CS - 360 Quiz 2 (Variant A) Solution

Name:
Roll Number:

Q1) Identify the functional (FR) and non-functional (NFR) requirements for the following examples. In case of NFR, write its type (availability, security, privacy, backup, performance, usability, etc.) [5 points]

1. The Sales system should allow users to record customers sales (FR)
2. Employees are never allowed to update their salary information. Such an attempt should be reported to the security administrator. (NFR- Security)
3. Verification email is sent to the user whenever he/she registers for the first time on some software system. (FR)
4. Emails should be sent with a latency of no greater than 5 hours. (NFR - Performance)
5. The background color for all windows in the application will be white and have a hexadecimal RGB color value of 0xFFFFFF(FR)

Q2) Given a scenario, select the best technique for requirement elicitation (interview, survey, ethnography(observation), system archaeology, focus groups, etc.) and provide a brief justification. [5 points]

Scenario: A startup is developing a mobile app that helps users track their water intake and reminds them to drink more water throughout the day.

Justification:

_Survey_____

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Scenario: A team is working on a new software system to be used in the manufacturing plant, and they need to gather information on how the current plant processes work and how the new system can integrate with them.

Justification:

_ ethnography(observation)/ system archaeology_____

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Q3) Given the following set of requirements, analyze the requirements and identify issues. [5 points]

1. Develop a mobile app that can track user's location

   Incomplete – (it is not clear that which platform the app should run on and what type of location data to track)

2. The software should be easy to use
   Not verifiable – (easy to use a subjective term it would be difficult to measure whether the requirements has been met or not)

3. The system should be available round the clock.
   Ambiguous – should specify 24/7

4. The system should be able to handle large amounts of data
   Ambiguous **and/or** not verifiable – what defines large

5. The system should be able to process data in real time and also be highly secure
   Inconsistent – processing large amounts of data in real-time requires sacrificing some security while providing high security(encryption/authentication) can slow down data processing

Q4) Create a sequence diagram for withdrawing money from an ATM. [5 points]