**Data Breach Avoidance System: A Proactive Security Measure Based on the Honeypot Strategy**

**Abstract:**

Data breaches have become one of the most pressing concerns for businesses and individuals in the digital age. With the continuous advancement of cyber-attack techniques, traditional security measures often fall short. This calls for a proactive approach to data protection. One such method that has gained traction is the honeypot strategy, which serves as a decoy to attract and detect cyber threats. The proposed Data Breach Avoidance System leverages the Honeypot Strategy to provide a proactive cybersecurity framework specifically designed for the MyBankCardsManager app. By deploying a sacrificial database alongside the original one, the system distracts would-be attackers, effectively monitoring and mitigating cyber threats. The architecture is built on MS Azure SQL Server and employs machine learning algorithms, Intrusion Detection Systems (IDS), and User and Entity Behavior Analytics (UEBA) to offer a robust security solution.