Multimodal Chatbots

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Google's UI hasn't changed much in 20 years.

Information interfaces are ripe for disruption.

The **Internet** looks like this …

Chatbots look like this …

Virtual assistants are opening doors for **natural**, **dynamic** information-seeking experiences.

Maps

Graphs

Products

Status

Actions

Lists

Filters
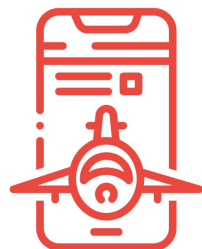
Images

Our goal for integrating GUIs:

1. Improved **accuracy** + agent **control** of conversational flow. Completion rate

2. Enhanced **user satisfaction** with GUI experiences.
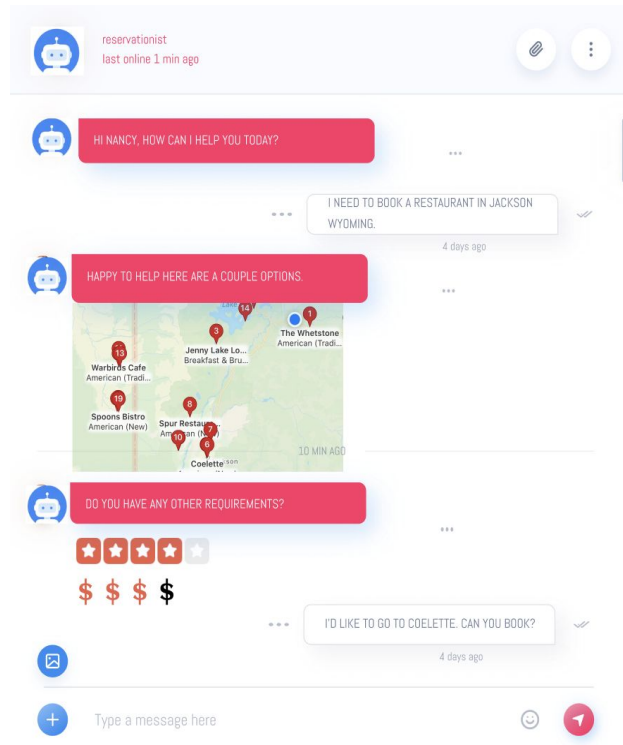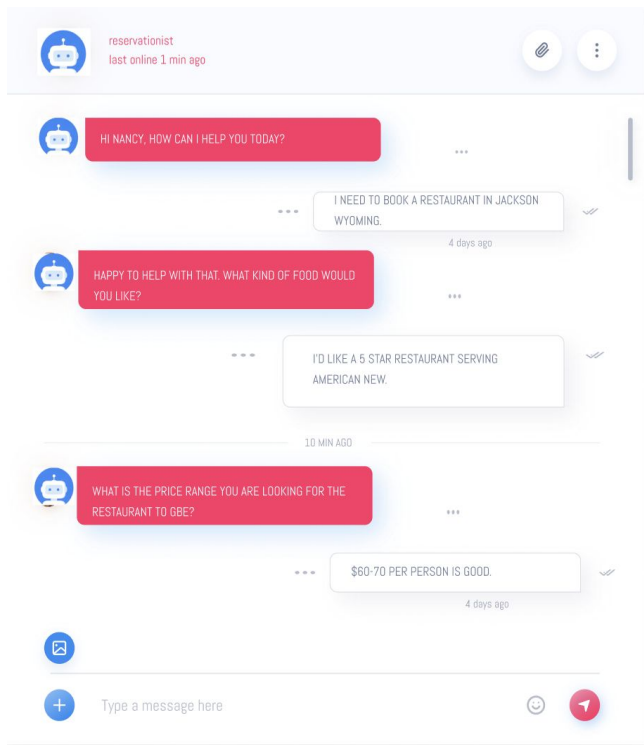
3. **Faster** time to task completion.

For this project, we'll build a multimodal chatbot that utilizes GUIs in dialogue.

Project Timeline:

- **Week 2-3:** Train + deploy a standalone text-based restaurant reservation chatbot running on Yelp API.
- **Week 4-5:** Build dialogue state machine (AI) to support GUI transitions.
- **Simultaneously Week 4-6:** Develop + integrate GUIs into the reservationist chatbot
- **Week 7-9:** Run user studies on time to completion, user satisfaction, completion rate / accuracy.

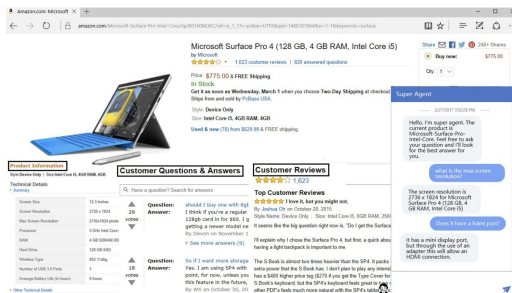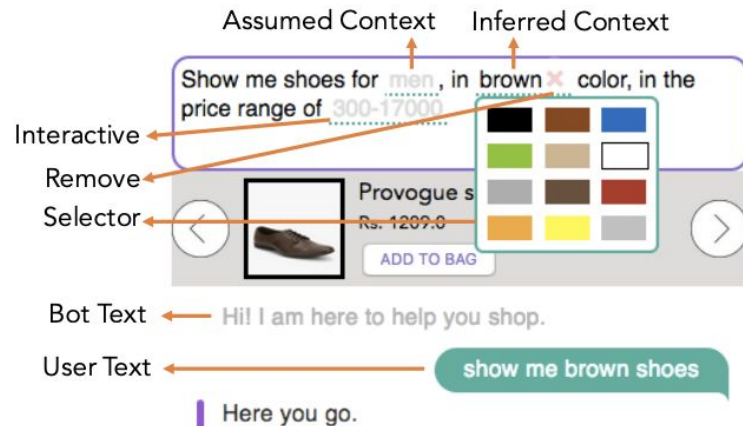# Reimagine chatbots via a **Virtual Reservationist**

@com.yelp

- Ratings
- Cuisine
- Price
- Name
- Geo
- Phone
- Site
- Review count

yes, papers can be written too!

SuperAgent: A Customer Service Chatbot for E-commerce Websites

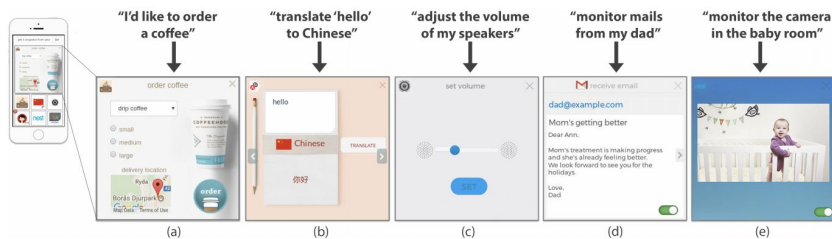**Brassau: Automatic Generation of Graphical User Interfaces for Virtual Assistants**

Figure 1: Brassau automatically generates interactive graphical user interfaces for virtual assistant commands in natural language.

Convey: Exploring the Use of a Context View for Chatbots