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AUDIO-ONLY MODE FOR VIDEO STREAMING SERVICES

ABSTRACT

An audio-only mode system for video streaming platforms allows a user to stream only audio playback from a video stream. The system detects a selection of an audio-only mode for a video playback. The system then provides an audio stream associated with the video playback in response to the detection of the selection of audio-only mode. This reduces data consumption, which in turn reduces data congestion and improves battery longevity.

PROBLEM STATEMENT

At times, a user is interested in only listening to the audio content of a video rather than watching the video. For example, the user might be interested in listening to a song from a music video or a popular discussion on a user’s favorite channel and not interesting in viewing the video. Because video streaming is a data-intensive process, a user may exhaust the data plan on a smartphone by streaming video content even when the user is only interested in the audio content from the video.

DETAILED DESCRIPTION

The system and techniques described in this disclosure relate to an audio-only mode for video streaming services. The system enables the user to stream only the audio playback for a video stream which provides an opportunity reduce the usage of a mobile wireless data plan. The system can be implemented for use in an Internet, an intranet, or another client and server environment. The client device can be any audio-enabled electronic device such as a mobile device, a smartphone, a tablet, a handheld electronic device, a wearable device, etc.
Fig. 1 illustrates an example method 100 to provide an audio stream associated with a video when an audio-only mode for the video playback is selected. As a default setting, a video streaming service enables a video player to buffer the video stream that also includes audio content, from a server, for playback. The system detects 102 a selection of audio-only mode for the video playback. The audio-only mode can be provided as a selectable option in the video player interface. Alternatively, or additionally, the audio-only mode can be provided as a slider/toggle virtual button or a similar UI button on the media player interface of the video streaming service.

The system provides 104 the audio stream associated with the video playback in response to detection of the selection of the audio-only mode. The system buffers only the audio stream from the server providing the video playback. On enabling the audio-only mode, the media player window of the video player interface may freeze to the last presented instance of the video when the audio-only mode was switched on by the user and continue to play the audio stream although the video stream will no longer be updated. Alternatively, or additionally, upon enabling the audio-only mode, the media player window may turn blank. In another embodiment, the audio-only mode may allow the user to turn off the display or even switch to another application while maintaining playback of the video’s audio content.

Because the audio-only mode streams only the audio playback from the server, the system enables a user to listen to the audio content from a desired video as well as reduce usage of the data plan on the user’s mobile device. Further, the media hosting websites and servers may allow content creators to upload audio files for diversifying the content types hosted by the content server. In case of audio files, the audio-only mode may be launched by default for playing a selected audio file by the user.
Figure 2 illustrates an example video player interface 200 with audio-only mode option. The video player interface 200 can be implemented in a web browser environment or in a mobile application. The video player interface 200 includes a media viewing window 202 which displays the video stream downloaded from one or more servers during a video playback. The video player interface 200 also generally includes a progress bar 204, progress indicator 206, and corresponding video playback controls 208. Additionally, the video player interface 200 includes an “Audio Only” button 210, which when selected by the user enables only audio content associated with the video playback to be buffered and played on the video player interface. On selection of “Audio Only” button 210 by the user, the media player window 202 freezes the video to the time when the audio-only selection was made by the user and streams only the audio from the server, thus optimizing the user’s mobile data plan usage. Alternatively, or additionally, the media player window 202 may turn blank. In another embodiment, the user may be able to configure the behavior of mobile device when playing a video in audio-only mode, e.g., continue to play the audio stream associated with the video playback when the display is turned off in order to reduce battery consumption by the user’s device.

Fig. 3 is a block diagram of an exemplary environment that shows components of a system for implementing the techniques described in this disclosure. The environment includes client devices 310, servers 330, and network 340. Network 340 connects client devices 310 to servers 330. Client device 310 is an electronic device. Client device 310 may be capable of requesting and receiving data/communications over network 340. Example client devices 310 are personal computers (e.g., laptops), mobile communication devices, (e.g. smartphones, tablet computing devices), set-top boxes, game-consoles, embedded systems. Client device 310 may execute an application, such as a web browser 312 or 314 or a native application 316. Web
applications 313 and 315 may be displayed via a web browser 312 or 314. Server 330 may be a web server capable of sending, receiving and storing video files 332. Video file(s) 332 may be stored on or accessible via server 330. Video file(s) 332 may be associated with web application 313 or 315 and accessed using a web browser, e.g., 312, or may be accessed using a software application 316. When accessed, video(s) 332 may be transmitted and displayed on a client device, e.g., 310, either as an audiovisual stream or as an audio-only stream. Resources 318 and 318’ are resources available to the client device 310 and/or applications thereon, or server(s) 330 and/or video(s) accessible therefrom, respectively. Resources 318’ may be, for example, memory or storage resources; a text, image, video, audio, JavaScript, CSS, or other file or object; or other relevant resources. Network 340 may be any network or combination of networks that can carry data communication.

The subject matter described herein can be implemented in software and/or hardware (for example, computers, circuits, or processors). The subject matter can be implemented on a single device or across multiple devices (for example, a client device and a server device). Devices implementing the subject matter can be connected through a wired and/or wireless network. Such devices can receive inputs from a user (for example, from a mouse, keyboard, or touchscreen) and produce an output to a user (for example, through a display and/or a speaker). Specific examples disclosed are provided for illustrative purposes and do not limit the scope of the disclosure.
Fig. 1

- **100**
  - Detect a selection of an audio-only mode for a video playback

- **102**
  - Provide an audio stream associated with the video playback in response to the detection of the selection of the audio-only mode

**DRAWINGS**