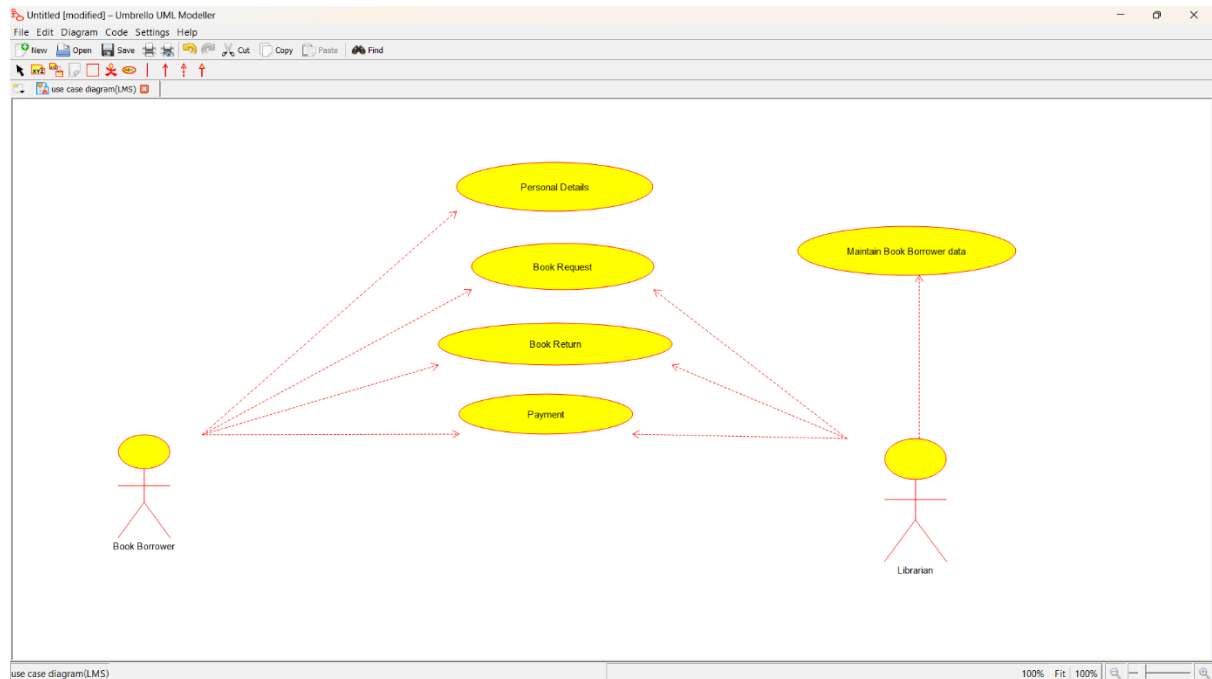
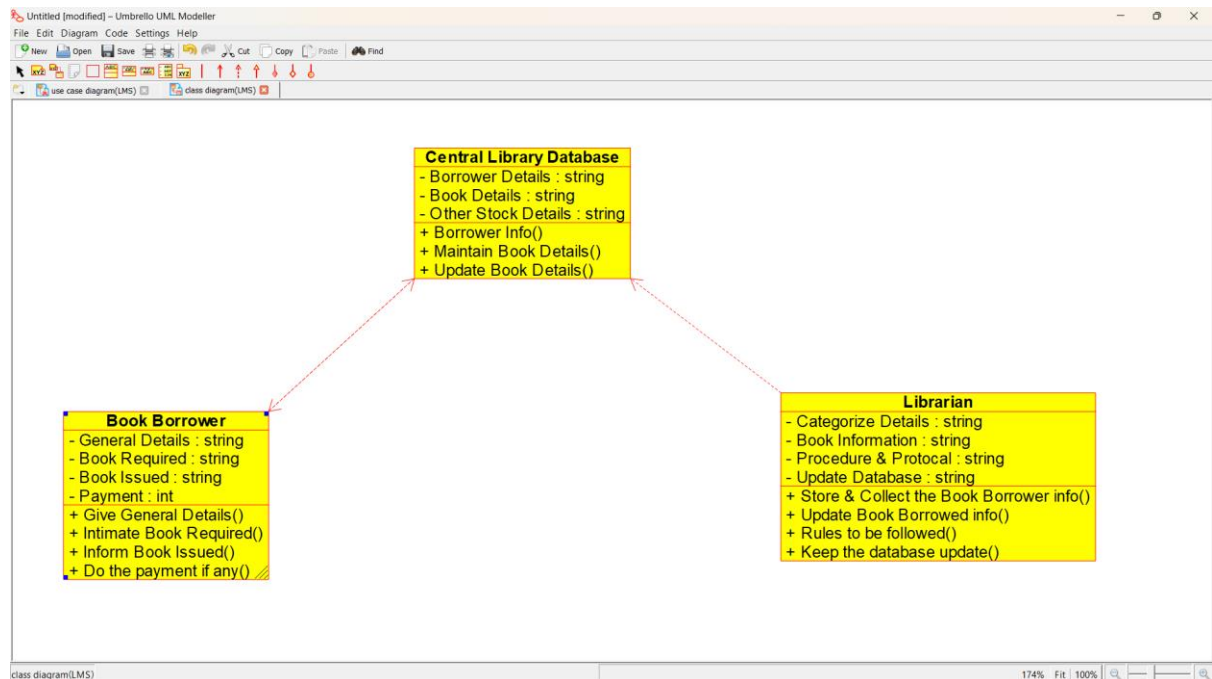


