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Chatbot for Creating and Consuming Podcasts via Short Messaging Service (SMS)

Baq Haidri

Kenneth V. Kennedy

Kaikai Sheng

Huy Nguyen

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ABSTRACT

Podcast creation can be a complicated undertaking that involves the use of audio equipment to record and process content. Furthermore, a podcast creator needs to work with a provider to host and distribute podcast content. Moreover, podcast creators must rely on listeners having a podcatcher application to discover and listen to the podcast. This disclosure describes a chatbot that enables users to create and consume podcasts easily from any device, including low capability mobile devices. Users can create or consume podcasts by interacting with the chatbot via Short Messaging Service (SMS) or other text-based chat interface. The techniques enable podcast creation and consumption from devices that lack Internet connectivity.

KEYWORDS

- Podcast
- Podcatcher
- Short Messaging Service (SMS)
- Multimedia Messaging Service (MMS)

- Really Simple Syndication (RSS)
- Audio recording
- Chatbot

BACKGROUND

Podcast creation can be a complicated undertaking that involves the use of audio equipment to record and process content. Furthermore, a podcast creator needs to work with a provider to host and distribute podcast content. Moreover, podcast creators must rely on listeners having a podcatcher application to discover and listen to the podcast. While some apps on a user device, such as a smartphone, include audio recording capabilities, most such applications typically lack mechanisms to host the content and/or distribute it via mechanisms such as Really Simple Syndication (RSS). Other solutions enable users to create podcasts via a website and/or

an app. However, these solutions require the podcast creator to have an Internet connection to upload the podcast and the podcast listener to use a podcatcher to listen to the podcast.

DESCRIPTION

This disclosure describes techniques that enable users to create and consume podcasts using primitive, low capability mobile devices, e.g., devices that are capable only of sending and receiving messages via Short Messaging Service (SMS) or other text-based chat interface. The techniques involve a chatbot that uses SMS for interacting with users for the purposes of creating or consuming podcasts. Users can access the chatbot by sending text messages via SMS to a phone number registered for the chatbot.

A user who wishes to create a podcast can initiate the process by sending the chatbot an SMS text message with a specific keyword, such as "podcast," that indicates that the user wishes to begin podcast creation. Upon receiving the podcast-creation keyword, the chatbot initiates a turn-by-turn conversation via SMS to prompt the user to provide additional information necessary to create the podcast. The creator can respond to the prompts via text messages that include pertinent information about the podcast, such as title, description, etc. The creator can record one or more audio clips on their mobile device and send the recordings to the chatbot via Multimedia Messaging Service (MMS). The information sent to the chatbot is then used to automatically generate the podcast that includes the user-provided audio clips. If the size of a particular audio clip exceeds permissible size limits of MMS, the audio clip can be broken down into multiple chunks that fit permissible size limits and each piece is transmitted separately to the chatbot. The chunks are combined upon receipt by the chatbot to recreate the user's entire audio clip.

After the user responds to the various chatbot prompts providing the requisite information to create the podcast, an episode of the podcast is generated and added to a publicly-available RSS feed open to anyone for subscription. At the end of the podcast creation process, the chatbot can be set to send a text message to the creator to tell potential listeners that they can listen to the podcast by sending a subscription message to the chatbot, such as "SUBSCRIBE <Podcast Title>."

