further specialized functions. While a communication system for a medical system may have different associated functions for event triggers such as “schedule an appointment”, “get test results”, and “refill a prescription”, a device support system can have functions for alternative categories such as “get operating instructions”, “request warranty repairs”, “speak with a technician”, or “get troubleshooting assistance”. Each of these events, when identified using a trigger template in a two-way communication session, can be used to call a serverless function from a cloud-based FaaS system. The use of such a serverless system allows the communication management system to dynamically allocate resources based on a system load that can vary dramatically over time. Additionally, by configuring serverless function templates in a FaaS system, updates to available functions can be made in the FaaS cloud by updating cloud-based templates while the two-way communication system operates, allowing updated functions to be accessed when ready via the cloud, rather than dealing with in-system updates.

[0008] According to a first aspect of the present disclosure, there is provided a computer-implemented method including: accessing a template configured to execute a response based on an event; facilitating a two-way communication session with a user device, wherein the two-way communication session includes a natural language communication; processing data of the two-way communication session to identify an event trigger corresponding to the template; requesting execution of a serverless cloud-based function associated with the event trigger, wherein requesting the serverless cloud-based function includes transmitting code associated with the serverless cloud-based function; and integrating one or more outputs of the serverless cloud-based function associated with the event trigger into the two-way communication session,
wherein when the code is received at a serverless provider, the serverless provider executes the code to generate the one or more outputs of the serverless cloud-based function.

[0008a] According to a second aspect of the present disclosure, there is provided a system including: a memory; and one or more processors coupled to the memory and configured to perform operations including: accessing a template configured to execute a response based on an event; facilitating a two-way communication session with a user device, wherein the two-way communication session includes a natural language communication; processing data of the two-way communication session to identify an event trigger corresponding to the template;

requesting execution of a serverless cloud-based function associated with the event trigger, wherein requesting the serverless cloud-based function includes transmitting code associated with the serverless cloud-based function; and integrating one or more outputs of the serverless cloud-based function associated with the event trigger into the two-way communication session, wherein when the code is received at a serverless provider, the serverless provider executes the code to generate the one or more outputs of the serverless cloud-based function.

[0008b] According to a third aspect of the present disclosure, there is provided a non-transitory computer readable medium including instructions that, when executed by one or more processors of a device, cause the device to perform operations including: accessing a template configured to execute a response based on an event; facilitating a two-way communication session with a user device, wherein the two-way communication session includes a natural language communication; processing data of the two-way communication session to identify an event trigger corresponding to the template; requesting execution of a serverless cloud-based function associated with the event trigger, wherein requesting the serverless cloud-based function includes transmitting code associated with the serverless cloud-based function; and integrating one or more outputs of the serverless cloud-based function associated with the event trigger into the two-way communication session, wherein when the code is received at a serverless provider, the serverless provider executes the code to generate the one or more outputs of the serverless cloud-based function.

[0009] Additional examples include systems, devices, computer readable media, as well as other implementations described herein. The foregoing, together with other features and embodiments, will become more apparent upon referring to the following specification, claims, and accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] The present disclosure is described in conjunction with the appended Figures:

[0011] FIG. 1A shows an example embodiment of a communication system in accordance with some aspects of the present technology;

CLAIMS

1. A computer-implemented method comprising:

accessing a template configured to execute a response based on an event;

facilitating a two-way communication session with a user device, wherein the two-way communication session includes a natural language communication;

processing data of the two-way communication session to identify an event trigger corresponding to the template;

requesting execution of a serverless cloud-based function associated with the event trigger, wherein requesting the serverless cloud-based function includes transmitting code associated with the serverless cloud-based function; and

integrating one or more outputs of the serverless cloud-based function associated with the event trigger into the two-way communication session, wherein when the code is received at a serverless provider, the serverless provider executes the code to generate the one or more outputs of the serverless cloud-based function.

2. The computer-implemented method of claim 1, further comprising:

terminating execution of the serverless cloud-based function based on a termination of the two-way communication session.

3. The computer-implemented method of claim 1, further comprising:

processing data of the two-way communication session to identify a function termination trigger corresponding to the serverless cloud-based function; and

terminating the serverless cloud-based function based on the function termination trigger.

4. The computer-implemented method of claim 1, wherein requesting the serverless cloud-based function associated with the event trigger further comprises:

transmitting a request, wherein when the request is received at a function-as-a-service platform, the function-as-a-service platform generates the one or more outputs.

5. The computer-implemented method of claim 1, wherein the template includes contact center data for a contact center associated with the two-way communication session and a terminal device associated with an agent.

6. The computer-implemented method of claim 1, further comprising:

receiving configuration settings associated with a client system, the configuration settings selecting the template and one or more event triggers corresponding to the template; and

automatically associating the template with two-way communication sessions associated with the client system.