EXPERIMENT : 20:-LIBRARY MANAGEMENT SYSTEM

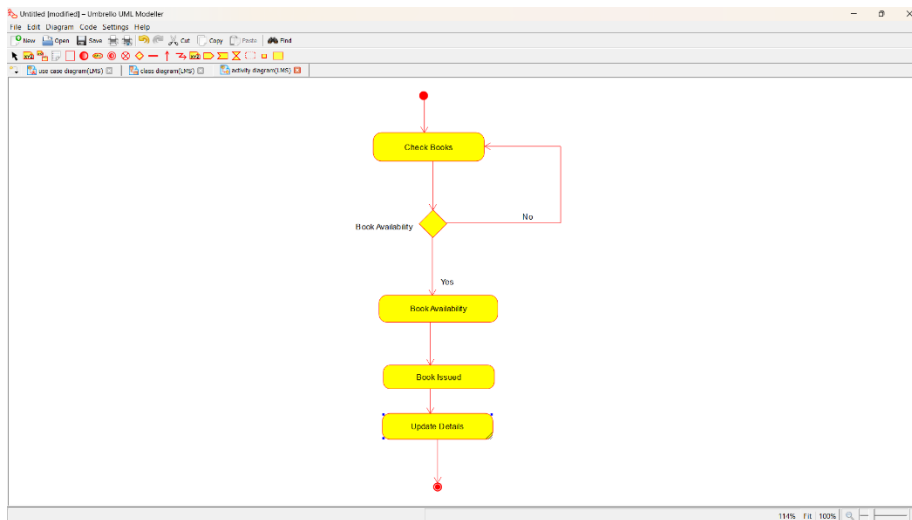
USE CASE DIAGRAM:



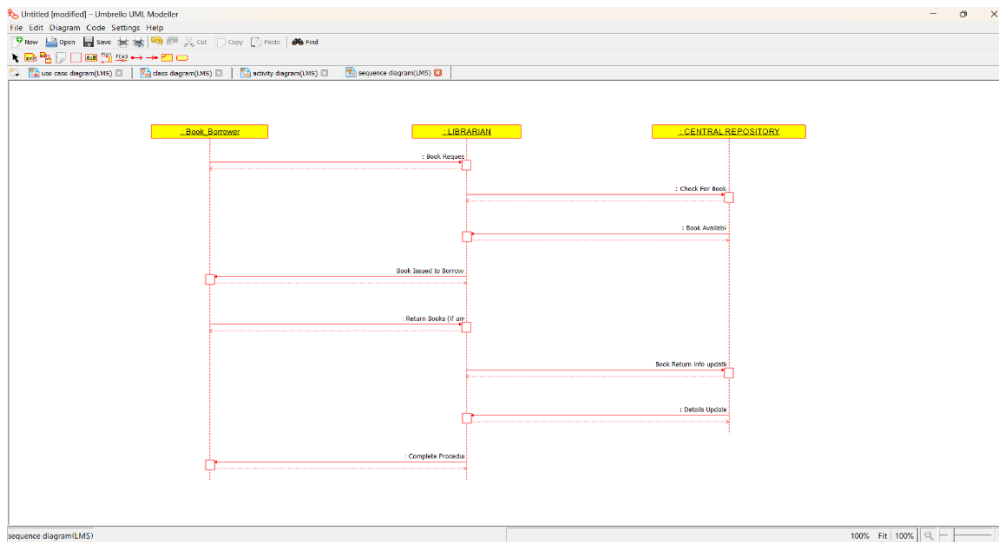
CLASS DIAGRAM:



