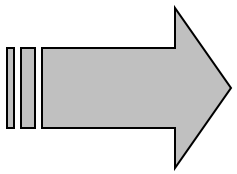
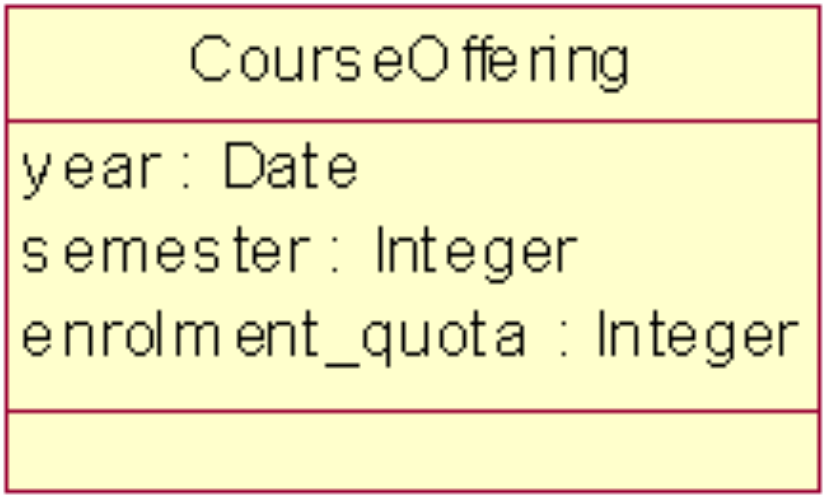
Example A.2 – University Enrolment

- Refer to Example A.1
- Consider the following additional requirements from the Requirements Document:
  - A student's choice of courses may be restricted by timetable clashes and by limitations on the number of students who can be enrolled in the current course offering.

