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Seamless Short Video Consumption Via a Web Browser or Application

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SEAMLESS SHORT VIDEO CONSUMPTION VIA A WEB BROWSER OR APPLICATION

Introduction

Computer-implemented systems and methods are described that enable seamless playback within a web browser or other application of content hosted by one or more third-party content providers. Web Pages including short videos hosted by a plurality of video hosting platforms can be rendered by a web browser to enable seamless playback of content at one or more video hosting platforms. For example, the system may receive a search query and provide a video results page including thumbnails, URL's, and/or other information related to videos hosted by one or more video hosting platforms. In response to a user selection associated with a particular video, the user's browser can render a webpage of the third-party website including the selected video. All or a portion of the video may be played using the browser. The system enables other (e.g., similar) videos to begin playback after the initial video. The system enables multiple videos from one or more platforms to be played without the browser returning to render the original search results page. Rather, the system enables the user to select other videos using a single interface and have those videos retrieved for playback without requiring a return to or reload of the search results page. In some examples, the system may include an embedded user application that is self-contained and functions to direct a user's browser or other application to videos at hosting platforms.

Traditionally, video results on search results pages provide some information (e.g., title, length, thumbnail) about a video and a selectable link (e.g., URL) which the user may select in order to view the video. Upon selecting the link, the user's browser is directed to a website or other application where the video is hosted. The video is often displayed within the hosting platform's interface on the user's computing device. The user may be able to view other videos from the hosting platform while remaining on the hosting platform's website. However, in order

to select a video from a different website host, the user must return to the search results page. In some instances, the user's browser may be directed to the search results page to watch other videos on the same hosting platform. If the user watches multiple videos, this can result in a "bungee" effect whereby the user bounces between the search results page and video hosting pages in order to watch videos. This may become cumbersome and frustrating, resulting in a user abandoning their search. Traditional systems may allow users to watch video content through a dedicated website or application associated with a particular video hosting platform. However, when utilizing these dedicated applications or sites, the user may be restricted to content hosted by a particular video hosting platform.

Summary

Computer-implemented systems and methods are provided for rendering web pages including videos associated with third party video platforms. A seamless viewing experience of videos at a plurality of different video hosting platforms is provided. A web browser may provide a user search query to a search engine or other platform from a user. In response, the platform may provide data for a user interface to display information, URLs, thumbnails, etc. for video results from which the user may select a video for playback. Upon selecting a video from the results, the browser retrieves a web page at the particular hosting platform including the selected video. In some instances, a search query is not required such that videos that have been proactively identified are enabled for playback within the browser. For example, a user may select a page or button within the search engine or other platform labeled "video" or "discover" that, upon selection, proactively renders third party pages including the videos.

Along with video playback, options for interacting with additional (e.g., similar) videos are provided. The videos can be, for example, videos from the same video hosting platform (e.g.

YouTube, YouTube Shorts, etc.) as a presently displayed video or videos from different video hosting platforms. If the user selects one of the similar videos, the browser can retrieve a webpage from the corresponding video hosting platform and render the page including the video. The user may be prompted with similar videos to choose from as well. The user may continue this cycle for as long as they desire.

According to some aspects, video results are algorithmically organized in a sequential order and videos may be played in response to user selection. When a user selects another video while a current video is playing, the sequential order of videos may continue from the newly selected video. Input buttons can be provided to enable user interaction with video results and videos. For example, a “Next” and a “Previous” input button can be displayed, allowing the user to view videos in the sequential order. In some embodiments, a next video in the sequential order can automatically play after a current video. In another embodiment, the user may select a next video by electing to continue through the sequential order of videos in either direction (e.g. forward or back, next or previous, etc.).

In some instances, interactivity with third-party video hosting platform features is maintained. The browser can render a third-party website such that native features provided by the video hosting platform (e.g., such as links, buttons for likes or comments, touch sensitive areas, or similar) are maintained. The host video provider can retain control of all actions within the frame and its relationship with users. In this manner, the user may take onward actions on the host provider's site or by opening the hosting provider's app where available. For example, while the video is played, interactive icons or buttons of the video hosting platform's page can be displayed.

In some instances, the user can select a plurality of videos from the video results to be queued for viewing using the web browser or application. In this particular embodiment, the user can select a plurality of videos, and they can be played back for the user sequentially. In some instances, the user can select both the videos to be played back, as well as an order in which the videos are played.