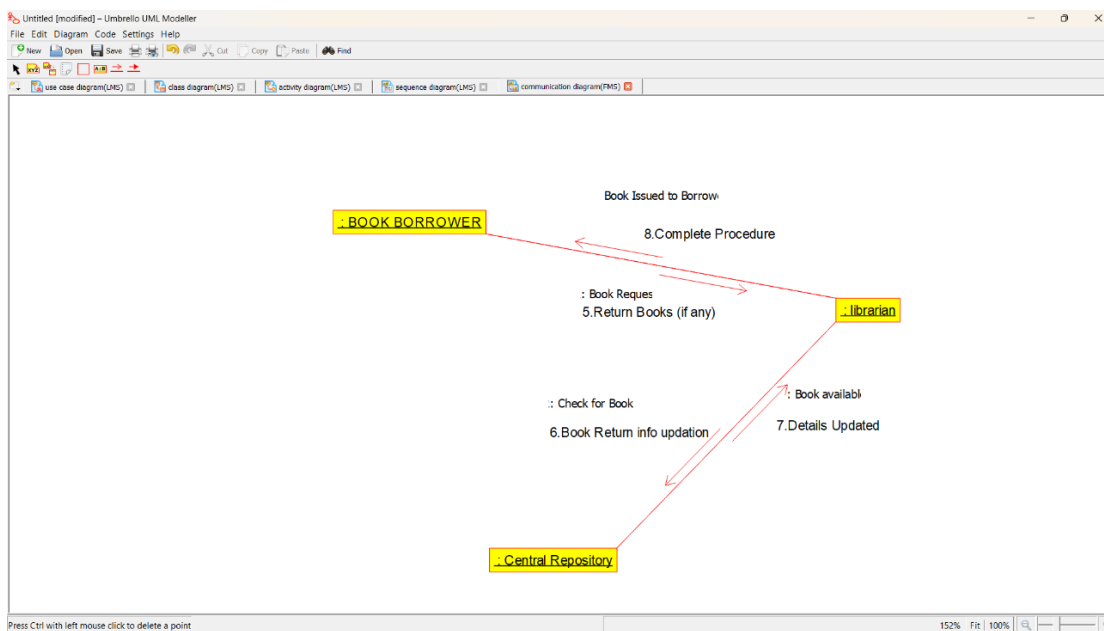
ACTIVITY DIAGRAM:



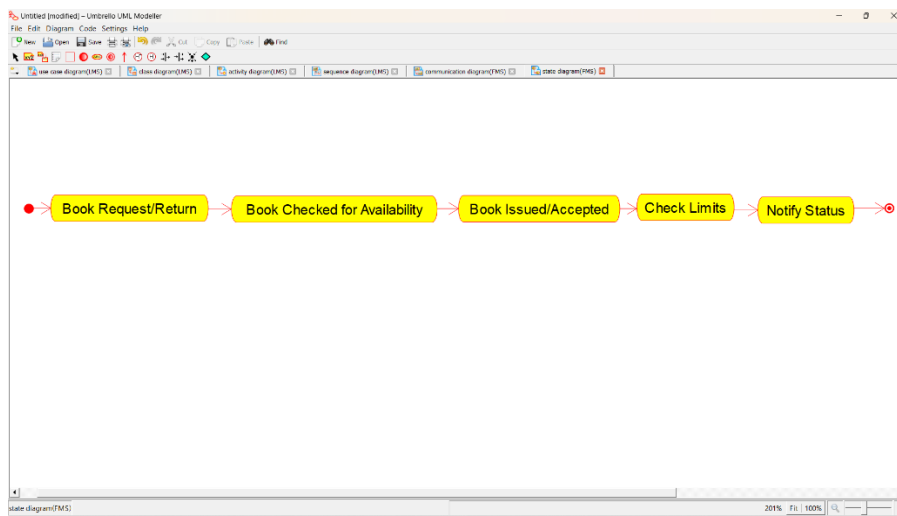
SEQUENCE DIAGRAM:



