

Department of Computer Science and Engineering

Semester: Fall – 2022

CSE -321: Software Engineering

Section:

Reg. ID:**Name:**

Q-1: Imagine, you are a software architect at **First Bank Corporation (FBC)**. The bank has **100** branches within the country, and more than **2200** employees. Computers, at the FBC have many different technologies, platforms, and operating systems that means users have deficient infrastructure capabilities. The bank has primary (central) and secondary data-store-houses also and it will be able to communicate remotely. The data storing must be secure even if users are scattered all over the country. Main Security System must installed in the central workstation and some modules of the system can access only by a select group of employees at the IT & Ops department. Clients (general banking employee) only able to connect with a secondary data-store-house. This system includes such clients like conventional banking, Islamic banking, SME banking, Cards and SWIFT services, Foreign exchange and remittance section, loan and advances, and payroll.

You have asked to develop a software system for managing the human resources aspect of the bank which must cover all the business rules.

- a) What is the most appropriate architectural solution model for the system?
- b) Draw the architectural diagram for this business setting according to business requirement and explain that architectural solution.

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