REMOTELY EMULATING COMPUTING DEVICES

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims priority to, and the benefit of, U.S. Provisional Patent Application entitled, "REMOTELY EMULATING COMPUTING DEVICES," having Application No. 61/454,986, filed March 21, 2011, and US Patent Application entitled, "REMOTELY EMULATING COMPUTING DEVICES" having Application No. 13/114,534, filed May 24, 2011 both of which are incorporated herein by reference in their entirety.

BACKGROUND

[0002] There are many specialized forms of computing devices such as, for example, smartphones, electronic book readers, tablet computers, video game consoles, and so on. Because of the physical differences among such devices, applications may differ from device to device. Even within a device category such as smartphones, different models of smartphones may have different display and input features.

SUMMARY OF INVENTION

[0002a] According to a first aspect of the invention, there is provided a non-transitory computer-readable medium embodying a program executable in a computing device, wherein when executed the program causes the computing device to at least: determine one of a plurality of models of an emulated computing device; obtain a selection of an application that is executable in the emulated computing device from a client; execute the application in a hosted environment; encode a video signal and an audio signal generated by the application into a media stream; generate a user interface that includes a graphical representation of a physical interface of the one of the models of the

emulated computing device; generate a rendering of the video signal from the media stream on a graphical representation of a physical screen of the one of the models of the emulated computing device; send the user interface and the media stream to the client; obtain an input command from the client, the input command being generated through a user interaction with the graphical representation of the physical interface of the one of the models of the emulated computing device; and provide the input command to the application executing in the hosted environment.

[0002b] According to a second aspect of the invention, there is provided a system, comprising: at least one computing device; and a server application executable in the at least one computing device, wherein when executed the server application causes the at least one computing device to at least: identify a model of a computing device and an application that is executable in the computing device; execute the application in a hosted environment and encodes a video signal of the application into a media stream; and generate a user interface for rendering in a client, the user interface including a graphical representation of a physical interface of the model of the computing device; and generate a rendering of at least a portion of the video signal from the media stream on a graphical representation of a physical screen of the model of the computing device.

[0002c] According to a third aspect of the invention, there is provided a system, comprising: at least one computing device; and a server application executable in the at least one computing device, wherein when executed the server application causes the at least one computing device to at least: identify a model of a computing device and an application that is executable in the

computing device; execute the application in a hosted environment and encodes an output of the application into a media stream; and generate a user interface for rendering in a client, the user interface including a graphical representation of a physical interface of the model of the computing device; and generate a rending of a video signal on a graphical representation of a physical screen of the model of the computing device, wherein the graphical representation of the physical screen is updated in response to the output of the application in the media stream.

[0002d] According to a fourth aspect of the invention, there is provided a method, comprising: obtaining, in a computing device, a user interface from a server, the user interface including a graphical representation of a physical interface of a mobile computing device; obtaining, in the computing device, a media stream from the server, the media stream including a video signal that is captured from an application executed in a virtualized environment that emulates the mobile computing device; rendering, in the computing device, the user interface; and rendering, in the computing device, the video signal from the media stream on a graphical representation of a physical screen of the mobile computing device.

BRIEF DESCRIPTION OF THE DRAWINGS

[0003] Many aspects of the present disclosure can be better understood with reference to the following drawings. The components in the drawings are not necessarily to scale, emphasis instead being placed upon clearly illustrating the principles of the disclosure. Moreover, in the drawings, like reference numerals designate corresponding parts throughout the several views.

[0004] FIG. 1 is a drawing of a networked environment according to various embodiments of the present disclosure.

[0005] FIGS. 2A and 2B are examples of user interfaces rendered in a client in the networked environment of FIG. 1 according to various embodiments of the present disclosure.