

## **AWS Final Project Checkpoint: Virtual Speech Therapy**

For my project thus far, I have been working on configuring the chatbot. This chatbot will allow users to start a therapy session triggering the retrieval of a phrase from the table in DynamoDB. I began by creating the start and stop intents for the chatbot and testing these. In addition, I have also been familiarizing myself with using DynamoDB and the Java API to access my tables. I have made a “Phrases” table and inserted over 100 phrases into that to begin with. The next step that I have begun is creating a lambda function to query from the database for a phrase. I managed to get this working in Java locally through Eclipse, but am having difficulty connecting it to be triggered by the chatbot. I am still working on figuring out exactly how to have the Lex intent trigger a Lambda function that queries DynamoDB.

Once I figure this out, I would need to further configure the chatbot using another Lambda function to process the user’s response to a given phrase. To do this, I would also need to understand how to trigger Lambda functions from Lex. Once I do this I can test the chatbot and integrate it with a mobile app. I still need to work on designing the mobile app as well.

In my proposal, I had a lot of ideas, but as I began to start working with the tools I began to realize there is a bit of a learning curve with many of these services. I think considering the difficulty of figuring out how to integrate these services in the limited amount of time, I will likely only be able to complete half the project I originally proposed by the due date. This would include the mobile app with integrated chatbot that saves user data in DynamoDB. This would still cover the requirements, using 4 services (MobileHub, Lex, DynamoDB, Lambda) where Lex is a new service. The remaining part that I initially wanted to add is the web frontend that would allow users to connect to mobile app user data and view it from web access. I hopefully plan to add this on my own time after the due date, but anticipate only being able to complete up till the mobile app by the due date.

I had difficulty setting up the environment for Java through Eclipse for DynamoDB, but was able to resolve that and have been able to run inserts and queries from Eclipse. The other difficulty that I’ve been experiencing is understanding how I can trigger a Lambda function authored in Java (in order to query from DynamoDB) from a Lex intent. I am still working on figuring out exactly how to do this. But once I figure this out, it should help resolve some of the other tasks I have left to do for configuration of the chatbot.