In another embodiment, in response to a given user query, video links to respective websites can be displayed for a user to select. Options can be provided for a user to select to open the video and view it within the web browser, or to select the link and be directed to the website where the video is being hosted.

In some embodiments, a user generates a search query via a user computing device and the query is sent to a remote computing system to generate search results including one or more videos relating to the query. The remote computing system sends the search results to the user computing device which displays the search results to the user. If a user selects one of the videos, the user computing device displays a user interface for playback of the selected video. The remote computing system may provide additional videos similar to the query or similar to the video being played. In some examples, the remote computing system may automatically generate a queue of similar videos relating to the query or the current video. The remote computing system can provide a display that enables the user to iterate through the search results. Any combination or order of the methods described herein may be executed on a user computing device, remote computing device, or similar. For example, all steps of generating videos as search results for a query can be performed on a remote computing system or parts of the process can be performed on a user computing device and others on a remote computing system as previously described.

Detailed Description

Figure 1 depicts an example computing system 100 in which systems and methods in accordance with the present disclosure can be executed. The computing system comprises a user computing device 102 including one or more processors 112, memory 114 which may include data 116 and instructions 118 configured to carry out the methods disclosed herein, and a user input component 122. The user input component can be, for example, a touch display or physical buttons within the user computing device 102. The computing system 100 further comprises a network 180 and a server computing system 130. The server computing system 130 comprises one or more processors 132, and memory 134 which may contain data 136 and instructions 138 configured to carry out the methods disclosed herein. For example, a system may receive a search query via the user input component 122 of the user computing device 102 and send the search query over the network 180 to the server computing system 130. The server computing system 130 may then return search results relating to the search query, of which at least one or more is a video result. If one of the one or more video results is selected, the server computing system 130 may send a URL for a third party web page including the video to the user computing device 102. The user computing device 102 may then fetch content using the URL in order to playback the video. Along with playing the video, video results for additional videos may be provided. The server computing system 130 may generate a sequential order of similar video results for playback once playback of the current video completes. The server may also perform any number of tasks disclosed herein while the user computing device 102 is playing a video. Any combination or order of systems or methods disclosed herein can be performed on the user computing device, server computing system, or similar. For example, all processes can be performed on the user computing device 102 or the server computing system 130.

Figure 2 depicts a browser window including an example user interface 200 that may be displayed after a video has been selected from a plurality of search results for a given search query. The user interface 200 renders a third-party webpage including a primary video 202 that may play immediately once it is selected or in response to user selection. UI 200 displays a thumbnail or other representation for a plurality of similar videos 206, and platform features 204 pertaining to the primary video 202. While the primary video 202 is played, a user may choose from the plurality of similar videos 206 to play, either once the primary video 202 has completed or immediately. The plurality of similar videos 206 may contain video from the same video hosting platform as the primary video 202 or from different video hosting platforms. The user may also interact with the primary video 202 using the platform features 204. The platform features 204 comprise any features the video hosting platform may present along with their videos. For example, a link to the page of the creator of the primary video 202, a “like” button or other annotation to the primary video 202 on its respective platform, or any other feature may be presented in the user interface 200. It will be appreciated that the platform features 204 are not limited to the examples provided herein and may apply to any number of features or options that a user may perform while watching the primary video 202.

Figure 3 depicts a browser window including another example user interface 300 with similar features to the example user interface 200 depicted in FIG. 2. The user interface 300 comprises similar features to user interface 200 such as the primary video 302 and platform features 304 (see 202 and 204 of FIG. 2). Features and capabilities disclosed with respect to FIG. 2 may be included in the example of FIG. 3. FIG. 3 further includes progression buttons 306 that cause the system to cycle through a predesignated queue of videos relating to the original search query for which the primary video 302 was selected, or the primary video 302 itself. The system

can continuously cycle through similar videos indefinitely, with new similar videos generated and queued with each iteration through the cycle. It will be appreciated that the progression buttons 306 may be formed in different manners than depicted. For example, progression buttons 306 may correspond to physical buttons on the device or swipe or touch gestures that may be performed on a screen, in the air, etc.

Referring now to Figure 4, an example search results page 400 for a user query is depicted. When the system is provided with a search query, the page 400 may display a window 402 comprising results for videos 404, 406, and 408 deemed relevant to the search query. The videos 404-408 may be from a common video hosting platform or from a plurality of different video hosting platforms. If any one of the videos 404-408 is selected, a user interface similar to those shown in FIGS. 2-3 may be displayed and the video may begin playback immediately. In some embodiments selecting a video 404-408 will redirect the browser to the website hosting the selected video.

