DYNAMIC COMMUNICATIONS ROUTING TO DISPARATE ENDPOINTS

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] The present patent application claims the priority benefit of U.S. provisional patent application no. 62/926,773 filed October 28, 2019, the disclosure of which is incorporated by reference herein.

BACKGROUND OF THE INVENTION

FIELD

[0002] The present disclosure relates generally to facilitating routing of communications. More specifically, techniques are provided to dynamically route messages having certain intents between bots and user devices during communication sessions configured with multi-channel capabilities.

SUMMARY

[0003] The term embodiment and like terms are intended to refer broadly to all of the subject matter of this disclosure and the claims below. Statements containing these terms should be understood not to limit the subject matter described herein or to limit the meaning or scope of the claims below. Embodiments of the present disclosure covered herein are defined by the claims below, not this summary. This summary is a high-level overview of various aspects of the disclosure and introduces some of the concepts that are further described in the Detailed Description section below. This summary is not intended to identify key or essential features of the claimed subject matter, nor is it intended to be used in isolation to determine the scope of the claimed subject matter. The subject matter should be understood by reference to appropriate portions of the entire specification of this disclosure, any or all drawings and each claim.

[0003a] According to a first aspect of the present disclosure, there is provided a computer-implemented method including: transmitting, by a bot during a client device communication session between the bot and a client device, a request for a question and a response associated with the question; receiving, by the bot, the question and the response; transmitting, by the bot, the question and the response, wherein when the question and the response are received at a user device associated with a user, the user device can transmit a follow up request, and wherein the question and the response are transmitted to the user device based on one or more characteristics of the user; receiving, by the bot, a follow up request associated with the user device, wherein the follow up request solicits further information about the response; facilitating, by the bot, a client device-to-user device communication session between the user device and a client device based on the follow up request, wherein the facilitating includes providing an interactive user interface

item for initiating the client device-to-user device communication session; making a determination, by the bot, that the client device-to-user device communication session has ended; and re-initiating the client device communication session between the bot and the client device.

[0003b] According to a second aspect of the present disclosure, there is provided a system including: a communication interface that communicates over a communication network, wherein the communication interface: transmits, during a client device communication session between a bot and a client device, a request for a question and a response associated with the question; and receives the question and the response; and a processor that executes instructions stored in memory to: transmit the question and the response, wherein when the question and the response are received at a user device associated with a user, the user device can transmit a follow up request, and wherein the question and the response are transmitted to the user device based on one or more characteristics of the user; receive a follow up request associated with the user device, wherein the follow up request solicits further information about the response; facilitate a client device-to-user device communication session between the user device and the client device based on the follow up request, wherein the facilitating includes providing an interactive user interface item for initiating the client device-to-user device communication session; make a determination, by the bot, that the client device-to-user device communication session has ended; and re-initiate the client device communication session between the bot and the client device.

[0003c] According to a third aspect of the present disclosure, there is provided a non-transitory, computer-readable storage medium, having embodied thereon a program executable by a processor to perform a method including: transmitting, by a bot during a client device communication session between the bot and a client device, a request for a question and a response associated with the question; receiving, by the bot, the question and the response; transmitting, by the bot, the question and the response, wherein when the question and the response are received at a user device associated with a user, the user device can transmit a follow up request, and wherein the question and the response are transmitted to the user device based on one or more characteristics of the user; receiving, by the bot, a follow up request associated with the user device, wherein the follow up request solicits further information about the response; facilitating, by the bot, a client device-to-user device communication session between the user device and a client device based on the follow up request, wherein the facilitating includes providing an interactive user interface item for initiating the client device-to-user device communication session; making a determination, by the bot, that the client device-to-user device communication session has ended; and re-initiating the client device communication session between the bot and the client device.

[0004] Certain embodiments of the present disclosure include a computer-implemented method. The method may include receiving a message from a first user. The message includes a question.