7. The computer-implemented method of claim 1, further comprising:

facilitating connection of the user device to a terminal device associated with an agent,

wherein the event trigger is communication data indicating a switch from an automated agent to a human agent, and wherein the one or more outputs indicate the agent and the terminal device.

8. The computer-implemented method of claim 1, wherein the code associated with the serverless cloud-based function includes custom logic to develop a conversational experience for the two-way communication session in response to a conversation started event.

9. The computer-implemented method of claim 1, wherein the code associated with the serverless cloud-based function includes custom logic to develop a conversational experience for the two-way communication session in response to a survey submitted event.

10. The computer-implemented method of claim 1, wherein the code associated with the serverless cloud-based function provides real-time natural language processing for a specialized topic associated with the two-way communication session.

11. A system comprising:

a memory; and

one or more processors coupled to the memory and configured to perform operations comprising:

accessing a template configured to execute a response based on an event;

facilitating a two-way communication session with a user device, wherein the two-way communication session includes a natural language communication;

processing data of the two-way communication session to identify an event trigger corresponding to the template;

requesting execution of a serverless cloud-based function associated with the event trigger, wherein requesting the serverless cloud-based function includes transmitting code associated with the serverless cloud-based function; and

integrating one or more outputs of the serverless cloud-based function associated with the event trigger into the two-way communication session, wherein when the code is received at a serverless provider, the serverless provider executes the code to generate the one or more outputs of the serverless cloud-based function.

12. The system of claim 11, further comprising:

terminating execution of the serverless cloud-based function based on a termination of the two-way communication session.

13. The system of claim 11, further comprising:

processing data of the two-way communication session to identify a function termination trigger corresponding to the serverless cloud-based function; and

terminating the serverless cloud-based function based on the function termination trigger.

14.The system of claim 11, wherein requesting the serverless cloud-based function associated with the event trigger further comprises:

transmitting a request, wherein when the request is received at a function-as-a-service platform, the function-as-a-service platform generates the one or more outputs.

15. The system of claim 11, wherein the template includes contact center data for a contact center associated with the two-way communication session and a terminal device associated with an agent.

16. The system of claim 11, further comprising:

receiving configuration settings associated with a client system, the configuration settings selecting the template and one or more event triggers corresponding to the template; and

automatically associating the template with two-way communication sessions associated with the client system.

17. The system of claim 11, further comprising:

facilitating connection of the user device to a terminal device associated with an agent, wherein the event trigger is communication data indicating a switch from an automated agent to a human agent, and wherein the one or more outputs indicate the agent and the terminal device.

18. A non-transitory computer readable medium comprising instructions that, when executed by one or more processors of a device, cause the device to perform operations comprising:

accessing a template configured to execute a response based on an event;

facilitating a two-way communication session with a user device, wherein the two-way communication session includes a natural language communication;

processing data of the two-way communication session to identify an event trigger corresponding to the template;

requesting execution of a serverless cloud-based function associated with the event trigger, wherein requesting the serverless cloud-based function includes transmitting code associated with the serverless cloud-based function; and

integrating one or more outputs of the serverless cloud-based function associated with the event trigger into the two-way communication session, wherein when the code is received at a serverless provider, the serverless provider executes the code to generate the one or more outputs of the serverless cloud-based function.

19. The non-transitory computer readable medium of claim 18, wherein the instructions further cause the device to perform operations comprising:

terminating execution of the serverless cloud-based function based on a termination of the two-way communication session.

20. The non-transitory computer readable medium of claim 18, wherein the instructions further cause the device to perform operations comprising:

processing data of the two-way communication session to identify a function termination trigger corresponding to the serverless cloud-based function; and

terminating the serverless cloud-based function based on the function termination trigger.

21. The non-transitory computer readable medium of claim 18, wherein requesting the serverless cloud-based function associated with the event trigger further comprises:

transmitting a request, wherein when the request is received at a function-as-a-service platform, the function-as-a-service platform generates the one or more outputs.

22. The non-transitory computer readable medium of claim 18, wherein the template includes contact center data for a contact center associated with the two-way communication session and a terminal device associated with an agent.

23. The non-transitory computer readable medium of claim 18, wherein the instructions further cause the device to perform operations comprising:

receiving configuration settings associated with a client system, the configuration settings selecting the template and one or more event triggers corresponding to the template; and

automatically associating the template with two-way communication sessions associated with the client system.

24. The non-transitory computer readable medium of claim 18, wherein the instructions further cause the device to perform operations comprising:

facilitating connection of the user device to a terminal device associated with an agent, wherein the event trigger is communication data indicating a switch from an automated agent to a human agent, and wherein the one or more outputs indicate the agent and the terminal device.