City Library Automation

A city library in Mexico planned to automate its' library operations and member operations. Library lends books, CDs and DVDs to its' members. Library administrator should be able to add a book/CD/DVD with book/CD/DVD name, author name, category (Fiction, Entertainment, Technical, and Management etc.), number of copies.

Member should be registered with library before he is allowed to check out book/CD/DVD. Member needs to give name, date of birth, sex, address, contact number and gets a member id. Member id needs to be specified for any transactions to be done in library.

Search facility needs to be made available to members by book name or author name or category or combination of above to search the relevant resources. Member can choose one or more book/CD/DVD to check out. Software needs to ensure the availability of the book before check out. Due date needs to be displayed once checked out. Due dates are 10 days, 5 days and 3 days for book, CD and DVD respectively. Member also should be able to see the list of books that she/he checked out.

Also should be able to return the book that he/she checked out. When the member returns the book beyond the due date, he/she should be fined accordingly. Fines are $1, $2 and $3 for book, CD and DVD respectively.

Administrator should be able to see the list of books checked out or due or returned for a given date.

Please create a console app for the above problem statement with appropriate exception handlers included.