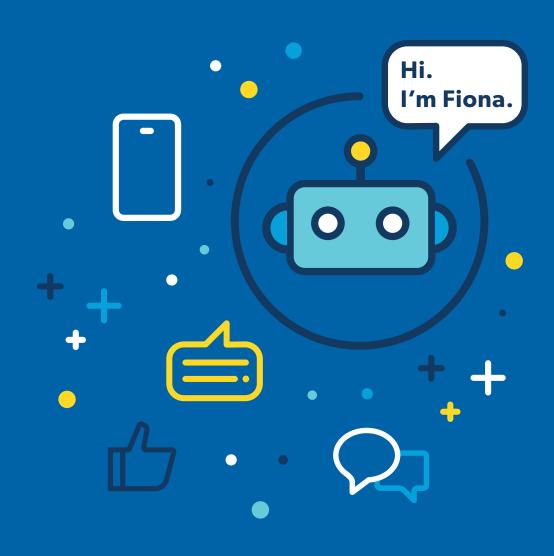
CapTech.

Building Better Chatbots



Chatbots. Consumers have largely embraced them, which means more and more businesses are relying on them. But what does it take to build a better chatbot? Our FAQ provides a brief overview, with an emphasis on how you can approach the writing process.

First, what exactly is a chatbot?

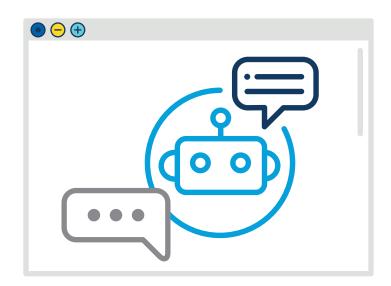
Think of a chatbot as a "software robot" that chats with customers on websites, messaging apps, or devices. A chatbot mimics conversation through text (e.g., 1800flowers.com) or voice (e.g., Alexa).

And people really use these chatbots?

Absolutely, and there's plenty of consumer research to prove it. For example, back in 2019 40% of consumers in the U.S. were using chatbots to shop with retailers. In addition, 77% of customers said chatbots will transform their expectations of companies over a five-year span.

Wow, okay. So how do chatbots work?

Chatbots can be rule-based, NLP-based (natural language processing), or a hybrid of the two. For rule-based chatbots, users follow a predetermined script that guides the user through the conversation to reach their intents; since this is a more manual process, if the chatbot encounters an utterance from the user that isn't included in the script, it may not be able to reply accordingly. The other option employs NLP and artificial intelligence (AI) that has the capability to work through the user's intents and utterances, and then determine how to answer. But both require writing!



You keep saying "intent" and "utterance." What are those?

Think of an intent as what the user is trying to accomplish with the chatbot, while the utterance is how the user communicates—the specific words and phrases—with the chatbot. For example, someone interested in knowing the weather forecast for today may type or say:

"What's today's forecast?"

"How does today's weather look?"

"Will it rain today?"

Here the intent of the user remains the same—but the three utterances are different.

Alright, got it. So, what's the process for creating a chatbot?

Since we're focused on writing, we'll keep things high-level, but here are the four steps you'd take:

- 1. Strategy/Research: First you'd knock out preliminary tasks like interviewing key stakeholders, conducting any necessary consumer and market research, and mapping out potential user flows.
- **2. Writing/Design:** This is where the bulk of the writing takes place. While you create the dialogs between users and the chatbot, you also develop personas (more on that in a minute).

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- **3. Prototyping:** Various tools exist for prototyping, such as Botmock, Voiceflow, and Botsociety. Once a tool is chosen, it's time to build out the flows for your chatbot.
- **4. Testing:** You've built a chatbot, but how effective is it? Testing identifies which flows work well and which ones may cause friction for users.

Writing technically takes place during all of these steps except testing—though the testing would probably lead to more writing since refinements would surely need to be made.

Who handles all of these steps?

A team of UX architects, writers, and researchers work together as a conversation design team to build a chatbot.

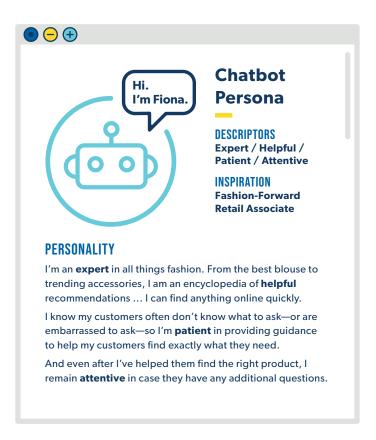
What is typically written first for a chatbot?

