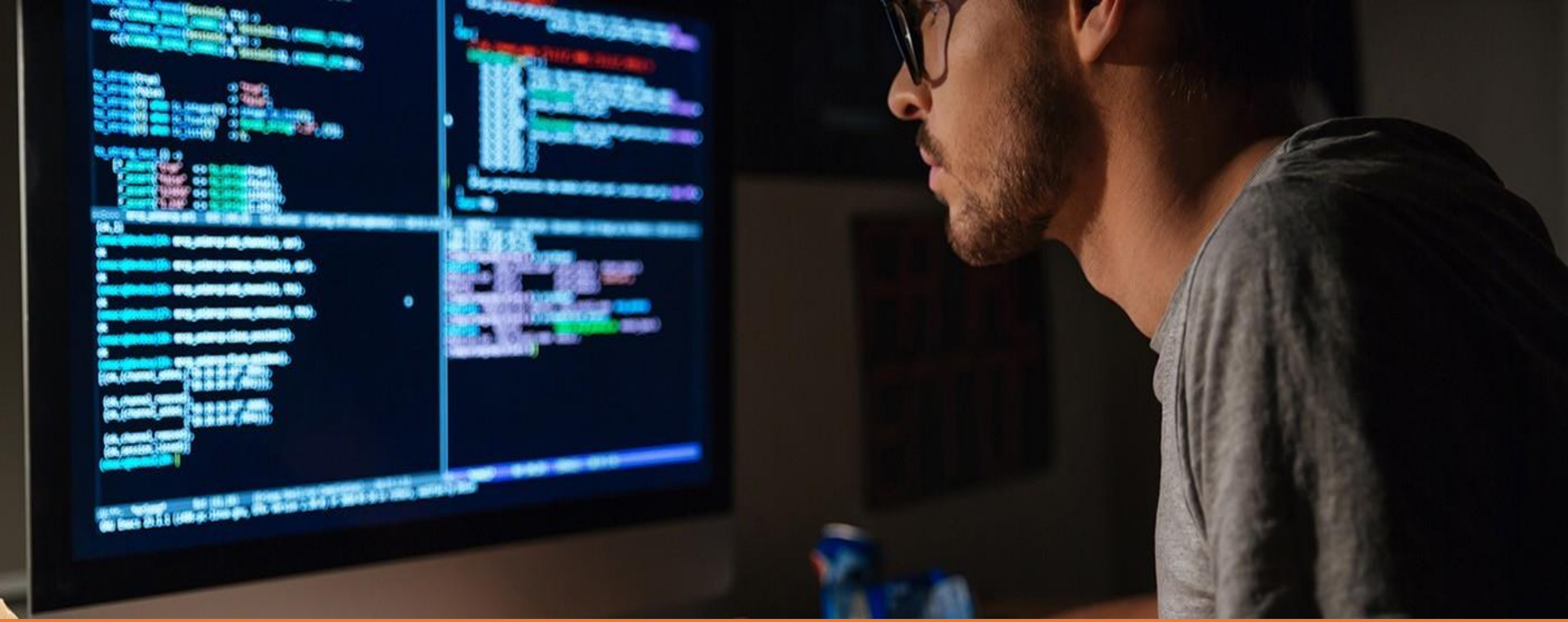
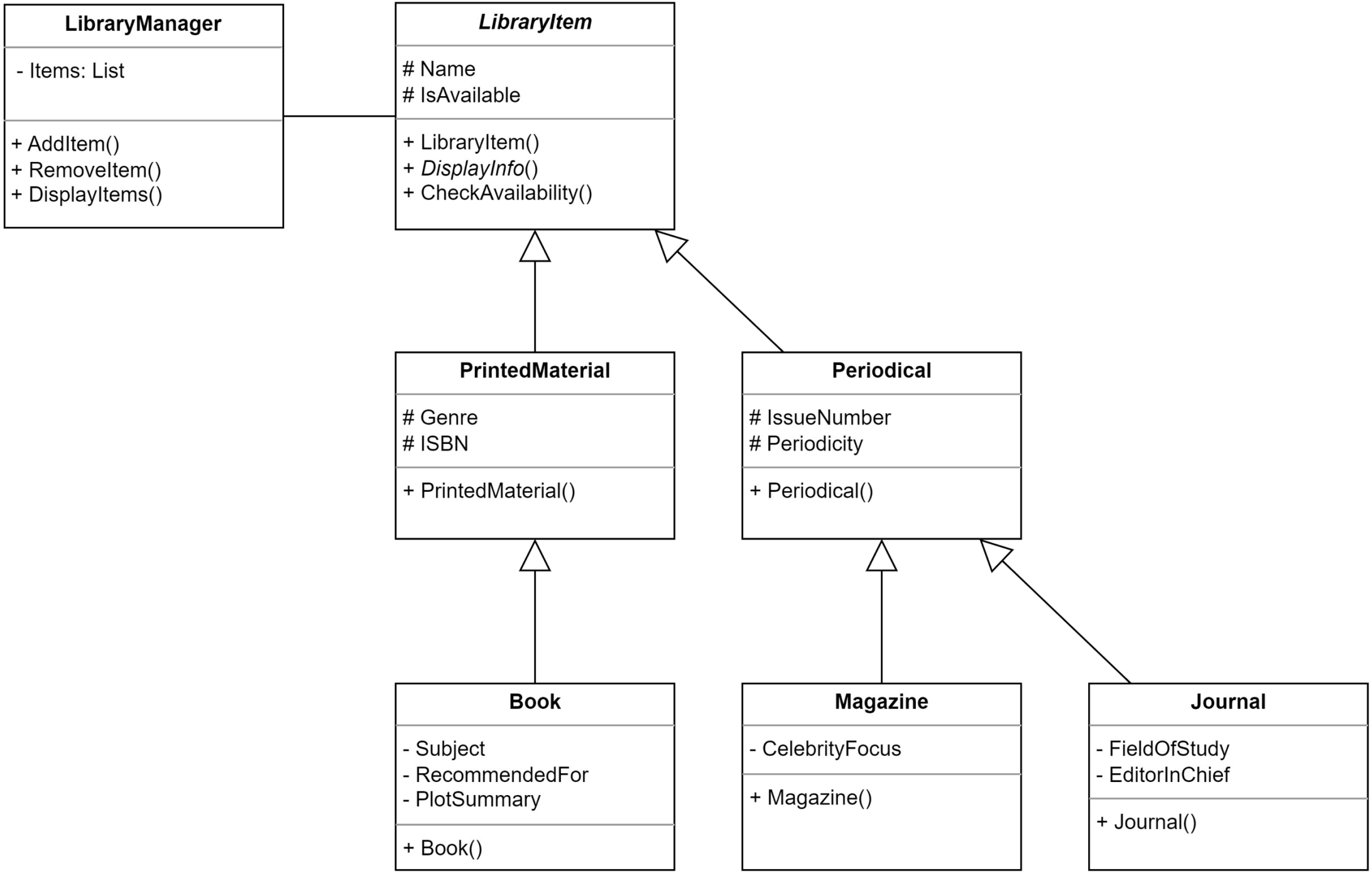


Object-Oriented Design

Dr Waleed Iqbal


LibraryManager
- Items: List
+ AddItem()
+ RemoveItem()
+ DisplayItems()
LibraryItem
Name
IsAvailable
+ LibraryItem()
+ DisplayInfo()
+ CheckAvailability()
PrintedMaterial
Genre
ISBN
+ PrintedMaterial()
Periodical
IssueNumber
Periodicity
+ Periodical()
Book
- Subject
- RecommendedFor
- PlotSummary
+ Book()
Magazine
- CelebrityFocus
+ Magazine()
Journal
- FieldOfStudy
- EditorInChief
+ Journal()

Expected Use

```
LibraryManager lm = LibraryManager.Instance; //Singleton Class

Book book = new Book(
    name: "The Enchanted Forest",
    genre: "Fantasy",
    isbn: "978-3-16-148410-0",
    subject: "Magic, Adventure, and Friendship",
    recommendedFor: "Teens and young adults who enjoy fantasy and adventure stories.",
    plotSummary: "When an ancient spell awakens the long-forgotten creatures of the Enchanted Forest…"
);

lm.AddItem(book);
lm.DisplayItems(List<Book> books);
lm.RemoveItem(book);
lm.RemoveItem(name: "The Enchanted Forest");
```