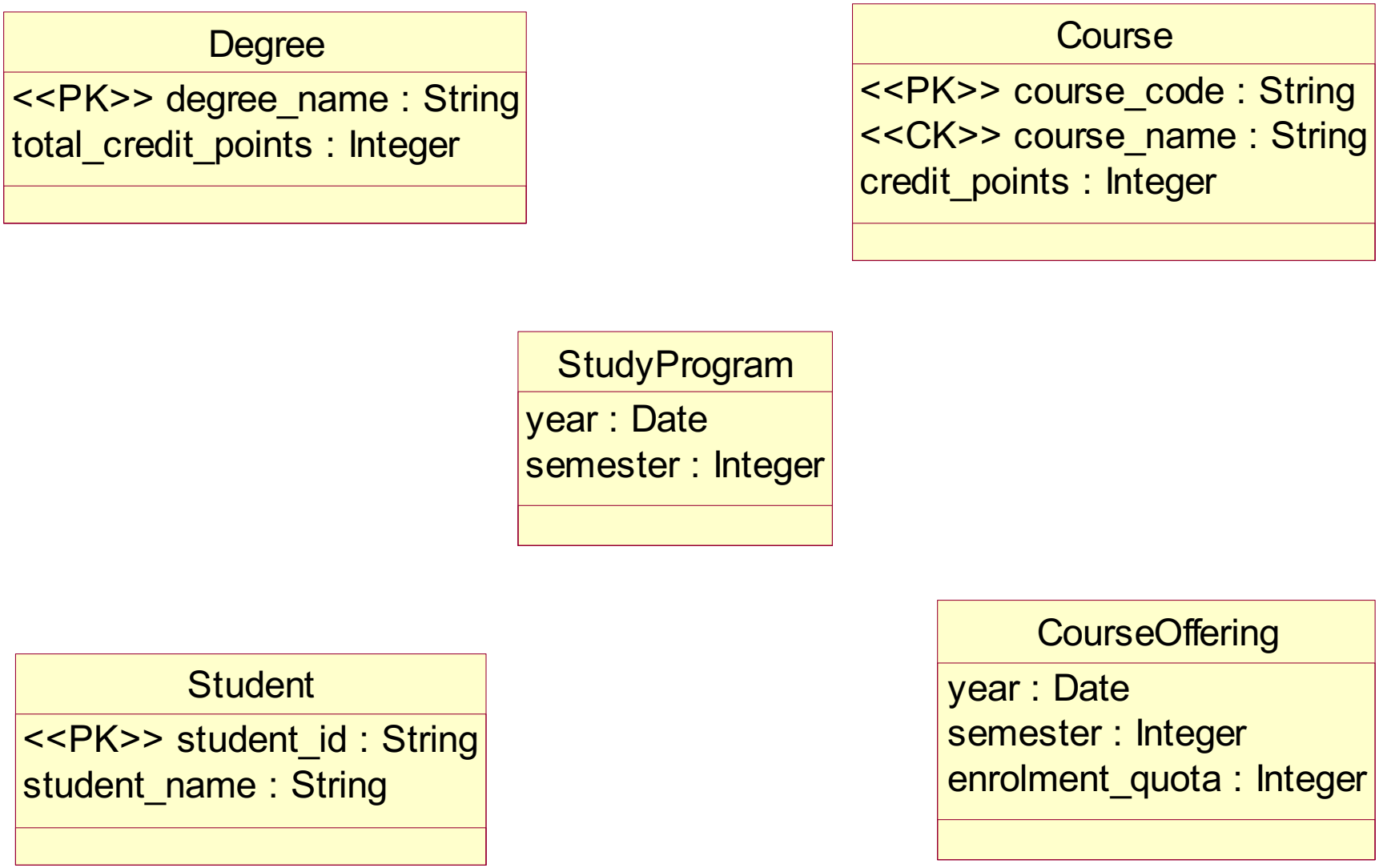




Example A.2 – University Enrolment

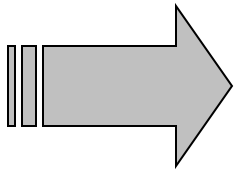
- More requirements:
  - A student's proposed program of study is entered in the on-line enrolment system
  - The system checks the program's consistency and reports any problems
  - The problems need to be resolved with the help of an academic adviser
  - The final program of study is subject to academic approval by the delegate of the Head of Division and it is then forwarded to the Registrar

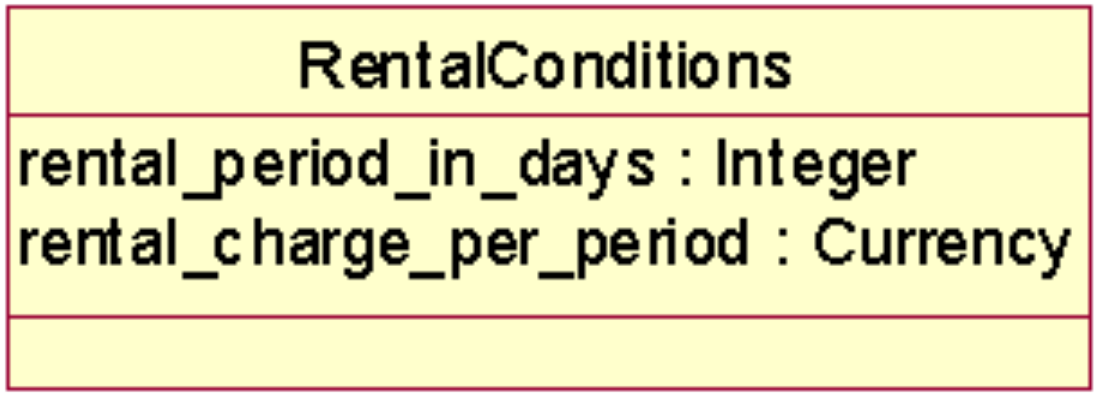
Example A.2 – University Enrolment (solution)



Example B.2 – Video Store

- Refer to Example B.1
- The additional requirements are:
  - The rental charge differs depending on video medium: tape or disk (but it is the same for the two categories of tapes: Beta and VHS).

