allows the client to modify item data within the program
- The program allows the client to access customer order data
- The program interface will indicate what it wants the customer to input (friendly)
- The program requests relevant information from the customer (product, special requirements etc.)
- The program allows customers to input information into the program which is stored for access
- The program parses information from customer input and arranges it in a table or similar structure for client
- The program will automatically inform the client of data entry errors
- The program warns customer if insufficient information has been provided, potentially because of data entry errors

