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# SOFTWARE ENGINEERING PRINCIPLES

## SOFTWARE SPECIFICATION: CASH DISPENSER

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# REQUIREMENTS 1

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There are many tills, which can access a central resource containing the detailed records of customers' bank accounts. Customers insert a card into the till and type in a PIN (Personal Identification Number), which is encoded by the till and compared with a code stored on the card.

After successfully identifying themselves to the system, customers may try to:

1. view the balance of their accounts;
2. make a withdrawal of cash;
3. ask for a statement of their account to be sent by post.

## REQUIREMENTS 2

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Information on accounts is held in a central database and may be unavailable. In this case (1) above may not be possible. If the database is available, any amount up to the total in the account may be withdrawn, subject to a fixed daily limit on withdrawals. This means that the amount withdrawn within the day must be stored on the card. 'Illegal' cards are kept by the till. The solution should consider feasible implementation architectures. These are likely to include a data line between each till and the central database. For example, transactions at a till may be recorded locally and sent in a queue down the line to the central database.