



eGain IT Engineer Take-Home Assignment

Customer Service Chatbot Interaction Designer

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Design Choices

- Chose a laptop selection chatbot based on a common real-life question: “What laptop should I get?”
- Wanted the experience to feel friendly and helpful, like chatting with someone you know
- Started with a simple conversation flow to guide users through key preferences
- Refined the flow during development to match natural conversation patterns
- Focused on making the interface clean, easy to follow, and engaging with buttons and clear prompts



Technical implementation

- Built with HTML, CSS, and JavaScript, each in separate files for clarity and maintainability
- JavaScript manages chatbot logic and flow, structured with:
 - A steps array to define the conversation path
 - An appendMessage function to display bot/user messages dynamically
 - Conditional logic to handle input validation (use case, budget)
 - Used a userResponses object to track answers and personalize laptop suggestions
- Logic includes a final step to generate suggestions based on OS and use case
- Ensured buttons were interactive and responsive, and the input was only enabled when needed



Challenges faced

- The most challenging part was getting started with the chatbot conversation design. I initially over complicated things and struggled with how to begin. After rereading the instructions, I gained a clearer understanding of what was expected, which helped me simplify the flow and move forward more confidently.



How you would improve the chatbot with more time

- Integrate AI (Artificial Intelligence) and NLP (Natural Language Processing) to support more natural and dynamic conversation
- Add a larger database of laptops and more filters (screen size, battery life, touchscreen, etc.)
- Provide direct links to purchase or add recommended laptops to a cart
- Make the experience more immersive by adding a virtual size comparison feature (inspired by IKEA's furniture preview) to help users visualize the laptop's size and portability