Personas, and there are two kinds for chatbots:

- **1. The user persona:** Think about who will use your chatbot. Developing proper user personas is always the first step.
- 2. The chatbot persona: Yes, even your chatbot needs a personality. Typically, the chatbot's tone and voice will take its cues from any existing brand standards. But whether you hope to educate consumers or utilize chat as a sales tool (or, in many cases, do both!), your chatbot should keep interactions friendly and brief—it is a conversation, after all.

What's up next after you've created the personas?

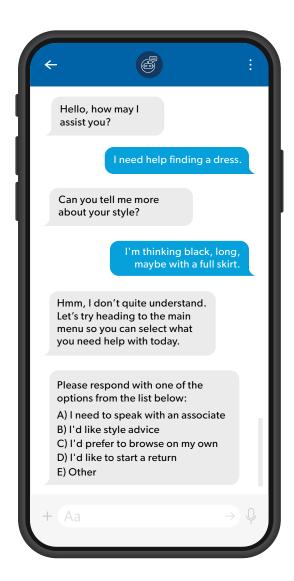
Once you've mapped out the necessary conversation flows, you can begin writing the actual dialog. Keep in mind that this includes thinking through user responses. Many conversation design teams start by mapping out the dialog based on the intent's "happy path," which assumes everything goes perfectly in the conversation, with the chatbot understanding every user response.



If there's a happy path, does that mean there's an unhappy path?

It does. That's part of the challenge: trying to predict where the conversation may go off course, all for the sake of ensuring it doesn't!

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Do conversation design teams have tricks up their sleeves to keep the conversation on track?

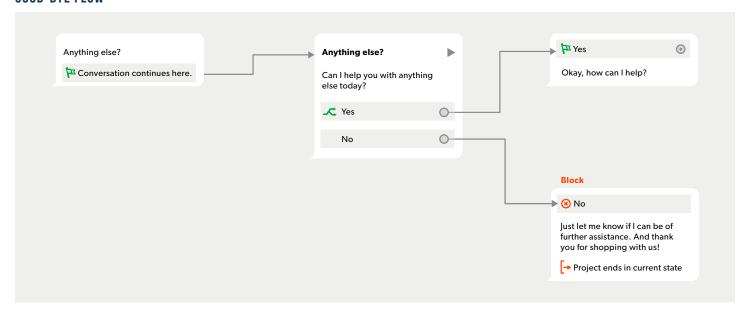
They do, even though it's an obvious solution. When the conversation calls for it, they provide potential answers as guardrails to keep the user on course—think of it like a multiple-choice test question.

Is there a typical conversation structure for chatbots to follow?

While the application will dictate the conversation to some degree, conversation design teams often follow a loose format that includes:

- 1. Greeting Flow: Think of this as a "hello" message to kick the conversation off.
- **2. Primary Flow:** Here you're helping the user achieve their specific task.
- **3. Good-Bye Flow:** Your chatbot must sign off after meeting the user's needs.
- **4. Catch-All Flow:** If the chatbot doesn't comprehend the user's intent, you need a Plan B.

GOOD-BYE FLOW



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What do you mean by a Plan B?

Though the goal is to predict every possible twist and turn in a conversation, there can be misunderstandings in a dialog—just as it happens with humans. This may occur due to something as simple as a user typo or asking about a product or service the business doesn't offer. You need a flow that directs a user back on track—which could include handing the user off to a living, breathing online assistant who can resolve the matter.

Is it okay to use emojis in chats?



One of Jakob Nielsen's 10 usability heuristics is a "match between the system and the real world," which means your chatbot should speak your users' language—and that language certainly includes emojis and GIFs. You don't necessarily want to go overboard; like in the usage above, a smart way to employ emojis in chat is to provide validation, especially if a user has completed the task at hand.

Aside from meeting consumers' needs, are there other advantages for companies that use chatbots?

1,000%. Businesses spend over \$1.3 trillion per year to address customer requests, and chatbots could help to reduce that cost by 30%. In fact, virtual customer assistants help organizations reduce call, chat, and email inquiries by 70%, while 90% of businesses report recording large improvements in the speed of complaint resolution.

In closing, using a chatbot might seem like a small amount of writing, but there are big benefits for the businesses that use them.



30% of customer request budgets could be reduced with chatbot implementation



70% reduction in call, chat, and email inquiries when chatbots are used



90% of businesses reported large improvements in speed of complaint resolution when chatbot was used



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Patrick has over 10 years of experience as a content creator, with specific consulting experience in content management. He is skilled in content testing analysis, style guides, and UX writing. Patrick has written for conversational technologies, which includes developing user and chatbot personas. He has worked on engagements across a diverse range of industries where he has delivered high-quality work, always adapting to meet different customer needs.

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