

2a. Provide information on your computing innovation and computational artifact.

- Name the computing innovation that is represented by your computational artifact.
- Describe the computing innovation intended purpose and function.

Describe how your computational artifact illustrates, represents or explains the computing innovation intended purpose, its functions, or its effect.

(Must not exceed 100 words)

<Satellite GPS's were made for people to see where they are on a GPS (most likely their phone or automobile) at any time they want. Multiple satellites in orbit send a signal at the speed of light to your device to determine your location. >

2b. Describe your development process, explicitly identifying the computing tools and techniques you used to create your artifact. Your description must be detailed enough so that a person unfamiliar with those tools and techniques will understand your process.

(Must not exceed 100 words)

<I used google draw to create my artifact. I got my images from google and from my websites. I took a square and put it over my entire artifact and turned it black for my background. I used arrows to indicate the process of how satellites work. I then put the topic in the very middle so the audience knows what the artifact is about.>

2c. Explain at least one beneficial effect and at least one harmful effect the computing innovation has had, or has the potential to have, on society, economy, or culture.

(Must not exceed 250 words)

<One beneficial effect of GPS Satellites are apps that can give you directions such as Google Maps. One negative effect is that if someone hacks your device they can find your location.>

2d. Using specific details, describe:

- the data your innovation uses;
- how the innovation consumes (as input), produces (as output), and/or transforms data; and
- at least one data storage concern, data privacy concern, or data security concern directly related to computing innovation.

(Must not exceed 250 words)

<GPS Satellites function by receiving signals from satellites on the ground that tell them where to send signals back to our devices. A receiver could be a phone, GPS, or a car. >

2e. Provide a list of at least three online or print sources used to create your computational artifact and/or support your responses through in-text citation to the prompts provided in this performance task.

- At least two of the sources must have been created after the end of the previous academic year
- For each online source, include the complete and permanent URL. Identify the author, title, source, the date you retrieved the source, and if possible, the date the reference was written or posted.
- For each print source, include the author, title of excerpt/article and magazine or book, page numbers(s), publisher, and date of publication.
- If you include an interview source, include the name of the person you interviewed, the date on which the interview occurred, the person's position in the field.
- Include in-text citations for the sources you used.
- Each source must be relevant, credible and easily accessed.

<https://www.explainthatstuff.com/howgpsworks.html>

By Chris Woodford, author, handsome, and University graduate. Updated June 23, 2019

<https://www.gps.gov/systems/gps/space/>

By the Government, last updated June 23, 2019.

<https://spaceplace.nasa.gov/gps/en/>

By NASA, last updated February 21, 2020