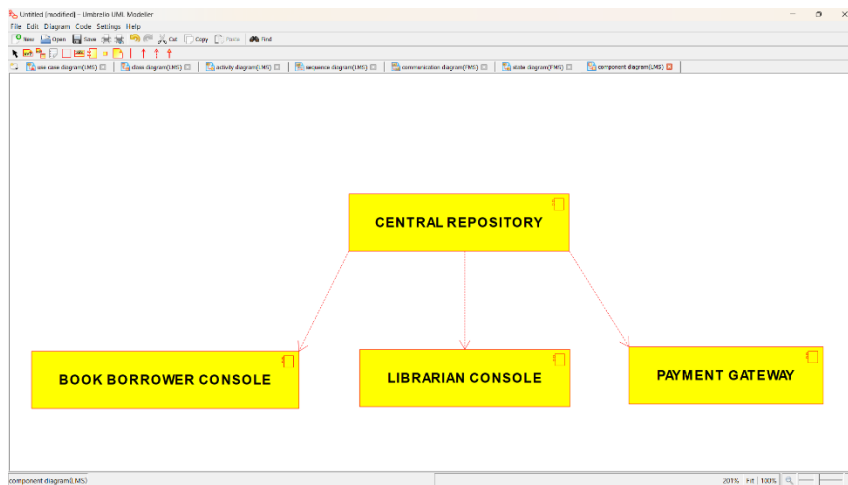
COLLABORATION DIAGRAM:



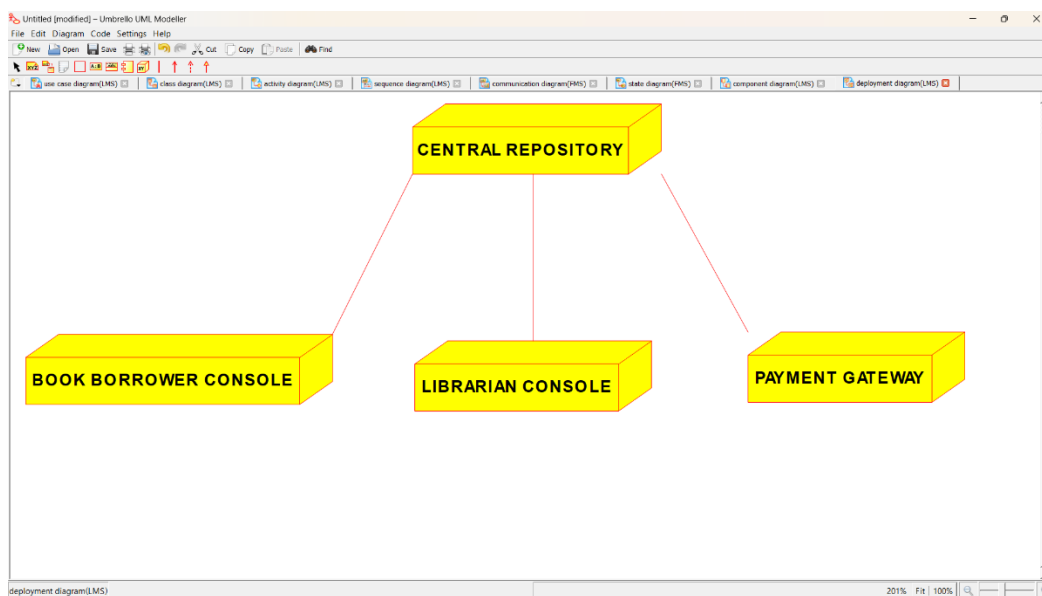
STATE CHART DIAGRAM:



COMPONENT DIAGRAM:



DEPLOYMENT DIAGRAM:



