**PROJECT 1**

**HISTORIC SECURITY VULNERABILITY**

We’re going to use our skills in Python to create a choose-your-own-adventure styled game, using objects and methods to make it very modular

Do some research and find

* An example of a historic data breach
  + I will use the example of the 2011 Playstation Network Hack
* Describe what kind of system the targeted system was
  + Servers containing account information for PS3 and PSP game console accounts
* Give a timeline for the data breach/attack
  + April 17th-19th: Data was stolen by hacking groups
  + April 20th: Sony acknowledged Playstation Network features were down, video streaming, playing online features of games, purchasing games online
  + April 22nd: Sony acknowledged a security breach in the Playstation Network
  + April 25th: Sony publicly acknowledged that some personal information was compromised
  + April 27th: Sony confirmed they were working with law enforcement to identify the people who breached security
  + May 2nd: Sony confirmed that encrypted credit card numbers had been stolen, and that 24.7 million accounts had information that was potentially accessed
  + May 3rd: Sony announced players of their online Facebook games were also impacted
  + May 6th: Sony began testing on their new system for Playstation Network, revealing that some of the previous system had been around since 2001.
  + May 14th: Sony services began coming back online
* Describe the negative impacts of this breach. Data losses, financial losses, etc.
  + Outage costs stated to be $171 million from Sony
  + 12,000 encrypted credit card numbers
  + Personal info of up to 24.7 million people
  + Fine of ~$400k from the UK regarding its data protection act of 1998
  + Multiple attempted lawsuits, although none won
  + No recorded instances of credit card fraud due to encrypted card data
* Did anything spur on the hack? What could the potential motivation be?
  + Hacking group Anonymous targeted Sony after the reveal that Sony dropped support for Linux on the PS3. Further, Sony had recently sued George Hotz, who had recently jailbroken the PS3 firmware.
* How could it have been prevented?
  + Updating Legacy hardware in the systems could have provided more stable security
  + Encrypting user data beyond their credit card number so the information isn’t useful to steal
  + Friendlier to hacking/general software communities
  + Communicating with customers quicker about the data breach

Once you’ve assembled all your information, put it together in a PowerPoint presentation (good visuals, descriptive, the works, you know what you’re doing) to present in class. Shoot for a 10–15-minute runtime for the presentation.

You’ll be assessed based on how well you covered each of the 6 bullet points. Try and write about data breaches/service outages that have a lot of info publicly available. If you’re stuck in finding one, try and reference this article: [List of data breaches - Wikipedia](https://en.wikipedia.org/wiki/List_of_data_breaches#List_of_data_breaches_involving_companies)