CLAIMS

1. A computer-implemented method comprising:

transmitting, by a bot during a client device communication session between the bot and a client device, a request for a question and a response associated with the question;

receiving, by the bot, the question and the response;

transmitting, by the bot, the question and the response, wherein when the question and the response are received at a user device associated with a user, the user device can transmit a follow up request, and wherein the question and the response are transmitted to the user device based on one or more characteristics of the user;

receiving, by the bot, a follow up request associated with the user device, wherein the follow up request solicits further information about the response;

facilitating, by the bot, a client device-to-user device communication session between the user device and a client device based on the follow up request, wherein the facilitating includes providing an interactive user interface item for initiating the client device-to-user device communication session;

making a determination, by the bot, that the client device-to-user device communication session has ended; and

re-initiating the client device communication session between the bot and the client device.

2. The computer-implemented method of claim 1, wherein the question and the response are received from a same client device.

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

receiving input regarding the question, wherein the input is associated with the client device.

4. The computer-implemented method of claim 3, wherein a menu of one or more questions is presented to the client device associated with the input, and wherein the input includes a selection from the menu.

5. The computer-implemented method of claim 1, wherein the one or more characteristics are obtained from one or more online sources that include at least one of a cookie or browsing history.

6. The computer-implemented method of claim 1, wherein transmitting the question and the response includes generating a graphical interface.

7. The computer-implemented method of claim 6, wherein the graphical interface is initially associated with a communication session between the user device and the bot.

8. The computer-implemented method of claim 7, wherein facilitating the client device-to-user device communication session includes switching from the communication session between the user device and the bot to the client device-to-user device communication session.

9. The computer-implemented method of claim 8, further comprising switching back to the communication session between the user device and the bot when the client device-to-user device communication session is closed.

10. The computer-implemented method of claim 1, wherein receiving the follow up request includes a selection from a menu of follow up options.

11. The computer-implemented method of claim 1, further comprising providing a timer that tracks a time of the client device-to-user device communication session between the user device and the client device.

12. The computer-implemented method of claim 11, further comprising determining an amount of payment due based on the tracked time.

13. The computer-implemented method of claim 1, further comprising receiving a rating from the user device, wherein the rating is associated with the client device.

14. The computer-implemented method of claim 1, wherein the client device-to-user device communication session is configured so that a type of information associated with the client device is not shown.

15. The computer-implemented method of claim 1, further comprising storing information regarding the client device-to-user device communication session in association with historical data.

16. The computer-implemented method of claim 15, further comprising initiating one or more subsequent communication sessions based on the historical data.

17. A system comprising:

a communication interface that communicates over a communication network, wherein the communication interface:

transmits, during a client device communication session between a bot and a client device, a request for a question and a response associated with the question; and

receives the question and the response; and

a processor that executes instructions stored in memory to:

transmit the question and the response, wherein when the question and the response are received at a user device associated with a user, the user device can transmit a follow up request, and wherein the question and the response are transmitted to the user device based on one or more characteristics of the user;

receive a follow up request associated with the user device, wherein the follow up request solicits further information about the response;

facilitate a client device-to-user device communication session between the user device and the client device based on the follow up request, wherein the facilitating includes providing an interactive user interface item for initiating the client device-to-user device communication session;

make a determination, by the bot, that the client device-to-user device communication session has ended; and

re-initiate the client device communication session between the bot and the client device.

18. The system of claim 17, wherein the question and the response are received from a same client device.

19. The system of claim 17, wherein the communication interface further receives input regarding the question, wherein the input is associated with the client device.

20. The system of claim 19, wherein a menu of one or more questions is presented to the client device associated with the input, and wherein the input includes a selection from the menu.

21. The system of claim 17, wherein the one or more characteristics are obtained from one or more online sources that include at least one of a cookie or browsing history.

22. The system of claim 17, wherein transmitting the question and the response includes generating a graphical interface.

23. The system of claim 22, wherein the graphical interface is initially associated with a communication session between the user device and the bot.

