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Assignment 03

Human Computer Interaction

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BSCS 6A

Arifullah Jan 186943

Bilal Khalid 128608

# Purpose of Virtual Assistants

Virtual Assistant is software tool that is bases on Artificial Intelligence and the aim is to make human computer interaction better by making computer interact with humans just like another human would do. Unlike other human computer interaction which need some interface to command the computer Virtual Assistants don’t need that. Essentially they make use of speech recognition to understand what a person is saying and artificial intelligence to respond to the command.

Although virtual assistants have been more intended towards entertainment, now a days the trend is towards utilizing the technology in more effective way such smart homes etc.

Voice commands are sometimes necessary for products

# Impact on the Interaction

Virtual assistants have introduced a new way of interaction with the computer and that too in a more humanistic way. Unlike the previous interaction methods which had a handful of limitations in when it comes to the smart assistants a lot of accessibility issues are eliminated because a user can do a lot of task by just talking to the device as if s/he is taking to another human being. The technology is in production stage; it has yet to improve.

One more important thing about these virtual assistant softwares is that now the users don’t have to interact with the device physically. The communication is through voice and that can be done from any place nearby.

Another possibility that the virtual assistant technology has introduced is Smart Home. The thing about smart home is that a computer system is installed in the home and has control over everything. It is smart and understands what the user is saying and does that thing, For example: Turn off all lights. Play xxx song. Play xxx movie. etc.

# Popular Virtual Assistants

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| Apple Siri | Google Assistant |
| It was released as an app for iOS in February 2010, and it was acquired by Apple two months later. Siri was then integrated into iPhone 4S at its release in October 2011. | Assistant initially debuted in May 2016 as part of Google's messaging app Allo, and its voice-activated speaker Google Home. After a period of exclusivity on the Pixel and Pixel XL smartphones, it began to be deployed on other Android devices in February 2017 |
| Apple siri opens when the home button is long pressed but it does not allow any settings. | Google assistant by default launches when the home button is long pressed however the behaviour can be changed. +ve |
| When it launches it starts listening and the screen animations which are so responsive to the sound it detects that it becomes evident that it’s listening. +ve | Google assistant also starts listening but there no feedback. So a new user may not be able to understand. |
| One of the major drawback of siri is that is doesn’t work without internet , even if the connect is weak it doesn't work for simple commands. | However google assistant can be used in offline mode but with limited functionality. |
| Apple has silent mode option controlled by a button on its side , siri doesn't obey the silent mode so it can make sound where iphone is not supposed to make any sort of noise. -ve |  |
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