Beta Presentation
Self-Service Support Chatbot for Google Cloud
The Capstone Experience
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Project Overview

• 4 components:
  ▪ Chatbot
  ▪ Analytics Dashboard
  ▪ Interrogator Script
  ▪ AI Model

• Reduce time to issue resolution
• Provide insight on the usefulness of current documentation
System Architecture

User
Input

Dialogflow API

React
Analytics
Dashboard

Flask Server

Database

Google NLP API
Google AI API
Beautiful Soup API
Elastic Search API

Google Cloud SQL
Google BigQuery
Chatbot Conversation In DialogFlow

![Chatbot Conversation Diagram]

**User:**
- Hi! What did you break that brought you to me?
  - I’m having an issue with my instance.
- Is your issue with creating your instance, connecting to your instance, starting up your instance, network traffic to or from your instance being dropped, firewall rules, or is it due to something else?
  - Creating my instance.
- Did you receive an error?
  - Yes.
- What error did you receive?
  - notFound.

**Bot:**
- See this document: https://cloud.google.com/compute/docs/troubleshooting/troubleshooting-instances#vm-not-created
  - If you receive a notFound or does not exist in zone error when requesting new resources, it means that the zone does not offer the resource or machine type that you have requested. See Regions and zones to find out which features are available in each zone.
  - Would you like to submit a support ticket, exit, or ask another question?
- I want to submit a support ticket.
- Do you want to open a support ticket or end our conversation?
  - support ticket.
Interrogator Script Command and Results

```
# Example of running a script to test network connectivity
sudo bash gee_local.sh
sudo bash gee-interrogator-script (su - spartan-289723)
no traceroute in /usr/sbin or /bin relying on PATH
107 :echo '####* Gee **********'
108 :echo
109 :grep -qw network
110 :('1 1 = 1')
111 :echo '### Network'
# Output from ifconfig and networking information
```

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Chatbot Configuration Dashboard
Documents in Elasticsearch
What’s left to do?

• Run more simulations to improve AI
• If time allows, use Kibana to expand analytics dashboard
• Remove meaningless paragraphs by title
Questions?