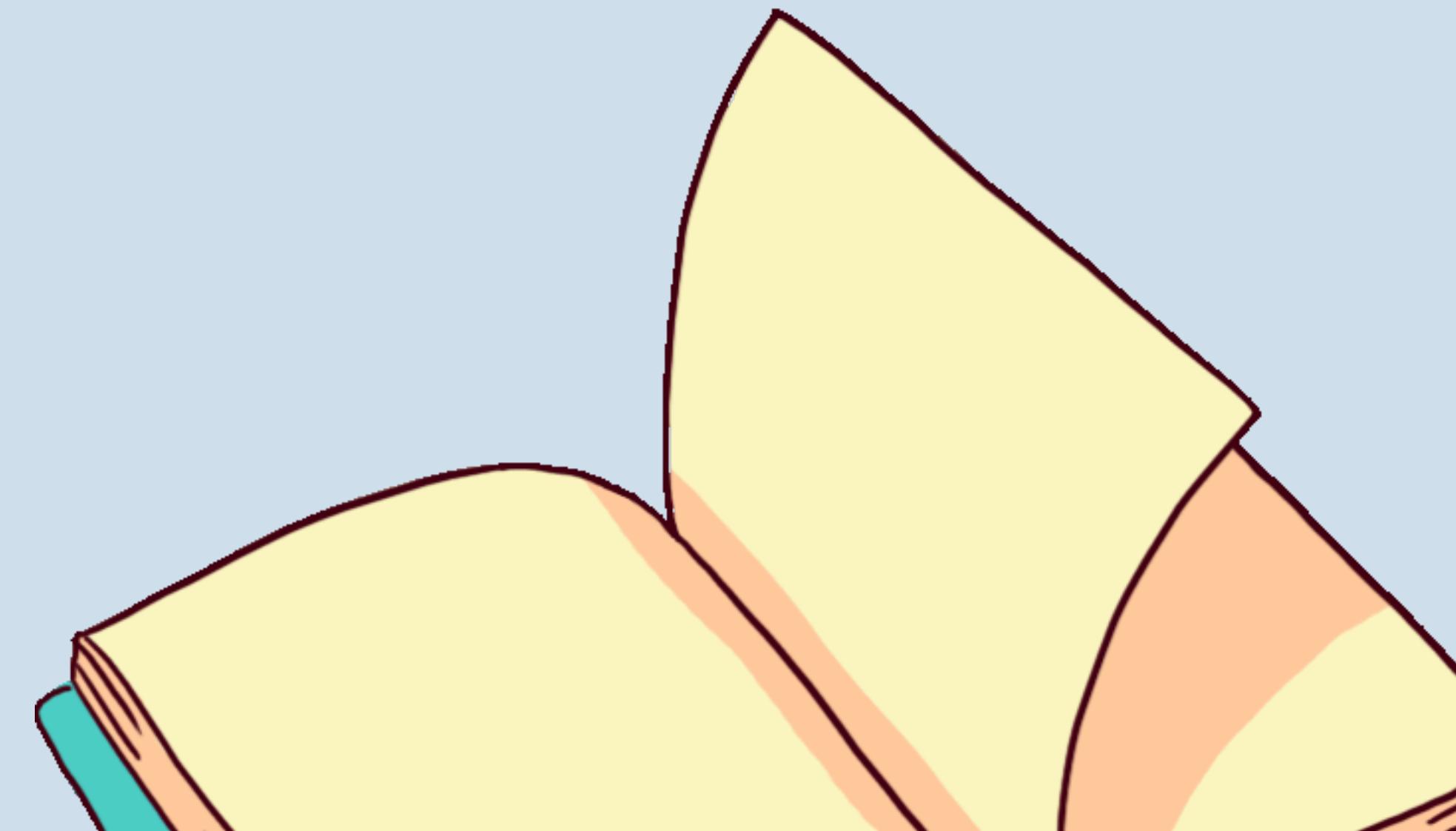
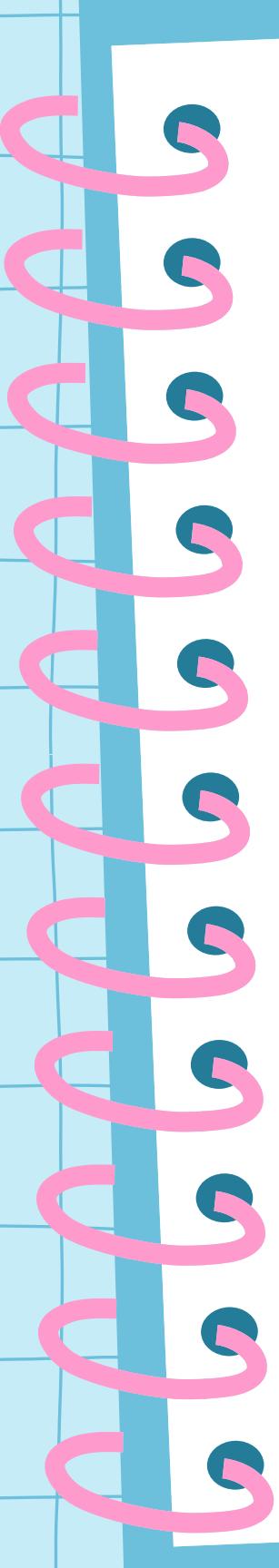


