# SD6502 Assignment 2 Design Document (Muaz Aldairi & Dylan Su)

## Requirement specification/Problem definition

The librarians in the Learning Commons at WelTec need their Library management software to be integrated into a Windows Form App so it is easier for them to manage and navigate. The form should have a login page where the user can select whether they want to access the Librarian, Student, or Tutor form. A list of available books, articles, or digital media is displayed, along with accompanying item details and search bar functionality. The Librarian form can add or remove items from the list and change item details. A student or tutor can view a list of items they have borrowed through their Borrowings list form. The Student form should calculate and display the penalty amount for an overdue item according to how many dues the item is overdue.

## CRC Cards

|  |  |
| --- | --- |
| **Book** |  |
| Stores Book name (String)  Stores Price (Double)  Stores ISBN (String)  Stores Author (String)  Stores Published year (Integer) | Collaborations:  Libarian Form  Student Form  Tutor Form |

|  |  |
| --- | --- |
| **Article** |  |
| Stores Article name (String)  Stores Price (Double)  Stores ID (String)  Stores Author (String)  Stores Published year (Integer) | Collaborations:  Libarian Form  Student Form  Tutor Form |

|  |  |
| --- | --- |
| **Media** |  |
| Stores Media name (String)  Stores Price (Double)  Stores ID (String)  Stores Author (String)  Stores Published year (Integer) | Collaborations:  Libarian Form  Student Form  Tutor Form |

|  |  |
| --- | --- |
| **Borrowing** |  |
| Stores item name (String)  Stores ID (String)  Stores Author (String)  Stores Item type (String)  Stores Published year (Integer)  Stores Item due date (DateTime)  Stores Renewal status (Boolean)  Stores Days overdue (Integer)  Stores Penalty amount | Collaborations:  StudentBorrowingsList  TutorBorrowingsList |

## Class diagram

Diagram

Description automatically generated