**Explore – Impact of Computing Innovations**

**Written Response Submission Template**

Please see [Assessment Overview and Performance Task Directions for Student](https://apcentral.collegeboard.org/pdf/ap-csp-student-task-directions.pdf?course=ap-computer-science-principles) for the task directions and recommended word counts.

# Computational Artifact

2a)

My computing innovation is Siri, a personal virtual assistant developed by Apple in 2016. It is available to the users with most of Apple devices, including iPhone, iPad, Mac, Apple Watch, and Apple TV. Siri enables the users to find solutions to questions, confirm flights, search web, turn on/off lights, make a call, and much more [3]. It does this by analyzing the grammar of the users input and takes action or search the internet if the user is asking a question, this is also represented by my computational artifact [2].

2b)

For my computational artifact I used Microsoft PowerPoint, a presentation program owned by Microsoft, because it is most widely used and has many tools. It is necessary for my artifact as it supports PNG images for my transparent background pictures such as the Siri sound wave at the bottom of my artifact. For my artifact I wanted to show the process of how the Siri works. To do this I wanted to show it by step by step: converting users voice to text, then searching for answer in the nearest Apple Database and finally providing result.

# Computing Innovation

2c)

Apple's Siri has made a huge impact on the virtual industry as it was one of the first of its kind. It has both positive and negative effects on society. One such benefit includes easy accessibility with the ability to ask to do almost anything hands-free which is important to beneficial to people who need special needs. Aside from these benefits, Siri has some harmful effects on society as it records some parts of the conversation between the user to improve itself [1].

2d)

Siri uses the voice of the user and it transforms it to text by analyzing the grammar and it will search the nearest Apple database or the internet and provides the result of the question asked. One privacy concern of this program is that it will record bits of the conversation to improve itself.

# References

2e)

[1] Yurieff, Kaya. “Apple Apologizes for Listening to Siri Recordings, Promises Changes.” CNN, Cable News Network, 28 Aug. 2019, www.cnn.com/2019/08/28/tech/apple-siri-apology/index.html.

[2] Pocket-lint. “What Is Siri and How Does Siri Work?” Pocket, 2 Sept. 2019, www.pocket-lint.com/apps/news/apple/112346-what-is-siri-apple-s-personalvoice-assistant-explained.

[3] Clover, Juli. “Siri: Everything You Need to Know.” *MacRumors*, MacRumors, 10 May 2019, www.macrumors.com/guide/siri/.

Artifact:

1. <https://upload.wikimedia.org/wikipedia/en/8/8e/AppleSiriIcon2017.png>
2. [https://miro.medium.com/max/2560/1\*LyLWfbHfFUG\_OyyGSwK-\_w.png](https://miro.medium.com/max/2560/1*LyLWfbHfFUG_OyyGSwK-_w.png)
3. <https://lh3.googleusercontent.com/proxy/StUz6Ej5j9ZzvCRXgxAl0WTeR34AFo69BU5BCsouOuucvbZ2pTA1YQ4XW30qyJsd0Gu_77y7kXmN-7XQdqIHrR2mV6SS1h6eeYPEEmZ9Ql-8UvNLEOnzIjdZJY30-e5Q4bkfLNmBCMky>
4. [https://www.pngkit.com/png/detail/231-2316751\_database-database-icon-png.png](file:///Users/Nani/Downloads/(4)%09https:/www.pngkit.com/png/detail/231-2316751_database-database-icon-png.png)