

# SE 2001: Software Requirements Engineering (A, B)

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## Quiz 3

Time: 20 minutes

Max Marks: 20

Roll No. \_\_\_\_\_ Solution \_\_\_\_\_

You are a requirements engineer and are asked by a bank to engineer requirements for to be developed software for an ATM machine. The software will deal with customers' requests regarding withdrawal of money, change of PIN, checking of account info etc. The hardware will include an ATM Machine at which the software runs and the software interacts with the ATM card reader and a keypad to get the input.

Answer the following questions in context of the ATM software mentioned above.

**Q1.**

**5 Marks**

You are engineering requirement for an ATM software for the first time. The bank does not agree to let you interact with its customers. However, the bank informs you about the customers itself saying that people with low salary to highly successful businessmen may use the ATM service. Also the potential users include uneducated as well as educated people. Which of the requirements elicitation technique is the most suitable in this situation? Justify?

**User Personas:** The focus here is on collecting user related information but the users cannot be contacted. The information is available through customer only.

Using any other technique may not help for example if we use ethnography, it can help understand the banking activities but not the users.

Introspection is out of question because the requirements engineer is not a domain expert

Apprenticeship is out of question because the bank has categorically disallowed the interaction with bank customers

**Q2.**

**5 Marks**

Lately, the bank allows you interact with its customers by giving you some time slots during working days. You can interact with a shortlist of bank customers in presence of the bank manager. Which of the requirements elicitation technique is the most suitable in this situation? Justify?

**Interviews:** The number of customers is not large and they can be asked questions in manager's presence

**Q3**

**5 Marks**

During interactions with the customers of the bank, you decide to capture their perspective as an ATM user and want to know the sequence of actions that the user would take when using an ATM. Some of the bank customers have a prior experience of using an ATM of another bank. Their experience can be handy for you to engineer requirements and the steps they take while using the ATM will help you a lot. Which of the requirements elicitation technique is the most suitable in this situation? Justify?

**Scenario Analysis:** Users' perspective is sought here. The statements mentions the sequence of actions related information which can help.

**Q4**

**5 Marks**

During interactions with the customers of the bank, you notice that some customers of the bank are facing difficulty explaining their needs. You try to talk to the manager to get clarity but you are unable to understand the banking related details that the manager provides, for example which type of bank account is charged how much for a cash withdrawal request above certain limit or on a request to prepare a bank draft etc., similarly there are many rules regarding reversal of charges for different types of bank accounts. Which of the requirements elicitation technique is the most suitable in this situation? Justify?

**Apprenticeship:** To learn the exact details, the engineer may become part of the system and perform the daily routine tasks to improve his/her understanding of the domain.

**Ethnography** is also applicable.

Both are applicable when domain is difficult to understand otherwise. Also both are applicable if other stakeholder face difficulty in explaining their needs.