24. The system of claim 23, wherein facilitating the client device-to-user device communication session includes switching from the communication session between the user device and the bot to the client device-to-user device communication session.

25. The system of claim 24, further comprising switching back to the communication session between the user device and the bot when the client device-to-user device communication session is closed.

26. The system of claim 17, wherein receiving the follow up request includes a selection from a menu of follow up options.

27. The system of claim 17, further comprising providing a timer that tracks a time of the client device-to-user device communication session between the user device and the client device.

28. The system of claim 27, further comprising determining an amount of payment due based on the tracked time.

29. The system of claim 17, further comprising receiving a rating from the user device, wherein the rating is associated with the client device.

30. The system of claim 17, wherein the client device-to-user device communication session is configured so that a type of information associated with the client device is not shown.

31. The system of claim 17, further comprising storing information regarding the client device-to-user device communication session in association with historical data.

32. The system of claim 31, further comprising initiating one or more subsequent communication sessions based on the historical data.

33. A non-transitory, computer-readable storage medium, having embodied thereon a program executable by a processor to perform a method comprising:

transmitting, by a bot during a client device communication session between the bot and a client device, a request for a question and a response associated with the question;

receiving, by the bot, the question and the response;

transmitting, by the bot, the question and the response, wherein when the question and the response are received at a user device associated with a user, the user device can transmit a follow up request, and wherein the question and the response are transmitted to the user device based on one or more characteristics of the user;

receiving, by the bot, a follow up request associated with the user device, wherein the follow up request solicits further information about the response;

facilitating, by the bot, a client device-to-user device communication session between the user device and a client device based on the follow up request, wherein the facilitating includes providing an interactive user interface item for initiating the client device-to-user device communication session;

making a determination, by the bot, that the client device-to-user device communication session has ended; and

re-initiating the client device communication session between the bot and the client device.

34. The non-transitory, computer-readable storage medium of claim 33, wherein the question and the response are received from a same client device.

35. The non-transitory, computer-readable storage medium of claim 33, further comprising receiving input regarding the question, wherein the input is associated with the client device.

36. The non-transitory, computer-readable storage medium of claim 35, wherein a menu of one or more questions is presented to the client device associated with the input, and wherein the input includes a selection from the menu.

37. The non-transitory, computer-readable storage medium of claim 33, wherein the one or more characteristics are obtained from one or more online sources that include at least one of a cookie or browsing history.

38. The non-transitory, computer-readable storage medium of claim 33, wherein publishing the question and the response includes generating a graphical interface.

39. The non-transitory, computer-readable storage medium of claim 38, wherein the graphical interface is initially associated with a communication session between the user device and the bot.

40. The non-transitory, computer-readable storage medium of claim 39, wherein facilitating the client device-to-user device communication session includes switching from the communication session between the user device and the bot to the client device-to-user device communication session.

41. The non-transitory, computer-readable storage medium of claim 40, wherein the method further comprises switching back to the communication session between the user device and the bot when the client device-to-user device communication session is closed.

42. The non-transitory, computer-readable storage medium of claim 33, wherein receiving the follow up request includes a selection from a menu of follow up options.

43. The non-transitory, computer-readable storage medium of claim 33, further comprising providing a timer that tracks a time of the client device-to-user device communication session between the user device and the client device.

44. The non-transitory, computer-readable storage medium of claim 43, further comprising determining an amount of payment due based on the tracked time.

45. The non-transitory, computer-readable storage medium of claim 33, further comprising receiving a rating from the user device, wherein the rating is associated with the client device.

46. The non-transitory, computer-readable storage medium of claim 33, wherein the client device-to-user device communication session is configured so that a type of information associated with the client device is not shown.

47. The non-transitory, computer-readable storage medium of claim 33, further comprising storing information regarding the client device-to-user device communication session in association with historical data.

48. The non-transitory, computer-readable storage medium of claim 47, further comprising initiating one or more subsequent communication sessions based on the historical data.