Team Project Assignment – Part 1 (do this first)

1. Select a mission-based or service delivery information system your firm will develop and host in the cloud to support one or more governmental agencies
   Use [NIST Special Publication 800-60 Volume 1 Guide for Mapping Types of Information Systems to Security Categories](#)

2. Determine the security categorization of the information and information system your firm will develop, host and support
   [Use NIST Special Publication 800-60 Volume 2 Appendices to Guide for Mapping Types of Information Systems to Security Categories](#)
   and [NIST FIPS 199 Standards for Security Categorization of Federal Information and Information Systems](#)

   - *Based on your information system's categorization, select either the [High](#), [Moderate](#), or [Low](#) System Security Plan (SSP) template to fill out*

   - *Step 1 of the assignment:*
     - *Complete FedRAMP System Security Plan's Cover Page, Sections 1, 2.1, 2.2, 9.1, and 9.3*

     The level of detail in your SSP should be one at which you would feel comfortable explaining to a group of high-level business leaders and executives

Team Assignment – Part 2a

3. Based on your team's Part 1 Deliverables (from 1 and 2) draft a logical network diagram of the information system architecture and infrastructure needed by your firm to develop and maintain the mission-based or service delivery information system for your government agency clients

  - You may use www.draw.io, PowerPoint, or another drawing tool to draw the logical network diagram of the information system infrastructure

  - Use appropriate network symbols and annotation in your architectural diagram, include:

    - Information System Servers: e.g. Web Server(s), Application Server(s), Database Server(s), File Server(s), …

    - Groups of desktop/laptop computers illustrating organized within LANS or VLANS of organizational units

    - Strongly consider having 3 parallel cloud-based system environments to support your system: Development System, Test System, and Production System

Team Assignment – Part 2b (do this part third)

4. Transform the draft of the logical network diagram of the information system architecture you created in step 3 into a logical security architecture diagram that represents recommendations for technical security infrastructure for the information system
   - Use appropriate network symbols and annotation
     - Information System Servers: e.g. Web, Application, Database, File, …
     - Identify the internet (cloud symbol), and locations and identify/symbolize different types of users who will be accessing your cloud system over the internet
     - Security zones (i.e. security domain areas) based on security categorizations
     - Appropriately placed switches, routers, and different types of firewalls, Intrusion Detection System(s) and/or Intrusion Protection Systems.
     - *Be sure to label all types of firewalls, IDSs IPS, and annotate to indicate the type of firewall technology and the type of IDS/IPS technology you placed in each location of your diagram*
     - Use boxes to identify the system's boundaries, locations of external information systems interconnected to your cloud system via the Internet
     - Identify where and how various user groups including clients and remote staff access your organization various IT system via the Internet and illustrate the data flow between each user group and the information system

- *Step 2 of the assignment:*
  - *Complete FedRAMP System Security Plan's cover page and Sections 1, 2, 7, 8.1, 8.2, 9.1, 9.2, 9.3, 9.4, 10.1, 11*

- *By class tomorrow morning hand in a draft of your SSP as your assignment individually via Canvas:*
  - *Each member of the team should submit an identical copy of the team's SSP document*
  - *Your SSP should have the following sections completed:*
    - *If the network diagram does not fit into section 9.4 and display well, you may also include a copy as a separate PDF file with your hand-in via Canvas.*

  - *Make sure that your team's identity (i.e. replace CSP Name with your Team # and members' names), and Information System Name, SSP Version and Version Date are listed on the cover page of the SSP document you hand in for your assignment cover page. Note: CSP = Cloud Service Provider.*

There is no single right answer: *The purpose of this exercise is to get you thinking about security architecture and to get you comfortable with documenting your ideas with diagrams*