1. **FBI Virtual case file**

Virtual Case File (or VCF) was a **software application** developed by the United States Federal Bureaut of Investigation (FBI) between **2000 and 2005**. The project was officially **abandoned in April 2005** while still in development stage—it cost the federal government nearly **$170 million**. Overall, this project was categorized as “inadequate and so poorly designed that it would be essentially unusable under real-world conditions”. Even in rudimentary tests, the system did not comply with basic requirements. It did not include network-management or archiving systems—a flaw that would have put crucial law enforcement and national security data at risk

The project demonstrated failures in the following areas:

* Lack of a strong technical architecture ("blueprint") from the outset led to poor architectural decisions
* Repeated changes in specification
* Repeated turnover of management, which contributed to the specification problem
* Micromanagement of software developers
* The inclusion of many FBI Personnel who had little or no formal training in computer science as managers and even engineers on the project
* Scope creep as requirements were continually added to the system even as it was falling behind schedule
* Code bloat due to changing specifications and scope creep—at one point it was estimated the software had over 700,000 lines of code.
* Planned use of a flash cutover deployment made it difficult to adopt the system until it was perfected.