DYNAMIC ENDPOINT COMMUNICATION CHANNELS

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. Provisional Application No. 62/745,552, filed October 15, 2018, which is hereby incorporated by reference in its entirety for all purposes.

FIELD

[0002] The present disclosure relates generally to communication processing using artificial-intelligence (AI). More specifically, techniques are provided to deploy an AI platform to select and manage endpoints in a communication channel, which enables customers to engage with endpoints best suited to answer natural language queries.

SUMMARY

[0002a] According to an aspect of the present disclosure, there is provided a non-transitory computer-readable medium including instructions stored thereon, the instructions effective to cause a connection management system to: receive, from a user device, a natural language communication; interpret~~,~~ an intent of the natural language communication using natural language processing, wherein the natural language communication corresponds to conversational human language that does not require conformance to a rigid protocol corresponding to at least one of wake words, key words, specified phrases, or explicitly named services; automatically determine, based on the intent, a social network member endpoint to receive the natural language communication, the social network member endpoint being selected from a collection of endpoints including at least one agent and at least one social network member; and facilitate a first conversation between the user device and the social network member endpoint to handle the intent of the natural language communication; and send the natural language communication to the social network member endpoint.

BRIEF DESCRIPTION OF THE DRAWINGS

[0003] The present disclosure is described in conjunction with the appended Figures:

[0004] Figure 1 shows an example embodiment of a network interaction system in accordance with some aspects of the present technology;

[0005] Figure 2 shows an example embodiment of a network interaction system in accordance with some aspects of the present technology;

[0006] Figures 3A, 3B, and 3C show example embodiments of a network interaction system that includes a connection management system in accordance with some aspects of the present technology;

[0007] Figure 4 shows a representation of a protocol-stack mapping of connection components' operation in accordance with some aspects of the present technology;

[0008] Figure 5 represents a multi-device communication exchange system embodiment in accordance with some aspects of the present technology;

[0009] Figure 6 shows an example embodiment of a connection management system in accordance with some aspects of the present technology; and

CLAIMS

~~WHAT IS CLAIMED IS:~~

1. A non-transitory computer-readable medium comprising instructions stored thereon, the instructions effective to cause a connection management system to:

receive, from a user device, a natural language communication;

interpret~~,~~ an intent of the natural language communication using natural language processing, wherein the natural language communication corresponds to conversational human language that does not require conformance to a rigid protocol corresponding to at least one of wake words, key words, specified phrases, or explicitly named services;

automatically determine, based on the intent, a social network member endpoint to receive the natural language communication, the social network member endpoint being selected from a collection of endpoints including at least one agent and at least one social network member; and

facilitate a first conversation between the user device and the social network member endpoint to handle the intent of the natural language communication; and

send the natural language communication to the social network member endpoint.

2. The non-transitory computer-readable medium of claim 1, wherein the instructions further cause the connection management system to:

monitor the first conversation for subsequent communications between the user device and the social network member endpoint;

detect an action trigger in the first conversation, wherein an action trigger requires an action to be taken by the connection management system.

3. The non-transitory computer-readable medium of claim 2, wherein the instructions further cause the connection management system to:

after detection of the action trigger, provide a message in first conversation.

4. The non-transitory computer-readable medium of claim 3, wherein the instructions further cause the connection management system to:

after detection of the action trigger, send a private message to the user device, or to send a private message to the social network member endpoint.

5. The non-transitory computer-readable medium of claim 2, wherein the instructions further cause the connection management system to:

after detection of the action trigger, add a second endpoint to the first conversation; and

send a communication that is part of the first conversation to the second endpoint.

6. The non-transitory computer-readable medium of claim 5, wherein the instructions further cause the connection management system to:

after detection of the action trigger, drop the social network member endpoint or the second endpoint from the first conversation, and discontinue sending communications that are part of the first conversation to the dropped endpoint.

7. The non-transitory computer-readable medium of claim 1, wherein the instructions further cause the connection management system to:

monitor the first conversation for subsequent communications between the user device and the social network member endpoint;

determine that the first conversation should be closed; and

close the first conversation.

8. The non-transitory computer-readable medium of claim 1, wherein the instructions further cause the connection management system to:

monitor the first conversation for subsequent communications between the user device and the social network member endpoint;

determine that the first conversation has gone dormant;

send a communication as part of the first conversation to the user device to resume the first conversation.

9. The non-transitory computer-readable medium of claim 1, wherein the instructions further cause the connection management system to:

monitor communications from the user device for a subsequent natural language communication;

interpret the intent of the subsequent natural language communication;

determine that the subsequent natural language communication is not part of the first conversation;

determine, based on the intent, a second endpoint to receive the natural language communication;

open a second conversation between the user device and the second endpoint to handle the intent of the subsequent natural language communication; and

send the subsequent natural language communication to the second endpoint.

10. The non-transitory computer-readable medium of claim 9, wherein the instructions further cause the connection management system to:

continue to monitor communications from the user device for additional communications;

determine whether the additional communications pertain to the first conversation or the second conversation;

forward the additional communications to the social network member endpoint when the additional communications pertain to the first conversation and forward the additional communications to the second endpoint when the additional communications pertain to the second conversation; thereby maintain the first conversation and the second conversation concurrently.