



Project: Ford Google Cloud Platform Hackathon, Chatbot Idea  
Team 1: Myself, an engineering manager, and 4 engineers  
Role: Product, VUI Designer  
Timeline: 8 hours, Summer 2021  
Scale: Hypothetical exercise, if implemented all Ford drivers  
Technology: Google Cloud Platform, Google Assistant, Sketch

Idea: Use GCP Google Assistant integration to create a chatbot to talk to the driver in Ford vehicles.  
Problem: Users get bored while driving. The entertainment console in vehicles have voice commands, but they lack the robustness of a cloud-connected virtual assistant.

- Process:
- Created simple example personas to generate usecases from using assumptions derived from consumer-facing materials and internal Ford branding documents. Used these users to frame our problem statement.
  - Generated usecases based on general user expectations of virtual assistants, design trends around them, and how the Virtual Assistant would interact with the car, providing value to the customer and enhancing the driving experience.
  - Drafted conversational scripts for the personas based on usecase brainstorm
  - Created a simple VUI diagram for one of the scripts.
  - Worked with developers to ship one intent, designed a deck to illustrate our process, and presented our findings to a panel of judges.

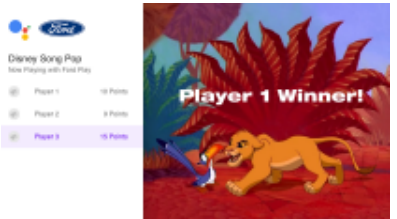
Outcome: Our team got 6th place out of 30 teams and the engineers were onboarded to the VUI design process



Conversational scripts served as the basic template for the intent we developed for the demo



Included in the VUI diagram was car-based integrations, represented by a truck emoji at points in the diagram the skill would interact with onboard car systems such as seat-scales that determine if someone is sitting in the seat and the infotainment system.



Mockups of infotainment screens helped communicate the unique usecase that Ford vehicles afford to voice skills and third party integrations, such as with Disney, showcase potential revenue opportunities.

Project: GCP Hackathon, Fordmoji Idea  
Team 2: Myself, a project manager, and 2 engineers  
Role: Product Designer  
Timeline: 8 hours, Summer 2021  
Scale: Hypothetical exercise, if implemented all Ford Drivers  
Technology: Google Cloud Platform, Computer Vision, IoT

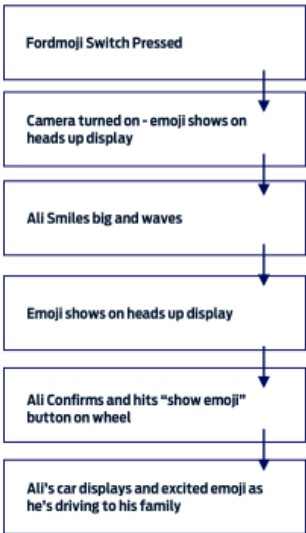
Idea: Use the front facing camera in Ford vehicles to analyze drivers faces for emotions and generate an emoji that shows on the outside of the car.  
Problem: The horn, and headlights are the only method of feedback drivers have to communicate with other drivers on the road.

- Process:
- Generated sample personas to frame usecases around.
  - Led a feature brainstorm session with the team. We were using an open-source emotion detection computer vision engine, so we framed the usecase brainstorm around our personas and scenarios that they would feel those emotions while driving.
  - Created a user journey diagram that they would use to frame the example application
  - Designed the workflow of the user within the car, emphasizing in the user experience that the emoji is a way of expressing emotion to other drivers the same way that the horn can be, driving utility of the product beyond novelty.
  - Created mockups, the deck look and feel and wrote the content, and presented the idea to the panel of judges.

Outcome: Our team got 3rd place out of 30 teams and executives were excited about the possibilities of innovating signals to other drivers using machine learning technology



All: Suburban driver, 69, retired, drives grandkids and wife to appointments and preschool, day care, and sports practice a lot. In the car for 15-40 minutes at a time a few times a day, careful driver. Drives a mach E SUV



A Persona, basic user flow, and mockup of the hardware elements present in the user journey were all delivered as part of our presentation. I designed the "show emoji" button as a touch screen button near the horn to drive the mental model of Fordmoji as driver-to-driver communication similar to a horn and to ensure the user keeps their eyes and attention on the road even when using the product.