Figure 5 depicts another example search results page 500 for a given user query to a system. Similar to the example page 400 in FIG. 4, the example page 500 comprises a window 502 comprising videos 508, 510, and 512 deemed relevant to the search query. Page 500 further includes associated links 509, 511, and 513 that correspond to the videos 508, 510, and 512. In this particular embodiment, if one of the videos 509-513 is selected, a user interface similar to FIGS. 2-3 is presented with the selected video. If one of the associated links 509-513 is selected, the website hosting the respective video 508-512 will be opened rather than displaying an interface akin to FIGS. 2-3. In some embodiments, the videos 508-512 comprise queue selectors 506 and 504 to allow the system to queue videos displayed in the window 502 for playback.

When a video is selected to be queued, the queue selector 504 may change to indicate the video is queued 506.

In some embodiments, the video results displayed 404-408 in FIG. 4 and 508-512 in FIG. 5 may be repopulated without the user reentering a query or selecting a video. For example, the windows 402 and 502 may allow for scrolling or swiping through a plurality of videos with new videos related to the user query being generated and displayed as the user scrolls or swipes through the presently displayed ones.

Figures

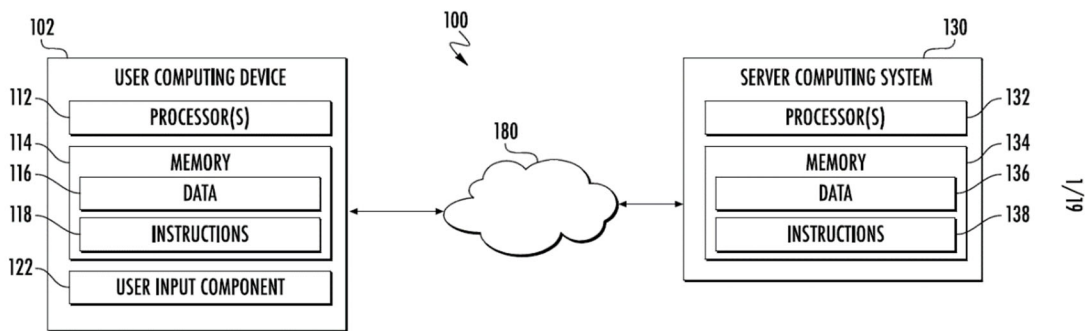


FIG. 1

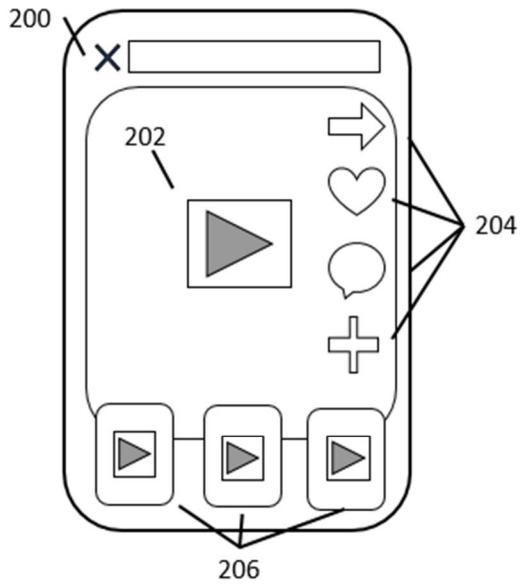


FIG. 2

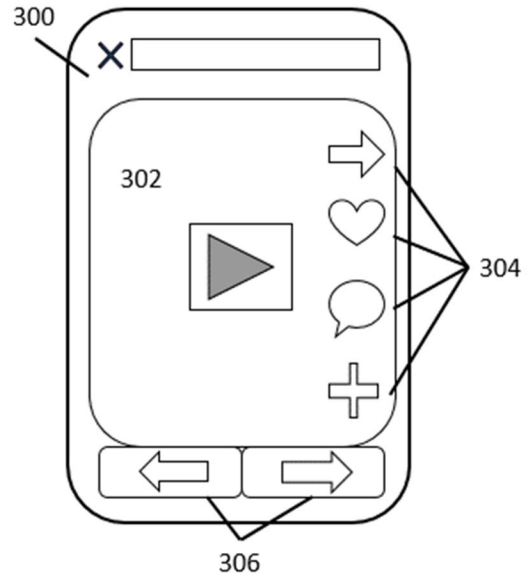


FIG. 3

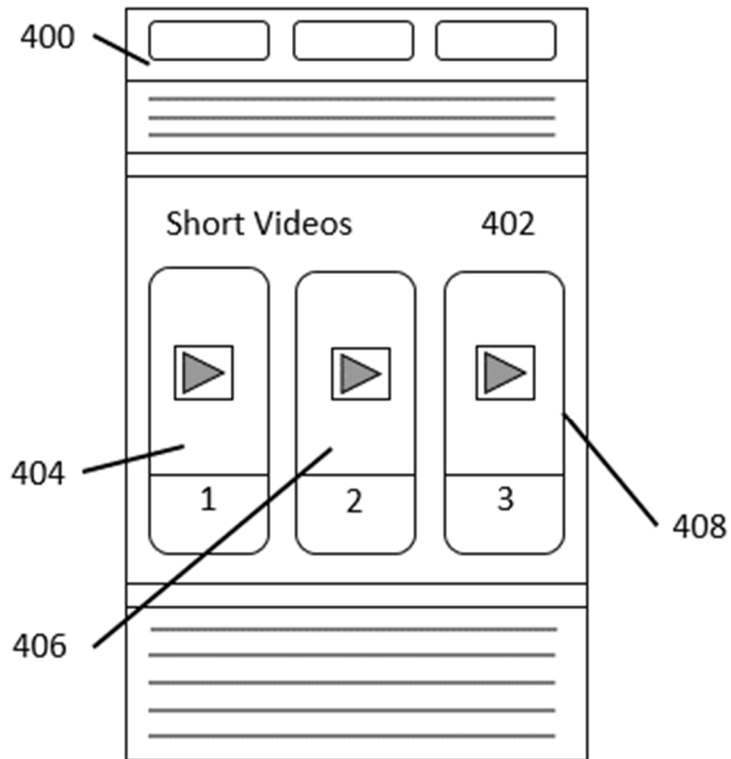


FIG. 4

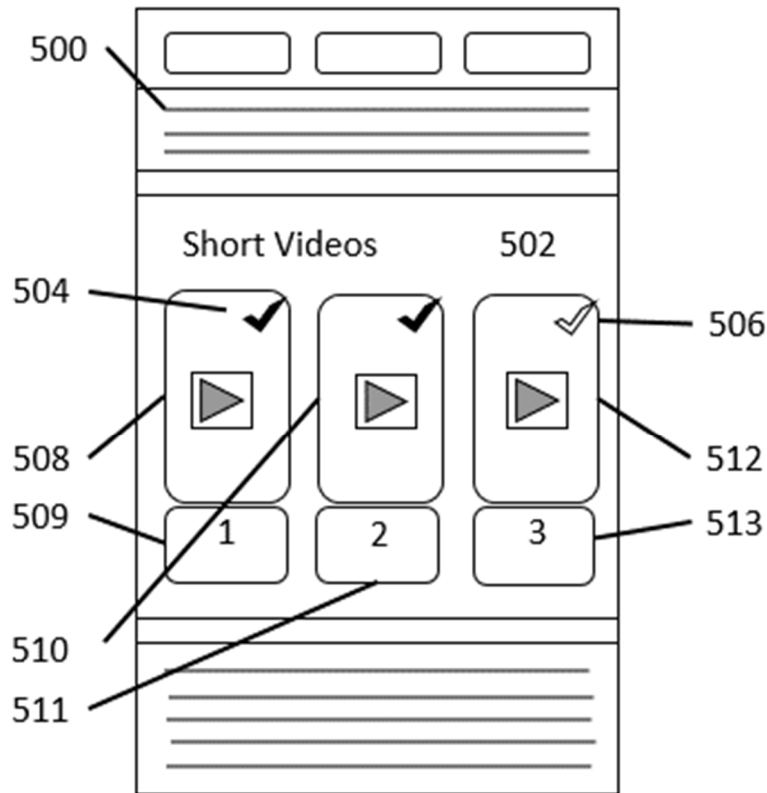


FIG. 5

Abstract

The present disclosure describes computer-implemented systems and methods for assisting a user to navigate and consume videos hosted on third-party platforms. In response to a user query, a plurality of video results responsive to the user query are displayed and upon selection of one of the plurality of video results, a web browser retrieves and renders a webpage including the video from the respective video hosting platform. The system can playback the video and generate similar video results from a plurality of video hosting platforms pertaining to a given user query.