Information Security
Project Proposal - Inam Ul Haq - BITF22M017

Data Breaches in Cloud Storage: Risks and Prevention Strategies

With the rapid adoption of cloud computing by organizations and individuals, massive amounts of sensitive data are stored on cloud platforms such as AWS, Google Cloud and Microsoft Azure. While cloud storage offers scalability and accessibility, it also introduces significant security concerns, especially *data breaches*.
The main idea of this research is to identify the major causes of data breaches in cloud storage systems and analyze the effectiveness of current prevention and mitigation strategies.

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2. Scope

This study will focus on:

1) Types of Data Breaches
2) Cloud Security Models
3) Existing Prevention Strategies

- **Proposed Scope of Research:**
    - Comparative analysis of breach incidents and mitigation outcomes.
    - Evaluating open-source and commercial tools used to secure cloud data.
    - Suggesting an improved framework or checklist for organizations to reduce breach risks.

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3. Deliverables

By the end of the project, the following outcomes will be produced:

1. **Comprehensive Report:** A report/paper summarizing causes, case studies, and existing mitigation techniques for cloud data breaches.
2. **Comparative Analysis:** Evaluation of at least three real-world breach incidents to identify key vulnerability patterns.
3. **Proposed Framework / Recommendations:** A structured set of preventive strategies or best practices for securing cloud-stored data.
4. **Presentation / Demonstration:** A presentation at the end in front of the class.