#### 1.0.0 User Interaction

* 1.1.0 The application should allow the user to interact with the chat bot
* 1.1.1 The user should be able to access the chatbot in a browser
* 1.1.2 The user should have a text box to type their query
* 1.1.3 The user should clearly see the response of the chatbot in the webpage
* 1.1.4 The user should be able to clearly see their conversation with the chatbot in the webpage

#### 2.0.0 Queries

* 2.1.0 The chatbot can answer basic questions about people:
  + 2.1.1 The application should take a user query about a person - ‘who is X’ - and respond with a description of that person.
  + 2.1.2 The application should take a user query about the birthdate of a person – ‘when was X born’ and return the birthday of the given person.
  + 2.1.3 The application should take a user query about the age of a person - ‘how old is X’ - and return the age of the given person.
  + 2.1.4 The application should take a user query about the birth place of a person – ‘where was X born’ - and return the birth place of the given person.
  + 2.1.5 The application should take a user query about the death date of a person – ‘when did X die’ and return the birth place of the given person.
  + 2.1.6 The application should take a user query about what a person is known for – ‘what is X known for’ and return a description of what the given person is known for.
  + 2.1.7 The application should take a user query about what a person looks like – ‘photo of X’ or ‘what does X look like’ - and return a photo of the person
  + 2.1.8 The application should take a user query about linking to the Wikipedia page of a person, and return a link to that page.
* 2.2.0 The chatbot can answer questions about countries:
  + 2.2.1 The application should take a query about a country, and return the description of that given country.
  + 2.2.2 The application should take a query about the population of a country, and return the population of that given country.
  + 2.2.3 The application should take a query about the capital of a country, and return the capital of the country.
* 2.2.3 The application should take a query about the description of a country, and return the description of that given country.
* 2.2.4 The application should take a query about the flag of a country, and return the flag image of that given country.
* 2.2.5 The application should take a query about where a country is on a map, and return a google maps location of that country.

#### 3.0.0 Advanced Queries

* + 1. The chatbot can perform advanced query searches and comparisons:
* 3.1.0 Advanced People queries
  + 3.1.1 The user can ask for a list of people born in a given year, e.g. ‘who was born in 1995’ and the chatbot returns a list of notable people born in that year
  + 3.1.2 The user can ask for a list of people born in a given place, e.g. ‘who was born in London’ and the chatbot returns a list of notable people born in that place
  + 3.1.3 The user can ask for winners of a given prize, e.g. ‘who won the Nobel Peace Prize [in 2009]’ and the chatbot returns a list of winners of that prize, or the winner of the prize in a given year.
* 3.2.0 Advanced Country queries
  + 3.2.1 The user can ask the chatbot for a list of countries with a given official language, e.g. ‘which countries speak Italian’, and the chatbot will return a list of countries which identify that language as their official language.
* 3.3.0 Combining queries with AND operator:
  + 3.3.1 The user should be able to combine queries using ‘AND’ to find people who satisfy two conditions. For example, ‘people who were born in 1980 AND were born in London’
* 3.4.0 Context-aware queries:
  + 3.4.1 The user should be able to ask sequential queries about a topic and the chatbot will be able to answer queries within that context. For example, the user first asks ‘Where was X born’, the chatbot responds, and the user asks a follow up question ‘What about Y?’. The chatbot will then respond to the second query with an answer that satisfies the query ‘where was Y born’.

#### 4.0 Conversation

* 4.1 The user should greet the chat bot and be returned with a similar greeting – e.g. Hello.
* 4.2 The user should be able to ask for example queries and the chat bot returns a number of working example queries
* 4.3 The user should be able to ask for help using the chatbot and be returned with a statement about how to use the chat bot.

### Performance Requirements

#### 5.1 Performance

* 5.1.1 The web page should load fully in less than 5 seconds
* 5.1.2 The chat bot should respond to each query within 5 seconds

#### 5.2 Reliability

* 5.2.1 The application should function without failure
* 5.2.2 Any errors that do occur during normal operation should be logged, and the user should be clearly informed that an error has occurred.