1.1 It is said that government spending on IT is increasing as government departments take initiatives to improve customer service or have a wider reach of services. Find out what factors are responsible for the increase of IT spending by government agencies. Also list and explain the three biggest IT projects undertaken by the federal government in recent times?

Answer: Government spending on Information Technology (IT) has been on the rise as agencies strive to enhance service delivery, expand accessibility, and strengthen security. Key factors contributing to this increase include:

➤ **Technological Drivers:**
- Digital transformation initiatives to improve service delivery.
- Cybersecurity enhancement and infrastructure modernization.
- Adoption of cloud computing and advanced data analytics.
- Modernization of legacy systems.

➤ **Organizational Motivations:**
- Increasing citizen demand for online services.
- Need for improved operational efficiency.
- Broader reach of government services.
- Enhanced data-driven decision-making capabilities.

In recent times, the federal government has undertaken several significant IT projects:

➤ Tax System Modernization:
- **The Internal Revenue Service's Business Systems** Modernization.
- Long-term project to upgrade tax processing infrastructure.
- Focus on integrating and improving tax system technologies.

➤ Healthcare Transformation:
- **Healthcare.gov**, the online health insurance marketplace launched as part of the Affordable Care Act
- Aimed at improving healthcare access and enrollment.

➤ Biometric Expansion:
- The project's aim is to have an effective screening and verification process for visa processing.

- The idea behind this is to capture and screen ten-digit fingerprint biometrics and all the **Port of Entry's (POE).** This will help in reducing the time taken to process application and verification as well.

2.2 Go to some open source projects and find out about their project charters. Find out why they have those project charters.

Answer: Open-source projects often establish project charters to define their scope and guiding principles. These charters serve as foundational documents that provide clarity and direction for contributors and stakeholders.

Purpose of Project Charters in Open-Source Projects:

- A project charter ensures that all contributors have a unified understanding of the project's goals and the extent of its activities.
- Charters outline the core values and principles that govern the project's development and community interactions.
- A well-defined charter helps in managing contributions effectively and ensures that the project remains aligned with its stated mission.

Examples of Open-Source Project Charters:

- **Linux Kernel Project:** The Linux Kernel Project charter focuses on maintaining and improving the Linux operating system kernel. It emphasizes collaboration among global developers, ensuring the kernel remains secure, efficient, and open for all.
- **Mozilla Firefox:** Mozilla's charter defines its mission to create an open and accessible internet, with the Firefox browser at its core. It prioritizes user privacy, open standards, and fostering community-driven innovation.
- **OpenCV:** OpenCV (Open-Source Computer Vision Library) is an open-source computer vision and machine learning software library. OpenCV was built to provide a common infrastructure for computer vision applications and to accelerate the use of machine perception in the commercial products.
- **Apache Hadoop:** The Apache Hadoop charter focuses on developing scalable and distributed computing solutions for big data processing.