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)
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<My computing innovation is Apple's facial recognition, the purpose of this invasion is to be able to unlock your Iphone x-11 Pro Max by using it facial recognition, My artifact shows how there software projects a dot map on your face.>

2b. Describe your development process, explicitly identifying the computing tools and techniques your 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 the program Google draw to create my Artifact. I used the shape tool and selected a square and used that for my background, then I went on google and and found some picture that described my program, and after finding my pictures I created text boxes on top of the pictures and wrote in them.>

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)

<2 beneficial effects of Apples Facial Recognition is that it's very secure and only has and it faster than Apples previous invasion which was there fingerprint scanner, And 1 harmful effect is if the camera is damaged the the Facial recognition will no longer work. >

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 the computing innovation.

(Must not exceed 250 words)

<The TrueDepth camera captures accurate face data by projecting and analyzing over 30,000 invisible dots to create a depth map of your face and also captures an infrared image of your face. A portion of the neural engine of the A11, A12 Bionic, A12X Bionic, and A13 Bionic chip protected within the Secure Enclave transforms the depth map and infrared

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 sources, 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 r   elevant, credible and easily accessed.

"About Face ID Advanced Technology." *Apple Support*, 14 Jan. 2020, support.apple.com/en-us/HT208108.