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

- Name the computing innovation that is represented by your computational artifact.

One of the innovations that is represented is the aerodynamics of fighter jets.

- Describe the computing innovation intended purpose and function.

The purpose of the aerodynamics are so that the jets are fast enough to avoid missile and make sure that the jet doesn't crash into the ground.

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

(Must not exceed 100 words) **[Complete / Incomplete]**

My computational artifact represents how aerodynamics work because the rudder is one of the things that insures that the aircraft is properly aligned to the curved flight path.

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) **[Complete / Incomplete]**

Some of the things used on the fighter jets that help them fly are the roll, pitch, and yaw. Roll is the rotation around the front-to-back axis. The pitch is the rotation around the side-to-side axis. Yaw is the rotation around the vertical axis. Most fighter jets have their pitch changers in the back of the jet, but on the J-20 they are in front of the wings.

https://www.grc.nasa.gov/www/k-12/airplane/rotations.html

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) **[Complete / Incomplete]**

Beneficial effects that fighter jets and airplanes have on our society is that the people who are in need of getting somewhere far, will most likely take an airplane because it is quicker than car. One harmful effect that airplanes are causing is that they are creating an ozone, a greenhouse gas that has a stronger warming effect at high altitudes than low.

http://content.time.com/time/world/article/0,8599,1654488,00.html

2d. Using specific details, describe:

- the data your innovation uses;

My innovation uses Optical Air Data System.

- how the innovation consumes (as input), produces (as output), and/or transforms data;

The way that my innovation consumes data is when the fighter pilot moves the joystick, presses buttons, fires the machine guns, and fires missiles.

- at least one data storage concern, data privacy concern, or data security concern directly related to the computing innovation. One data security concern is being hacked. As the plane reaches full production, the Air Force is racing to plug holes that could allow hackers to exploit the jet's connected systems—with disastrous results.

(Must not exceed 250 words) **[Complete / Incomplete]**