PROGRAM CODING:

```
/**
 * Class Central_Library_Database
 */
public class Central_Library_Database {
    //
    // Fields
    //
    private String Borrower_Details;
    private String Book_Details;
    private String Other_Stock_Details;
    //
    // Constructors
    //
    public Central_Library_Database () { };
    //
    // Methods
    //
    //
    // Accessor methods
    //
    /**
     * Set the value of Borrower_Details
     * @param newVar the new value of Borrower_Details
     */
    private void setBorrower_Details (String newVar) {
        Borrower_Details = newVar;
    }
    /**
     * Get the value of Borrower_Details
     * @return the value of Borrower_Details
     */
    private String getBorrower_Details () {
        return Borrower_Details;
    }
    /**
     * Set the value of Book_Details
     * @param newVar the new value of Book_Details
     */
    private void setBook_Details (String newVar) {
        Book_Details = newVar;
    }
    /**
     * Get the value of Book_Details
     * @return the value of Book_Details
     */
    private String getBook_Details () {
        return Book_Details;
    }
    /**
     * Set the value of Other_Stock_Details
     * @param newVar the new value of Other_Stock_Details
     */
    private void setOther_Stock_Details (String newVar) {
        Other_Stock_Details = newVar;
    }
    /**
     * Get the value of Other_Stock_Details
     * @return the value of Other_Stock_Details
     */
    private String getOther_Stock_Details () {
        return Other_Stock_Details;
    }
    //
    // Other methods
    //
    /**
     */
    public void Borrower_Info()
    {
    }
    /**
     */
}
```

```

public void Maintain_Book_Details()
{
}
/**
 */
public void Update_Book_Details()
{
}
}
/**
 * Class Book_Borrower
 */
public class Book_Borrower {
//
// Fields
//
private String General_Details;
private String Book_Required;
private String Book_Issued;
private int Payment;
//
// Constructors
//
public Book_Borrower () { };
//
// Methods
//
//
// Accessor methods
//
/**
 * Set the value of General_Details
 * @param newVar the new value of General_Details
 */
private void setGeneral_Details (String newVar) {
    General_Details = newVar;
}
/**
 * Get the value of General_Details
 * @return the value of General_Details
 */
private String getGeneral_Details () {
    return General_Details;
}
/**
 * Set the value of Book_Required
 * @param newVar the new value of Book_Required
 */
private void setBook_Required (String newVar) {
    Book_Required = newVar;
}
/**
 * Get the value of Book_Required
 * @return the value of Book_Required
 */
private String getBook_Required () {
    return Book_Required;
}
/**
 * Set the value of Book_Issued
 * @param newVar the new value of Book_Issued
 */
private void setBook_Issued (String newVar) {
    Book_Issued = newVar;
}
/**
 * Get the value of Book_Issued
 * @return the value of Book_Issued
 */
private String getBook_Issued () {
    return Book_Issued;
}
/**
 * Set the value of Payment
 * @param newVar the new value of Payment

```

```

*/
private void setPayment (int newVar) {
    Payment = newVar;
}
/**
 * Get the value of Payment
 * @return the value of Payment
 */
private int getPayment () {
    return Payment;
}
//
// Other methods
//
/**
 */
public void Give_General_Details()
{
}
/**
 */
public void Intimate_Book_Required()
{
}
/**
 */
public void Inform_Book_Issued()
{
}
/**
 */
public void Do_the_payment_if_any()
{
}
}
/**
 * Class Librarian
 */
public class Librarian {
    //
    // Fields
    //
    private String Categorize_Details;
    private String Book_Information;
    private String Procedure_Protocol;
    private String Update_Database;
    //
    // Constructors
    //
    public Librarian () { };
    //
    // Methods
    //
    //
    // Accessor methods
    //
    /**
     * Set the value of Categorize_Details
     * @param newVar the new value of Categorize_Details
     */
    private void setCategorize_Details (String newVar) {
        Categorize_Details = newVar;
    }
    /**
     * Get the value of Categorize_Details
     * @return the value of Categorize_Details
     */
    private String getCategorize_Details () {
        return Categorize_Details;
    }
    /**
     * Set the value of Book_Information
     * @param newVar the new value of Book_Information
     */
    private void setBook_Information (String newVar) {

```

```

    Book_Information = newVar;
}
/**
 * Get the value of Book_Information
 * @return the value of Book_Information
 */
private String getBook_Information () {
    return Book_Information;
}
/**
 * Set the value of Procedure_Protocal
 * @param newVar the new value of Procedure_Protocal
 */
private void setProcedure_Protocal (String newVar) {
    Procedure_Protocal = newVar;
}
/**
 * Get the value of Procedure_Protocal
 * @return the value of Procedure_Protocal
 */
private String getProcedure_Protocal () {
    return Procedure_Protocal;
}
/**
 * Set the value of Update_Database
 * @param newVar the new value of Update_Database
 */
private void setUpdate_Database (String newVar) {
    Update_Database = newVar;
}
/**
 * Get the value of Update_Database
 * @return the value of Update_Database
 */
private String getUpdate_Database () {
    return Update_Database;
}
//
// Other methods
//
/**
 */
public void Store_Collect_the_Book_Borrower_info()
{
}
/**
 */
public void Update_Book_Borrowed_info()
{
}
/**
 */
public void Rules_to_be_followed()
{
}
/**
 */
public void Keep_the_database_update()
{
}
}

```