

**CSC186 – Project Example**

**KONAKUNI – BOOKSTORE MANAGEMENT SYSTEM**

**FRONT COVER AND TABLE OF CONTENT**

1. **ORGANIZATIONAL STRUCTURE**

**2.0 INTRODUCTION**

**3.0 OBJECTIVES**

1. System can store all information for both customer and book.

2. System can calculate and display the total price of all purchases on 22nd July.

3. System can determine the highest demand type of book by displaying either “Digital Book!”, “Physical Book!” or “Equal demand!”.

**4.0 SCOPE**

Class diagram

1. There are 4 classes; Customer, Book, Digital Book, Physical Book and Date. Class Date is optional.
2. Customer and Book has a many-to-many relationship with aggregation link. It is a part of relationship where Book is the whole and Customer is the part-of objects. Books with same serial number and title can be purchased by many customers, no customer at all and one customer only. This implies a relationship which part of object Customer can still exist independently of the whole object Book.
3. Digital book and physical book are type of books. This implies inheritance relationship where Book has general attributes; ISBN, title and quantity sold. Digital book has unique attribute which is size of memory and date to determine discount for digital awareness day while physical book has number of pages and hardcover or softcover.
4. Date and Digital Book has a one-to-one relationship with composition link. They are dependent to each other.

Use Case diagram

1. Only one actor which is Administrator. Administrator either contract or permanent can do the same process.
2. Processes;
   1. Administrator can add information about customer.
   2. Administrator can add information about book.
   3. Administrator can update/edit customer’s phone number.
   4. Administrator can calculate the total purchase price.
   5. Administrator can calculate and display the total of price of all purchases on 22nd July.
   6. Administrator can determine the highest demand type of book by displaying either “Digital Book!”, “Physical Book!” or “Equal demand!”.

**5.0 UML DIAGRAM**

UML Class Diagram

Diagram

Description automatically generated

UML Use Case Diagram

Diagram

Description automatically generated

**6.0 INPUT FILE**

**7.0 CLASS DEFINITION OF INHERITANCE, POLYMORPHISM AND RELATED CLASSES**

**8.0 CLASS APPLICATION**

**9.0 OUTPUT FILE OR/AND SAMPLE INTERFACES**

**10.0 REFERENCES**