



Cubic Virtual Ticket Agent

Andrew Plaza, Miles Maloney, Natalie Malmgren, Rachel Valdez
Faculty Mentor: Dr. Chuck Pateros
Industry: Jorge Septien



Problem Statement

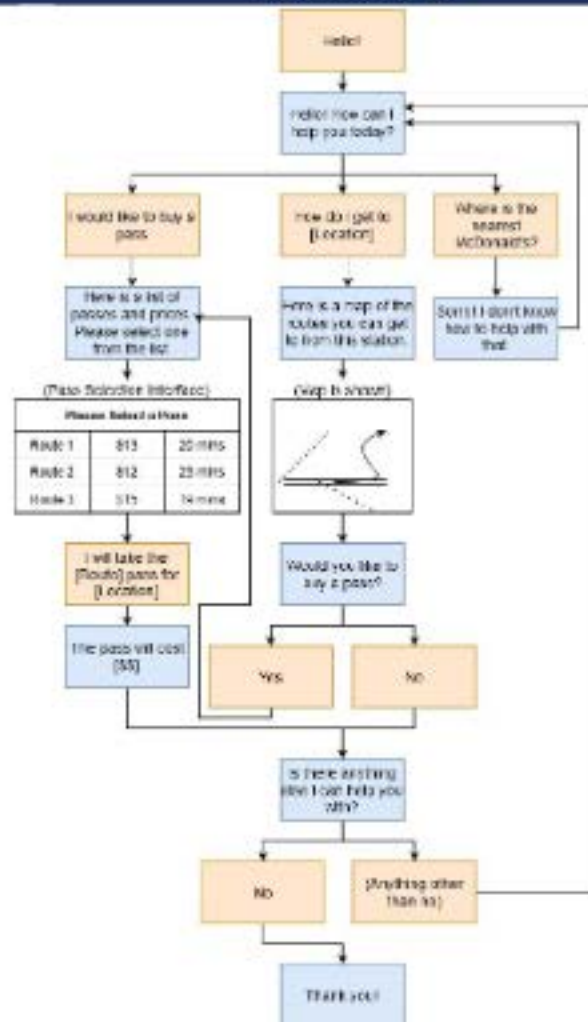
- Problem:**
 - Current transportation interface limiting for people with disabilities.
 - Great demand for HMI methods.
- Goals:**
 - HMI system with natural language processing capabilities
 - More accessible system for those with disabilities.

User Stories

- Interactive voice recognition
 - Initiate and complete purchases
 - Orally select passes and tickets
- Blind user accessibility
 - Receive audible info on pass/ticket availability



Conversational UI



Technical Tools

Tools we are using:

- GitHub
- Mycroft AI
- Raspberry Pi



Technical Challenges

- Working with NLP interfaces
- Learning to use new tools
- Designing from the point of the view of the user
- Integration with existing systems

Implementation Details

- Functions
 - Listing Tickets
 - Purchasing tickets
 - Getting specific ticket
 - Getting route
- Database module
- HTTP Request Handler
- Mycroft Skills
- Google Maps API