Users who wish to listen to podcasts using the techniques described in this disclosure can do so by texting a subscription message to the chatbot via SMS as mentioned above. Whenever a new episode of the subscribed podcast is available, subscribing listeners are automatically sent messages from the chatbot providing the title, description, and audio of the latest episode. If the size of the audio exceeds MMS size limits, it can be broken down appropriately into multiple parts that are sent as separate MMS messages.
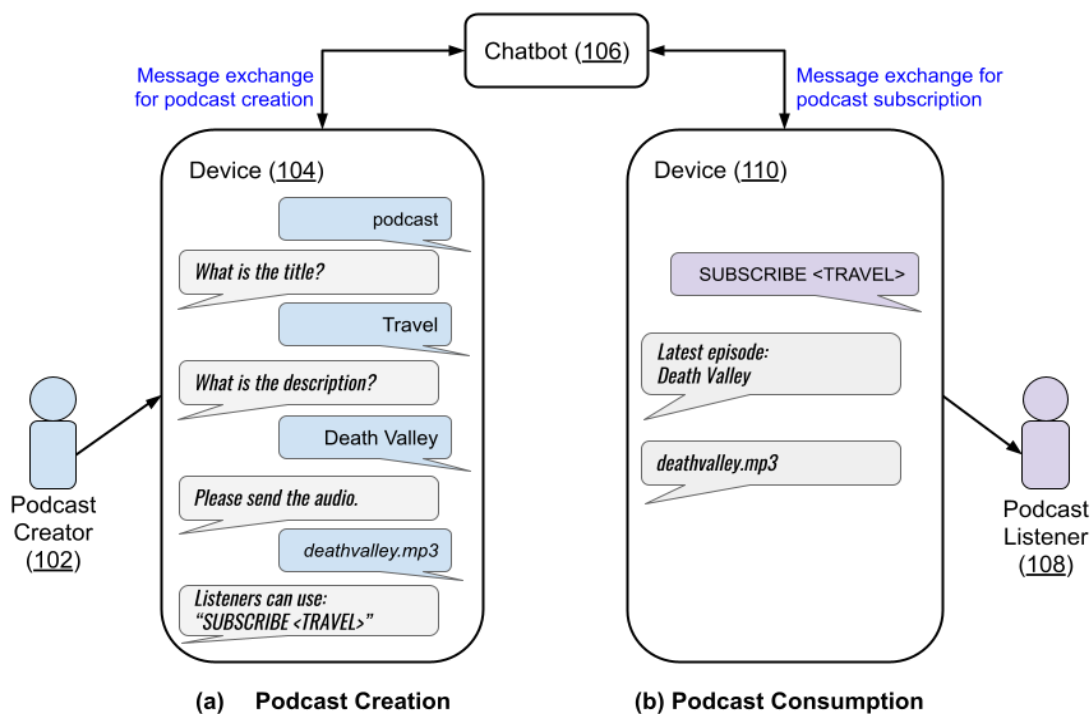

Fig. 1: Creating and consuming podcasts via SMS/MMS interaction with a chatbot

Fig. 1 shows an example of operational implementation of podcast creation and consumption. As seen in Fig. 1(a), a podcast creator (102) utilizes a device (104) to create a podcast. The device has SMS/MMS capabilities. The user initiates creation of the podcast by sending the text message "podcast" via SMS to a chatbot (106). The user then responds (shown in blue bubbles) to subsequent prompts (shown in green bubbles) received from the chatbot, providing the title, description, and the audio file for the podcast.

As seen in Fig. 1(b), a podcast listener (108) who wishes to listen to the podcast sends a subscription message to the chatbot indicating the title of the podcast. The SMS/MMS response from the chatbot delivers information regarding the latest podcast episode along with the corresponding audio.

The described techniques can be implemented using standard off-the-shelf tools and components for creating chatbots. The chatbot can be based on a cloud server and can implement a message exchange protocol to enable podcast creation and subscription. With user permission, the audio clips and other podcast data (including subscription data) can be stored securely on the cloud server.

The described techniques can optionally include the capability to distribute hyperlocal podcasts based on location. For example, with user permission, a podcast can be distributed to those located within a particular city block. In addition to RSS, podcasts created via the techniques described in this disclosure can be distributed via other channels and platforms, such as subscription apps, podcatchers, etc.

The described techniques enable users of primitive phones without Internet access capabilities or without data connectivity to create and consume podcasts as long as the device has SMS/MMS capabilities. Further, the techniques enable podcast creation without the need for

specialized audio equipment to record the podcast. The techniques make podcast creation and consumption accessible to users in areas with poor Internet availability.

CONCLUSION

This disclosure describes a chatbot that enables users to create and consume podcasts easily from any device, including low capability mobile devices. Users can create or consume podcasts by interacting with the chatbot via Short Messaging Service (SMS) or other text-based chat interface. Upon receiving the podcast-creation keyword, the chatbot initiates a turn-by-turn conversation via SMS to prompt the user to provide the information to create an episode of the podcast. The chatbot adds the podcast episode to a publicly-available RSS feed or other subscription platform. Listeners can subscribe to the podcast by sending a text message to the chatbot and in response, receive messages from the chatbot providing title, description, and audio of the requested episode. The techniques enable podcast creation and consumption from devices that lack Internet connectivity.

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