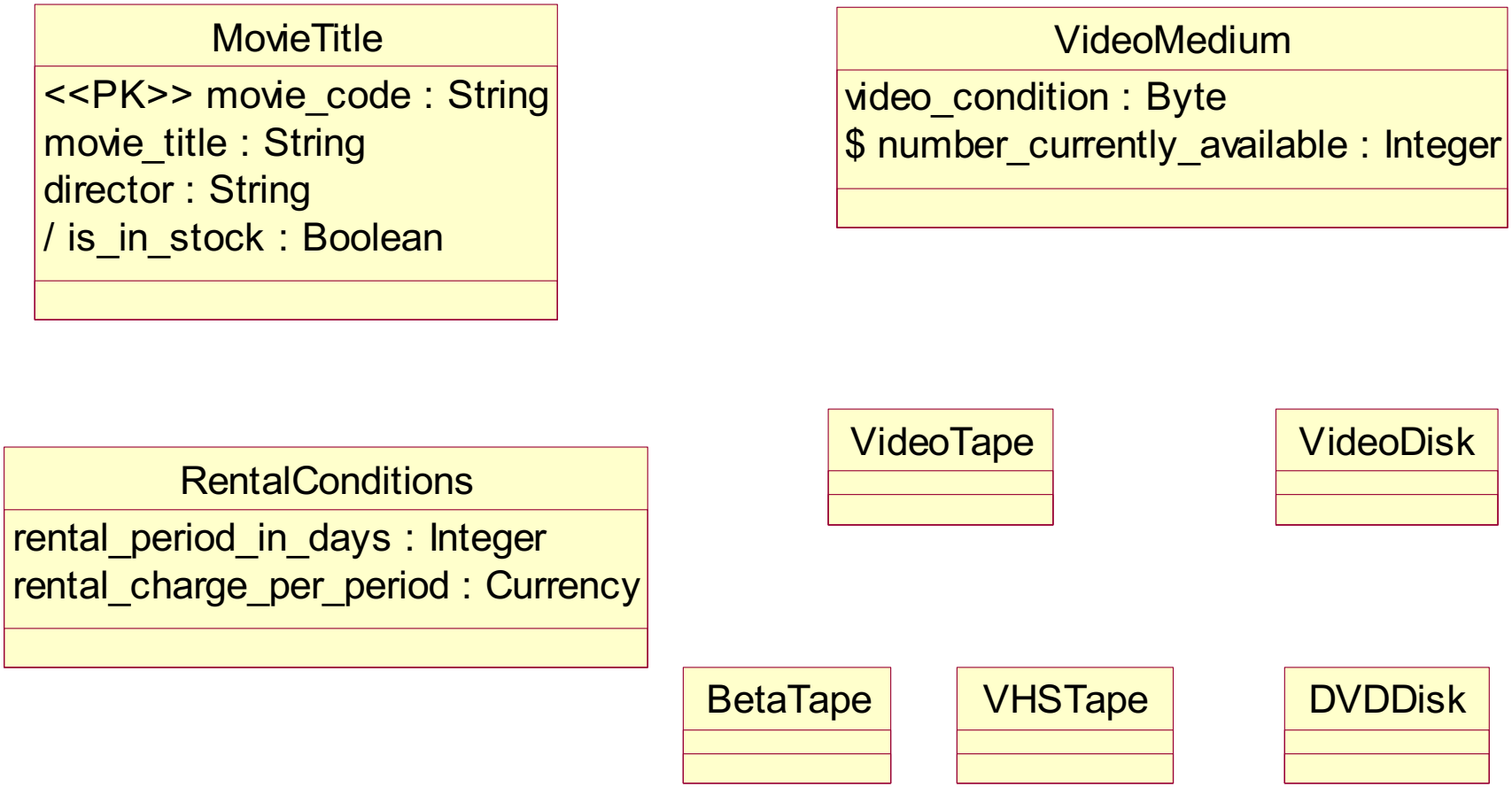




Example B.2 – Video Store

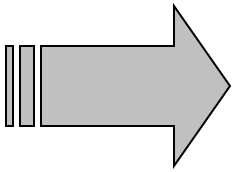
- More requirements:
  - The system should accommodate future video storage formats in addition to VHS tapes, Beta tapes and DVD disks
  - The employees frequently use a movie code, instead of movie title, to identify the movie
  - The same movie title may have more than one release by different directors

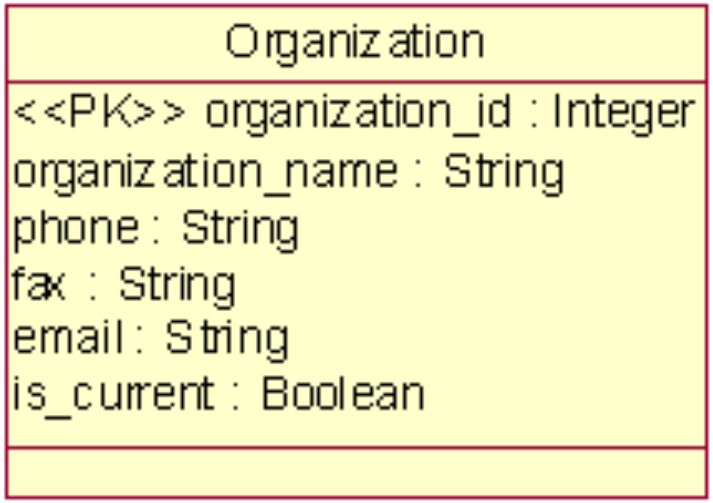
Example B.2 – Video Store (solution)

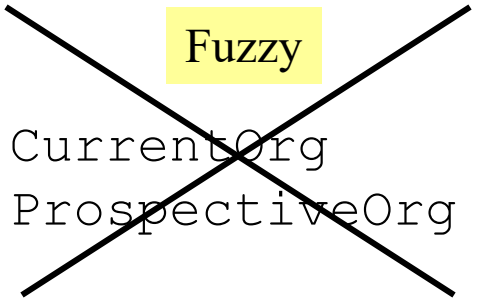


Example C.2 – Contact Management

- Refer to Example C.1 and consider the following additional information
  - A customer is considered current if there exists a contract with that customer for delivery of our products or services. Contract management is, however, outside the scope of our system.



