AI-Powered Customer Support Platform

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Atlantic
Technological
University

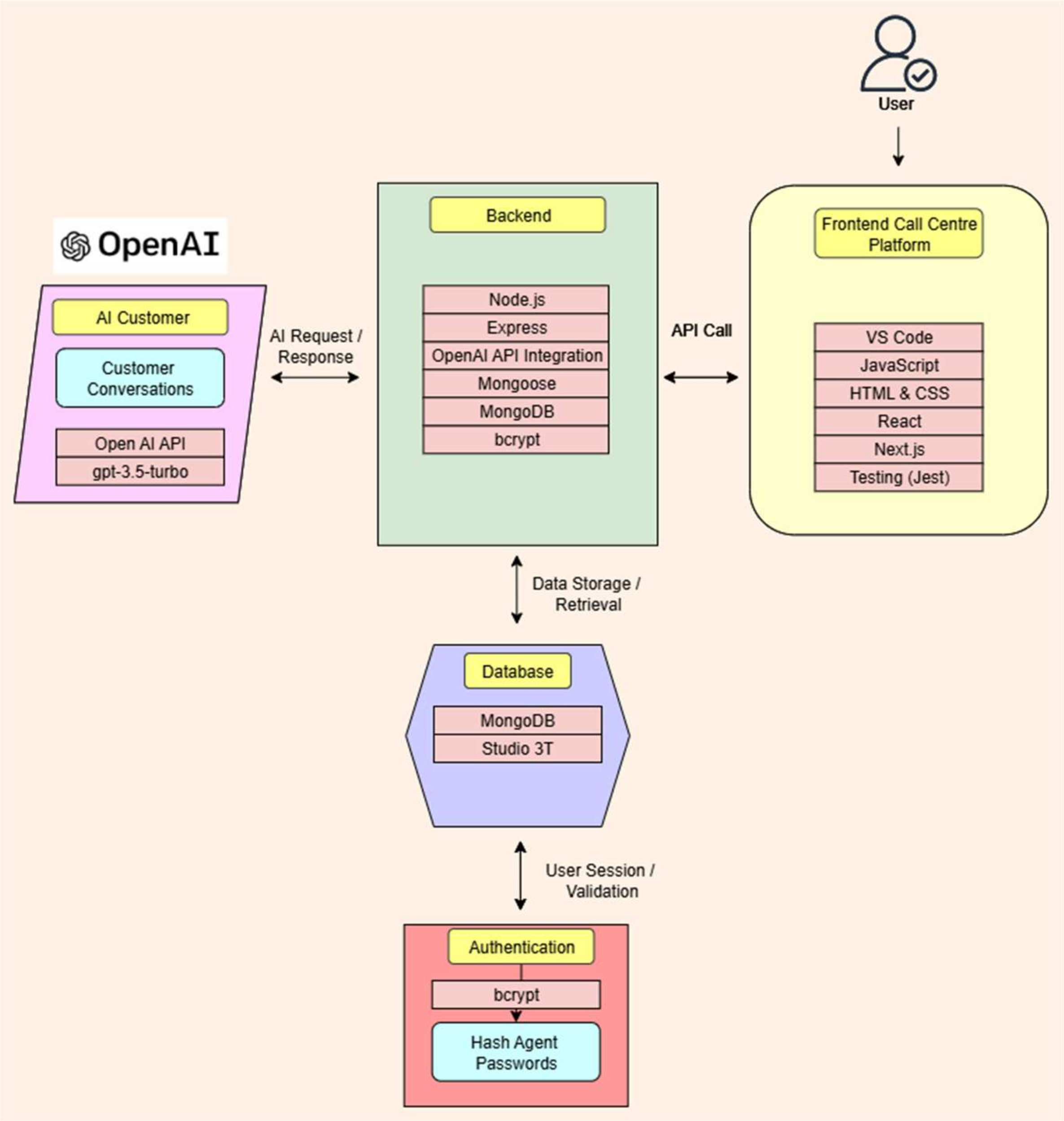
- Mikaela Diaz | G00401392

- BEng(H) in Software & Electronic Engineering
- Atlantic Technological University
- Supervisor: Brian O’Shea
- 2024/2025

Project Overview

- My project is an AI-Powered Customer Support Platform that helps a staff member manage their work.
- The CRM platform has components to help staff control their calls by selecting stations, putting clients in queues or on hold, and tracking their statistics. The data and API calls will be simulated using a Full Fake REST API with a JSON Server.
- The calls will be simulated using a user interface, a timer, and fake data.
- I decided to use a Full Fake REST API with JSON Server because it simplifies simulating API calls and managing data without needing to set up a full backend.
- I have developed 3 call centre components: Station Selection, Queue Activation, and Agent Stats.
- The call centre platform will also include an AI chatbot that can answer questions and give tips. It will be integrated using Open AI API.

