Guest: So what’s your project about?

Us: Our project was to make a virtual chatbot that would be used at Doctors’ offices to help callers schedule appointments without human intervention. Basically, it’s a callbot that answers when you call a doctor’s office. Instead of asking you to go through menus and hit buttons on your phone, it asks verbal questions and records your responses in order to schedule your appointment. We’re able to do this mostly through AWS and hopefully this would hypothetically save time and money for doctors offices as well as make scheduling appointments more efficient.

Guest: That’s interesting. Tell me more

Us: We have a small demo that shows how the bot works. (Play demo using the Amazon Lex Dashboard). And we get those same responses and levels of voice recognition when we call the bot through a normal phone too. We’re just using this dashboard to show the conversation visually. We used Amazon Web Services to build our project and in order to connect the bot to the phone call, we used Amazon Connect which acts as a virtual call center that transfers phone calls. Because of Amazon Connect, we are able to build escalation into the project, which means if the caller wants to talk to a human, they just have to say and Amazon Connect will transfer their call to an actual employee. The real backbone of it is Amazon Lex and Amazon Lambda. Amazon Lex allowed us to build the actual bot complete with voice recognition, natural language processing, etc. The bot asks the questions and then transcribes the responses. It sends those responses to Amazon Lambda which is the code that analyzes the responses and decides what to do. For example, when the bot asks for what time the patient would like, and the patient responds with 2:30, the lambda code is the one that grabs the database and checks if 2:30 is open and returns back to the bot if the time is available or not. Lastly we used Amazon Relational Database Services to house our database and that's the database the code looks at to get availabilities, doctor’s names, locations, etc.