COSC 310: ChatBot Assignment

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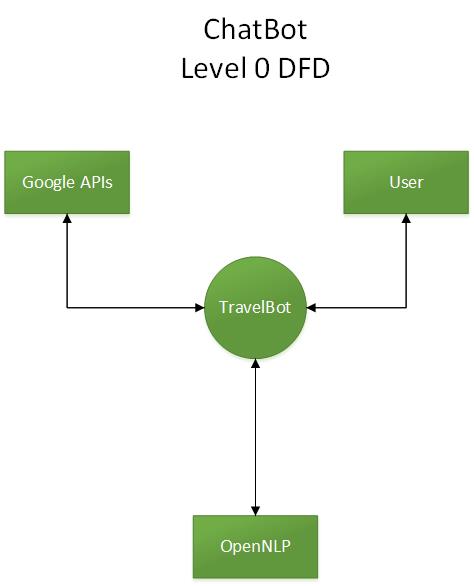
Date: March 11, 2014

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**GitHub Repository:**

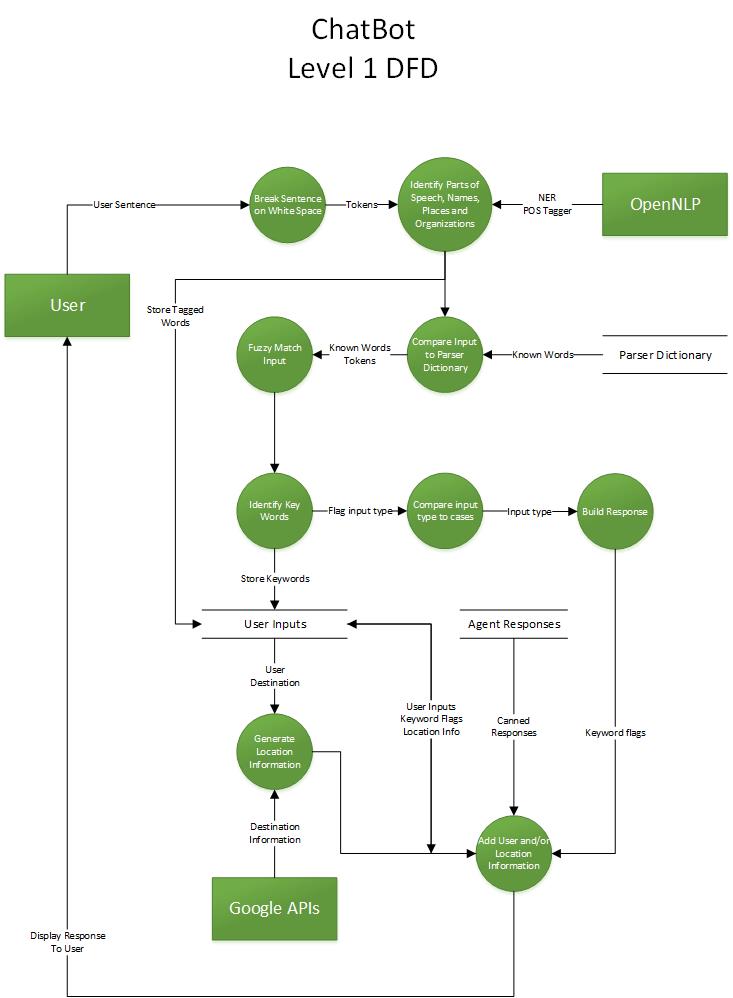
<https://github.com/miken22/COSC310_TravelBot>

Github Graphs:



Description:

This DFD provides a high level overview of the ChatBot system. The central process is the TravelBot program which handles user input, parsing and spell checking, and response generation. There are three major external entities that the system must interact with to decide how to respond. The primary external entity is the User who provides the agent with input. The agent processes the input and returns a response to the user. The second external entity is the OpenNLP parsing toolkit.



Description:

**Sample Dialogue:**

TravelBot started at Mar 01, 2014 02:54:30 PM

Powered by Google

Travel Bot: Hi! Welcome to our travel center. We help arrange trips to Mexico and ski resorts in BC and Alberta. How can I help you today?