Architecture Diagram

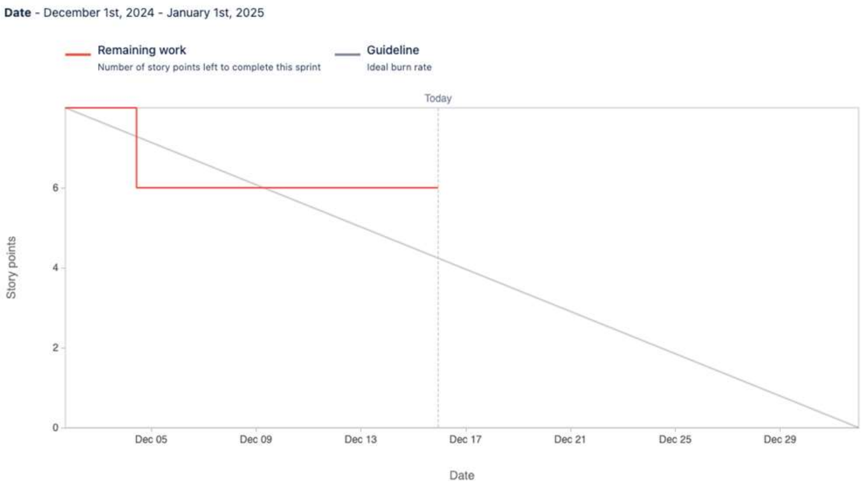


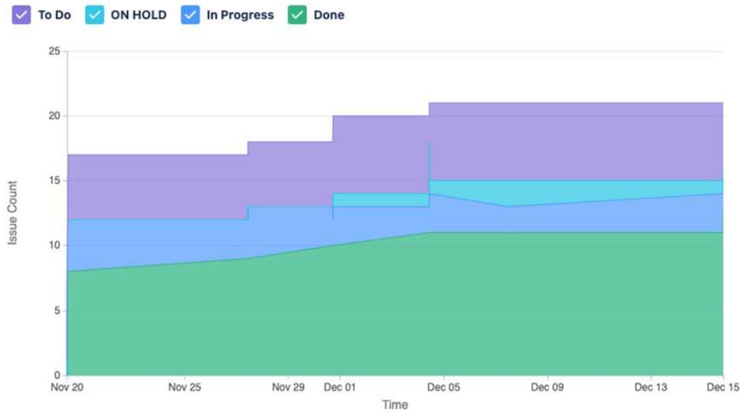
Features

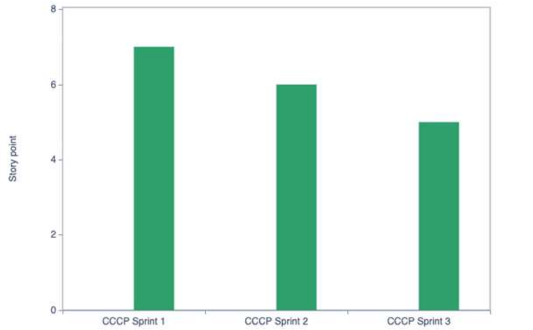
OpenAI Integration

Project Management (Jira)

- I used Jira to create monthly sprints and add tickets to track my progress. I am on my fourth sprint.
- I chose Jira because it is what I use at work at Genesys.
- I added weekly OneNote updates to keep track of my progress.
- I changed my project plan a few times along the way, such as removing authentication.







Sprint	Commitment	Completed
CCCP Sprint 1	0	7
CCCP Sprint 2	0	6
CCCP Sprint 3	0	5

Skills Developed and Learned Lessons

Conclusion and Future Improvements

Thank you

- Video QR code
- Codebase QR code

Academic / Technical Content

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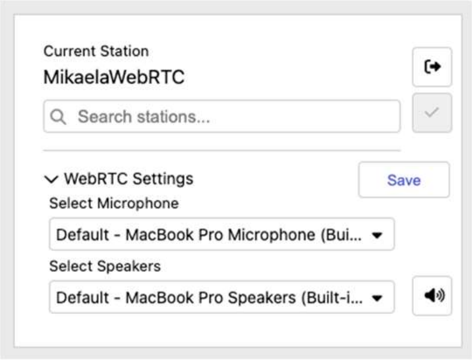
Demonstration of Understanding

- The Station Selection component allows the staff to select a station and its settings. A station is an entity that can receive and place calls.
- The Queue Activation component allows the staff to activate a queue and see if clients waiting or on hold. The staff must activate their “On Queue” status to be able to take calls from the queue.
- The Agent Stats component shows some stats to the staff, such as how many calls they have answered, the time they have spent on calls, or how long clients stayed on hold.
- The 3 components are coded using Typescript in the Vue.js framework, and they are tested using Vitest. They are standalone and function independently from each other. I also used HTML and CSS.
- The CRM platform will also be coded using Typescript and Vue.js.
- I will place the components on different pages of the CRM platform using Vue routing.

