Case Study 2 Specification

Objectives

You are instructed to use pseudocode concepts to develop a scenario which is applicable to be used as an e-Portal at the Election Commission of EOL for identifying valid voters.

The specification and requirements would be listed down in detail as follows.

- A valid NIC is the primary source which is to be used to identify the valid voters. A person can be identified as a valid voter, or an invalid voter based on the extracted information from a valid NIC. NICs are issued by the Department for Registration of Persons.

- There are two kinds of valid NICs named as the old NIC and the new NIC. The old NIC has a unique 9-digit number, in the format 000000000A (where 0 is a digit and A is a letter). The first two digits of the number are the holder's year of birth (e.g.: 91xxxxxxxx for someone born in 1991). The next three digits contain the number of days in the year of the person's birth. For females, 500 is added to the number of days. The next three digits are serial number of the issued day. The next digit is the check digit. The final letter is generally a 'V' which indicates that the holder is eligible to vote in the area. In some cases, the final letter can be 'X' which usually indicates the holder is not eligible to vote.

- The new NIC has a unique 12-digit number. The first four digits of the number are the holder's year of birth (e.g.: 199602235438 for someone born in 1996). The next three digits contain the number of days in the year of the person's birth. For females, 500 is added to the number of days. The next four digits are the serial number. The last digit is the check digit.

- For a particular person, the legal voting period starts with age 18.

- Think that EOL wants to extract the details of a voter, the respective details such as the NIC, birth year, gender and ability of voting should be written to a file once the NIC is entered to the proposed system.

Tasks

1. Create a pseudocode for the main flow of the above scenario. Make assumptions appropriately. (LO2)