Capital One Incident Wizard

Team members: Isaac Lyu, Ahmad Scruggs, Gamal Almareh, Matthew Baker | Faculty adviser: Tomasz Arodz, Ph.D. | Sponsor: Capital One | Mentor: Vinay Soni

Background

Problem Statement:

 Creating ServiceNow incidents is a tedious process that hinders agent efficiency and causes loss of application context, impacting developers' ability to replicate issues. Leveraging an AI Chatbot, we aim to boost productivity and enhance customer service quality.

Current Challenges:

- Inefficient manual processes lead to longer response times.
- Engineers are unable to get the necessary application context required to fulfill incidents

Affected Parties:

- Agents: Struggle with manual incident creation
- Incident Contributors: This includes agents, managers, or anyone else creating incidents not being able to efficiently supply the necessary context to resolve the incident.
- Customers: Experience delays and inconsistencies in service due to incidents not being resolved.
- Engineers: Often receive incidents that aren't actionable due to lack of data or context.

Objectives

User Interface:

 Should provide an intuitive interface for agents to submit, view and manage incidents.

Al Integration:

 Al capabilities to compile user data for creation of incidents, should also learn from agent feedback to improve accuracy

Feedback Mechanism:

 Mechanism for agents to rate AI suggestions, enabling continuous improvement

Authentication:

 Require users to log in with username and password to access incident management features.

Nonfunctional Requirements:

- System should be fast enough to handle multiple concurrent incidents
- Compatible with multiple browsers and screen sizes while ensuring reliability.
- System should include unit tests to validate key functions.

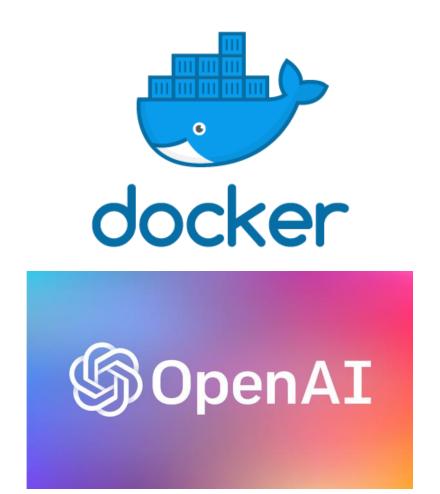
User Experience Before After Client Client Client proposes Customer Client proposes Customer Service Issue Capital One Agent **Capital One Agent** Agent Interacts with Agent Manually Submits Wizard Incident to submit Incidents Incident Request **Incident Wizard** servicenow Checks for similar incidents Engineer fulfills/dismisses the Incident Request Allows for more efficient agent-customer Creates Incident on ServiceNow servicenow **Capital One Engineer**

Approach

Methodology:

- Implement an Al-driven solution that automates incident creation and provides realtime troubleshooting suggestions.
- Design an intuitive interface using React to improve user experience.
- Integrate a feedback mechanism for continuous improvement based on agent interactions.
- Utilize agile development practices for iterative testing and enhancements.









Capital One Engineer