Components



Current Station

MikaelaWebRTC

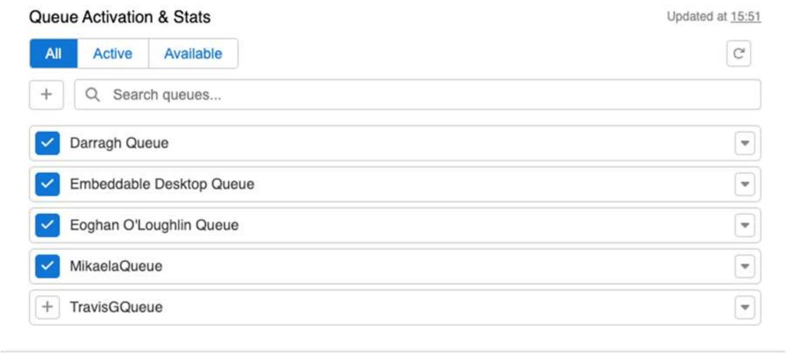
WebRTC Settings

Select Microphone

Default - MacBook Pro Microphone (Bui...

Select Speakers

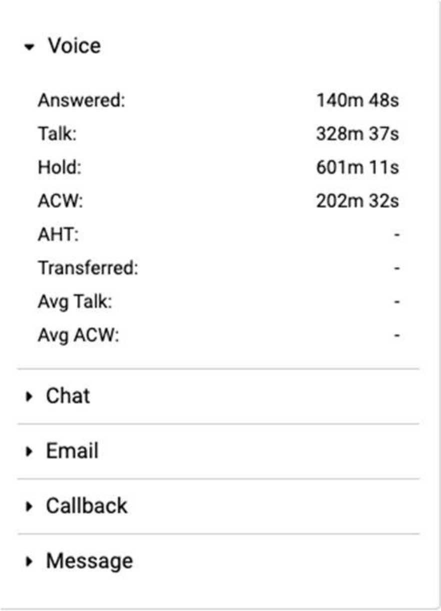
Default - MacBook Pro Speakers (Built-i...



Queue Activation & Stats

Updated at 15:51

- ☑ Darragh Queue
- ☑ Embeddable Desktop Queue
- ☑ Eoghan O'Loughlin Queue
- ☑ MikaelaQueue
- + TravisGQueue



Voice

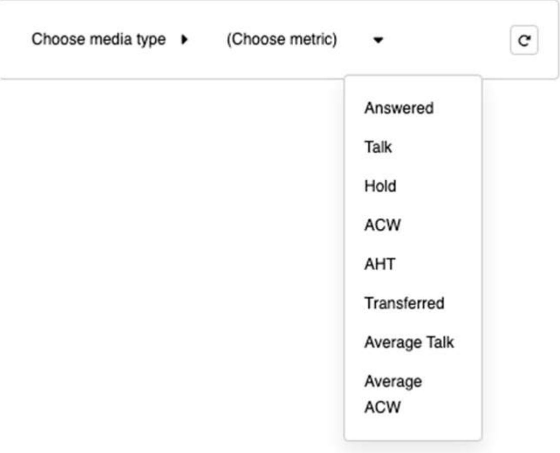
Answered:	140m 48s
Talk:	328m 37s
Hold:	601m 11s
ACW:	202m 32s
AHT:	-
Transferred:	-
Avg Talk:	-
Avg ACW:	-

Chat

Email

Callback

Message



Research

- While deciding my project idea I thought about creating a learning platform similar to an example proposal from last year, but then I decided to do a company-driven project because I thought it would be more relevant to my career.
- I used existing code from Genesys to learn how to create the components for in my project. The code I worked with was originally designed to function within Salesforce. My work at Genesys was to adapt these components to work as standalone components outside of Salesforce.
- I also used Genesys Cloud Research Centre to find information about how the components work.
- I researched how to integrate Open AI API into my project by searching a guide on the Open AI API website.
- I decided to use a Full Fake REST API with JSON Server because it allows me to simulate API calls.
- To learn Vitest I used existing examples at Genesys and the Vitest guide on their website.
- I learned Vue.js and Typescript during my internship. I used tools such as W3Schools, Udemy, and YouTube tutorials.
- I decided to create the CRM platform using Vue.js instead of React.

Initiative & Engagement

- I had weekly standups with my team (Ciara, Elen, Dan, Mark, Cillian). We added our updates to a shared OneNote notebook.
- I reviewed Parthib and Ciara's proposals, and they reviewed mine. We exchanged feedback and applied it to our proposals.
- I updated my OneNote weekly and recorded videos that I uploaded to YouTube and OneNote.
- I updated my supervisor about my project’s progress usually by Email or sometimes during class.
- I asked one of my coworkers if he thought my project idea was good and he gave me some feedback.