User: Hi

Travel Bot: Hi, how can I help?

User: I want to go to Calgary

Travel Bot: Calgary is very nice!

User: how far is calgary

Travel Bot: The distance between Calgary and Kelowna is 605.15km

User: can I drive?

Travel Bot: You can if you want.

Driving to Calgary, from Kelowna would cost approximately $299.58.

User: can i fly

Travel Bot: Searching...

I can certainly help you with that. All our flights are direct to Calgary.

Flying to Calgary, from Kelowna would cost approximately $207.24.

User: what activities are there?

Travel Bot: While you are there you could rent a snowmobile, or you could go skiing

User: are there popular restaurants?

Travel Bot: Let me look that up...

A very popular place is Pita Express.

User: how can I get around?

Travel Bot: We could help set you up with a rental car if you'd like. Be sure to drive carefully on the mountain roads!

User: Can I get around another way?

Travel Bot: If you want to get between cities Greyhound is the way to go.

User: actually, I want to go to Revelstoke

Travel Bot: Everybody loves Revelstoke!

User: how far is revelstoke?

Travel Bot: The distance between Revelstoke and Kelowna is 197.43km

User: are there good restaurants there?

Travel Bot: Determining what's best for you.

A very popular place is The Village Idiot.

User: are there any activities there?

Travel Bot: While you are there you could rent a snowmobile, or you could go heliskiing

User: can you book me a hotel?

Travel Bot: We offer a wide variety of accomodations. Do you have a budget?

User: I can afford $60

Travel Bot: Searching for the best accommodations that match you budget.

We've partnered with some great places. You might like Hotel Tropicoco, only $50, a night!

User: what's the weather like right now?

Travel Bot: It is currently -4.0 degrees C in Revelstoke and the sky is clear.

User: how can I get around there?

Travel Bot: If you want to get between cities Greyhound is the way to go.

User: How can I get around town?

Travel Bot: We could help set you up with a rental car if you'd like. Be sure to drive carefully on the mountain roads!

User: Actually I want to go somewhere warm. I want to go to Mexico City

Travel Bot: It is currently -4.0 degrees C in Revelstoke and the sky is clear.

User: Actually, I want to go to Cancun

Travel Bot: Everybody loves Cancun, Mexico!

User: what's the weather like there

Travel Bot: It is currently 25.37 degrees C in Cancun, Mexico and the sky is clear.

User: can you book me a hotel?

Travel Bot: Were you interested in a family resort, or one of our luxury offerings?

User: I can afford $100

Travel Bot: Searching for the best accommodations that match you budget.

I suggest BeachScape Kin Ha Villas. It just takes seconds to walk from your room to the beach!

User: what activities are there?

Travel Bot: While you are there you could swim with dolphins, or you could see some of the historical landmarks

User: how can i get around?

Travel Bot: If you want to get between cities coach bus is the way to go.

User: are there any popular restaurants?

Travel Bot: Well let me find out...

There may be some local places, but nothing outstanding.

User: can I go on a cruise?

Travel Bot: Searching...

Yes! The Maya Riviera is one of the most popular cruise destinations.

User: can i fly there?

Travel Bot: Searching...

I can certainly help you with that. All our flights are direct to Cancun.

Flying to cancun, mexico, from Kelowna would cost approximately $2157.65.

User: can I drive?

Travel Bot: You can if you want.

Driving to cancun, mexico, from Kelowna would cost approximately $3118.99.

User: ok thanks

Travel Bot: Of course, anytime.

User: bye

Travel Bot: See ya

Limitations:

One of the limitations of the program is how input is provided by the user. Sentences must be phrased in a manner that uses the keywords from the parser dictionary to identify what the user has said.

The agent is only able to handle conversations in English.

The agent is only able to maintain a conversation about the destinations in its dictionary.

Users must ask the agent direct questions

Other Sample Dialogues:

These short conversations demonstrate some of the limitations of the ChatBot program. Below is an example of when the user asks the agent too general of a question. The agent indicates that it does not know how to respond to the given sentence.

User: where can I go there

Travel Bot: Sorry, I don't know what to say to that.