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Device dock with built-in virtual assistant

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ABSTRACT

This disclosure describes a device dock with a speaker that enables selective personalization of a virtual assistant. When no device is coupled to the device dock, user queries to the dock receive responses from a non-personalized virtual assistant. When a user device is coupled, a personalized virtual assistant application specific for the user responds to the user queries. The personalized virtual assistant can have a personality and use a tone of voice personalized for the user.

KEYWORDS

- Device dock
- Charging dock
- Docking station
- Phone stand
- Smart speaker
- Smart display
- Virtual assistant
- Personalization

BACKGROUND

Virtual assistant hardware such as a smart speaker, smart display, etc. provides access to a virtual assistant through a voice user interface. Current virtual assistant applications do not include a user-specific personality and are not personalized taking into account different user preferences. Thus, a smart speaker responds to the same query from different users in a similar manner.
DESCRIPTION

This disclosure describes a smart device dock that provides a personalized virtual assistant that responds to user queries when a user device is docked. As illustrated in Fig. 1, a smart device dock (102) is provided that allows users to dock a user device such as a smartphone, smartwatch, tablet, or other types of mobile and/or wearable devices. The dock can include features to charge such a device via wired or wireless power. The dock includes a virtual assistant, e.g., similar to virtual assistant applications in smart speakers or other devices.

Fig. 1(A) illustrates an example situation when no user device is coupled to the dock and a user provides a query (“How’s the weather tomorrow?”). The response from the virtual assistant, provided via a speaker built-in or connected to the dock is provided in a generic manner, as shown in Fig. 1(A). If the dock doesn’t include a screen, a voice response is provided; if the dock includes a screen, a response can be displayed along with the spoken
response. The response is a generic response that is not personalized to the user. The virtual assistant responds with the same personality and tone for all queries when no device is docked.

Fig. 1(B) illustrates an example situation where a user device (104) is docked to the device dock. The dock utilizes the display screen to provide a visual user interface in response to the user query, along with the spoken response. Further, with user permission, user identity and preference information can be utilized to provide a personalized response. For example, in response to the same query, the response in Fig. 1(B) includes a greeting to the user (“Good evening John!”) and the response is personalized (“Take your umbrella”) for the user. The personality of the virtual assistant as well as the tone of the spoken response are customized for the user. If the user denies permission to access user identity or preference information from the user device, the generic response is provided instead.

Further to the descriptions above, a user may be provided with controls allowing the user to make an election as to both if and when systems, programs or features described herein may enable collection of user information (e.g., information about a user’s social network, social actions or activities, profession, a user’s preferences, or a user’s current location), and if the user is sent content or communications from a server. In addition, certain data may be treated in one or more ways before it is stored or used, so that personally identifiable information is removed. For example, a user’s identity may be treated so that no personally identifiable information can be determined for the user, or a user’s geographic location may be generalized where location information is obtained (such as to a city, ZIP code, or state level), so that a particular location of a user cannot be determined. Thus, the user may have control over what information is collected about the user, how that information is used, and what information is provided to the user.
CONCLUSION

This disclosure describes a device dock with a speaker that enables selective personalization of a virtual assistant. When no device is coupled to the device dock, user queries to the dock receive responses from a non-personalized virtual assistant. When a user device is coupled, a personalized virtual assistant application specific for the user responds to the user queries. The personalized virtual assistant can have a personality and use a tone of voice personalized for the user.