

COSC 310 - 001
Software Engineering
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Assignment 4 - Individual Project Documentation

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1.0 Googletrans API

1.1 getLang

```
def getLang(self, response):  
    translator = googletrans.Translator()  
    tran = translator.translate(response, dest='english')  
    return tran.src
```

This method was designed to take in the user's response and using the googletrans API, determine the language the user is speaking in and return the language.

1.2 responseTrans

```
def responseTranslate(self, response):  
    translator = googletrans.Translator()  
    tran = translator.translate(response, dest='english')  
  
    return tran.text
```

This method takes in the users response using googletrans API and will translate and return the users message in english which will be used later by the nodes to determine the correct response from the bot.

1.3 transNode

```
def transNode(self, response, lang):  
    translator = googletrans.Translator()  
    tran = translator.translate(response, src = 'en', dest = lang)  
  
    return tran.text
```

This method will take in the users language which was determined from the getLang method that was determined earlier, as well as the bot's response to the users message. Using the googletrans API, the response will be translated to the user's language and then displayed for the user to read in the GUI.

2.0 wikipedia API

2.1 wikipedia.page

```
try:
    wikipedia.set_lang(language)
    page_py = wikipedia.page(baseAnswer)
    newtext = self.transNode('here is a link containing more information on ', language)
    nodeValue['text'] = newtext + baseAnswer + ': ' + page_py.url
except:
    newtext = self.transNode('I cant find any information on wikipedia regarding that. I would consult your doctor for more information ', language)
    nodeValue['text'] = newtext
```

The built-in wikipedia.page function allows us to enter a string which we get from the user and returns the web page of the specified string.

2.2 wikipedia.summary

```
try:
    wikipedia.set_lang('en')
    abuses = wikipedia.summary("Abuse", sentences = 3)
    transtext = self.transNode(abuses, language)
    newtext = self.transNode('Here is a brief summary on substance abuse from wikipedia: ', language)
    nodeValue['text'] = newtext + ': ' + transtext
except:
    newtext = self.transNode('Drugs and alcohol can be highly addictive, you should try to refrain from taking them in high quantities.', language)
    nodeValue['text'] = newtext
```

The built-in wikipedia.summary function allows us to enter a string and the amount of sentences we want, which will be used to grab a wikipedia summary on the specified string.

2.3 wikipedia.section

```
try:
    wikipedia.set_lang('en')
    mc = wikipedia.page(answer)
    print(answer)
    stringBuild = 'Here are some of the wikipedia suggested readings associated with ' + answer + ': '
    sec = mc.section('Further reading')
    stringBuild = stringBuild + sec
    newtext = self.transNode(stringBuild, language)
    nodeValue['text'] = stringBuild
except:
    transtest = 'There is no recommended wikipedia readings associated with ' + answer
    newtext = self.transNode(transtest, language)
    nodeValue['text'] = newtext
```

Wikipedia API also contains a function: wikipedia.section, which allows us to take specific sections within the page. In this case we are taking the “Further reading” section which will be returned and displayed to the user.