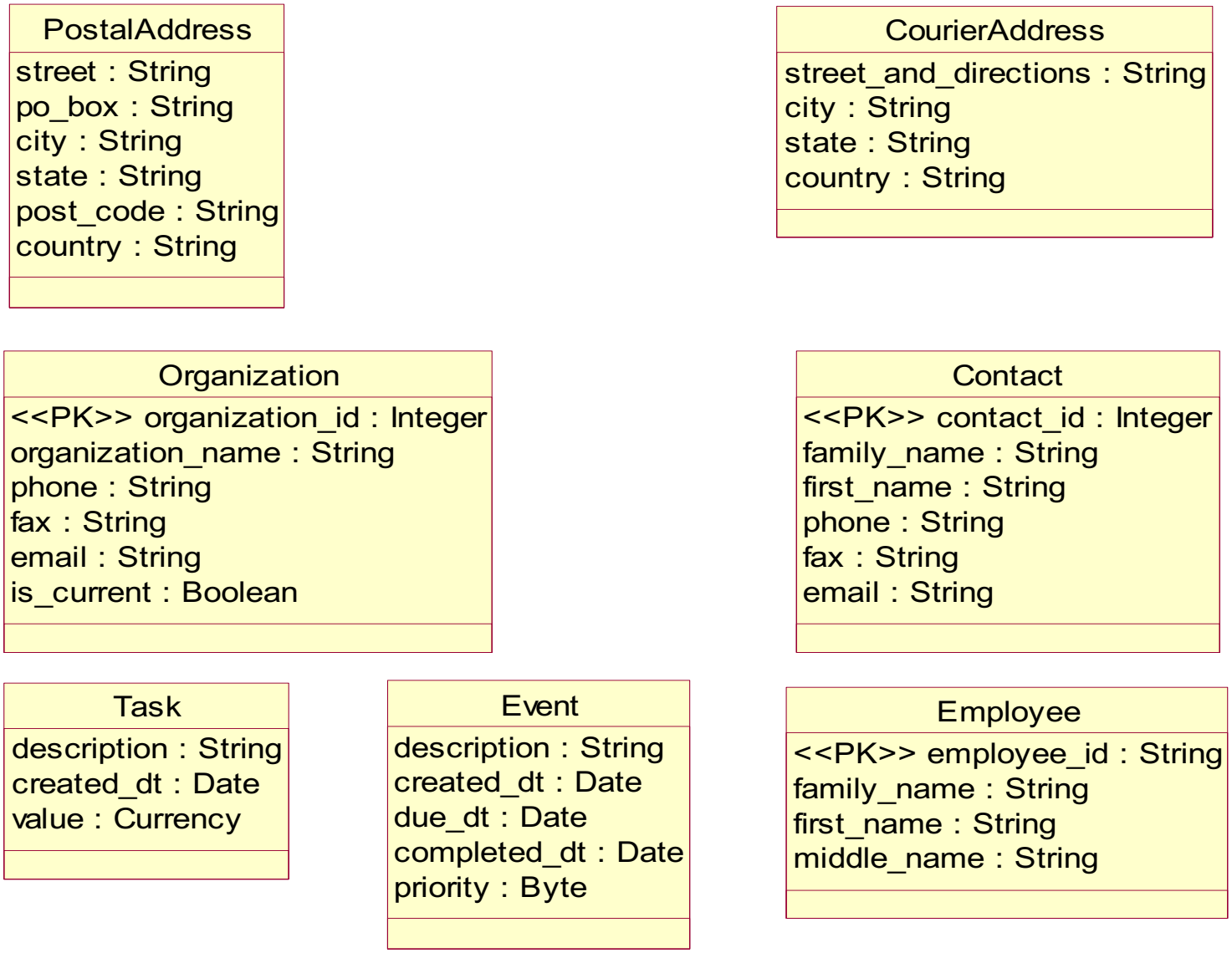




Example C.2 – Contact Management

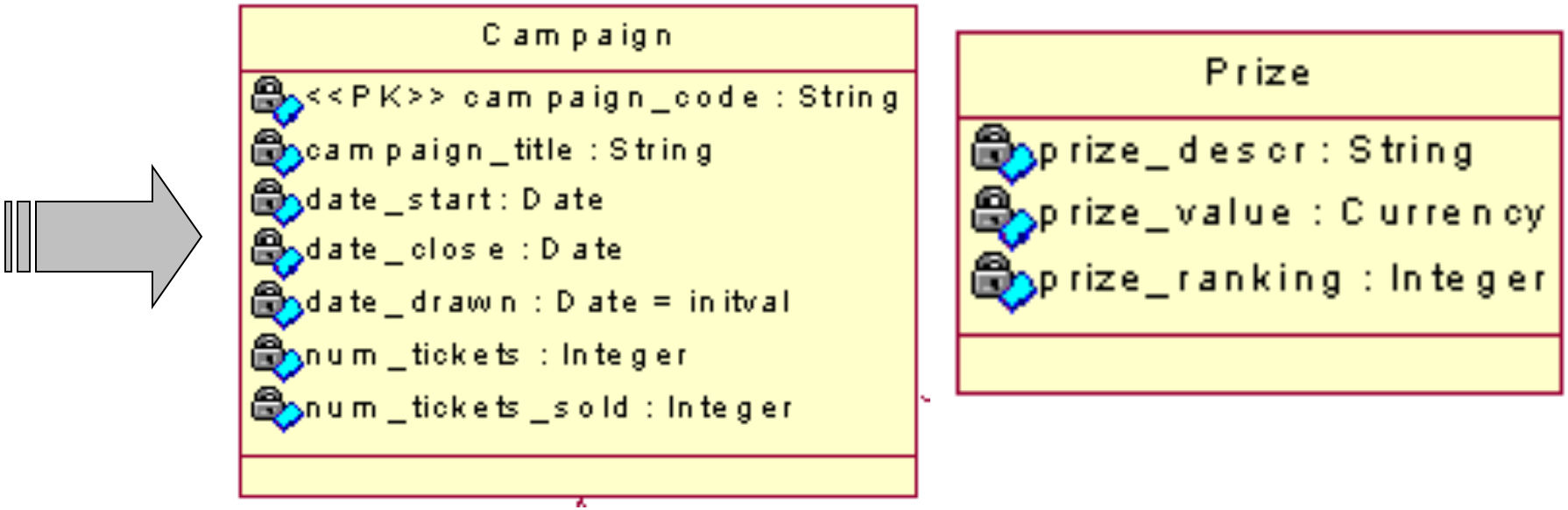
- More requirements:
  - Reports on contacts based on postal and courier addresses (e.g. find all customers by post code)
  - Date and time of the task creation are recorded
  - The "money value" of a task can be stored
  - Events for the employee are displayed on the employee's screen in the calendar-like pages (one day per page).
    - The priority of each event (low, medium or high) is visually distinguished on the screen
  - Not all events have a “due time” - some are “untimed”
  - Event creation time cannot be changed, but the due time can.
  - Event completion date and time are recorded
  - The system stores identifications of employees who created tasks and events, who are scheduled to do the event (“due employee”), and who completed the event

Example C.2 – Contact Management (solution)



Example D.2 - Telemarketing

- Refer to Example D.1
- Consider the following additional information
  - Each campaign
    - Has a title that is generally used for referring to it
    - Has also a unique code for internal reference
    - Runs over a fixed period of time
  - Soon after the campaign is closed, the prizes are drawn and the holders of winning tickets are advised



Example D.2 - Telemarketing

- More requirements:
  - Tickets are uniquely numbered within each campaign
  - The total number of tickets in a campaign, number of tickets sold so far, and the current status of each ticket are known (e.g. available, ordered, paid for, prize winner)
  - To determine the performance of the society's telemarketers, the duration of calls and the successful call outcomes (i.e. resulting in ordered tickets) are recorded
  - Extensive information about supporters is maintained
    - Contact details (address, phone number, etc.)
    - Historical details such as the first and most recent dates when a supporter had participated in a campaign
    - Any known supporter's preferences and constraints (e.g. times not to call, usual credit card number)

Example D.2 - Telemarketing

- More requirements:
  - Telemarketing calls are made according to their priorities
  - Calls which are unanswered or where an answering machine was found, are rescheduled
    - Times of repeat calls are alternated
    - Number of repeat calls is limited
      - Limits may be different for different call types (e.g. a normal "solicitation" call may have different limit than a call to remind a supporter of an outstanding payment)
  - Call outcomes are categorized - success (i.e. tickets ordered), no success, call back later, no answer, engaged, answering machine, fax machine, wrong number, disconnected.

Example D.2 – Telemarketing (solution)