Book Management System





Professors:

1. Hà Kỳ Anh

2. Nguyễn Quang
Hào



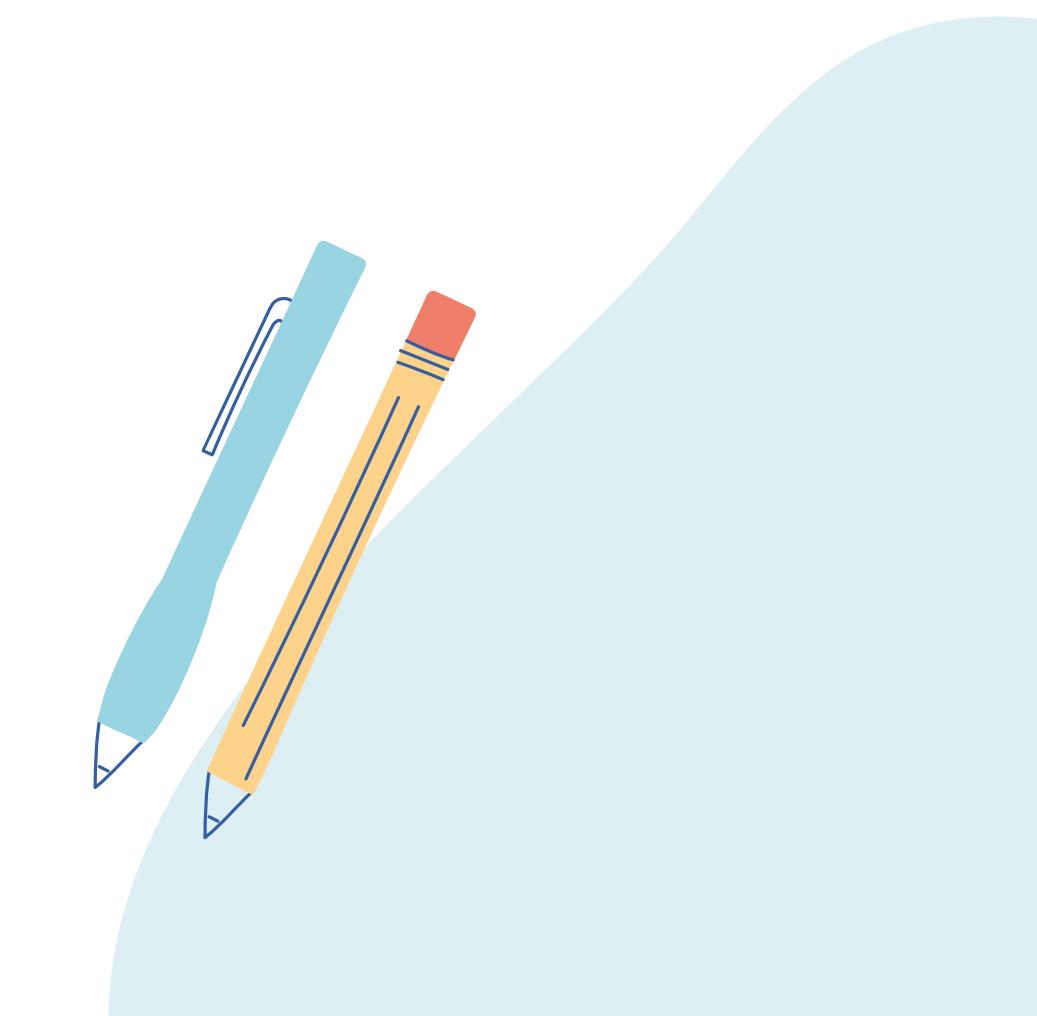
A Book Management Program

written by professors.

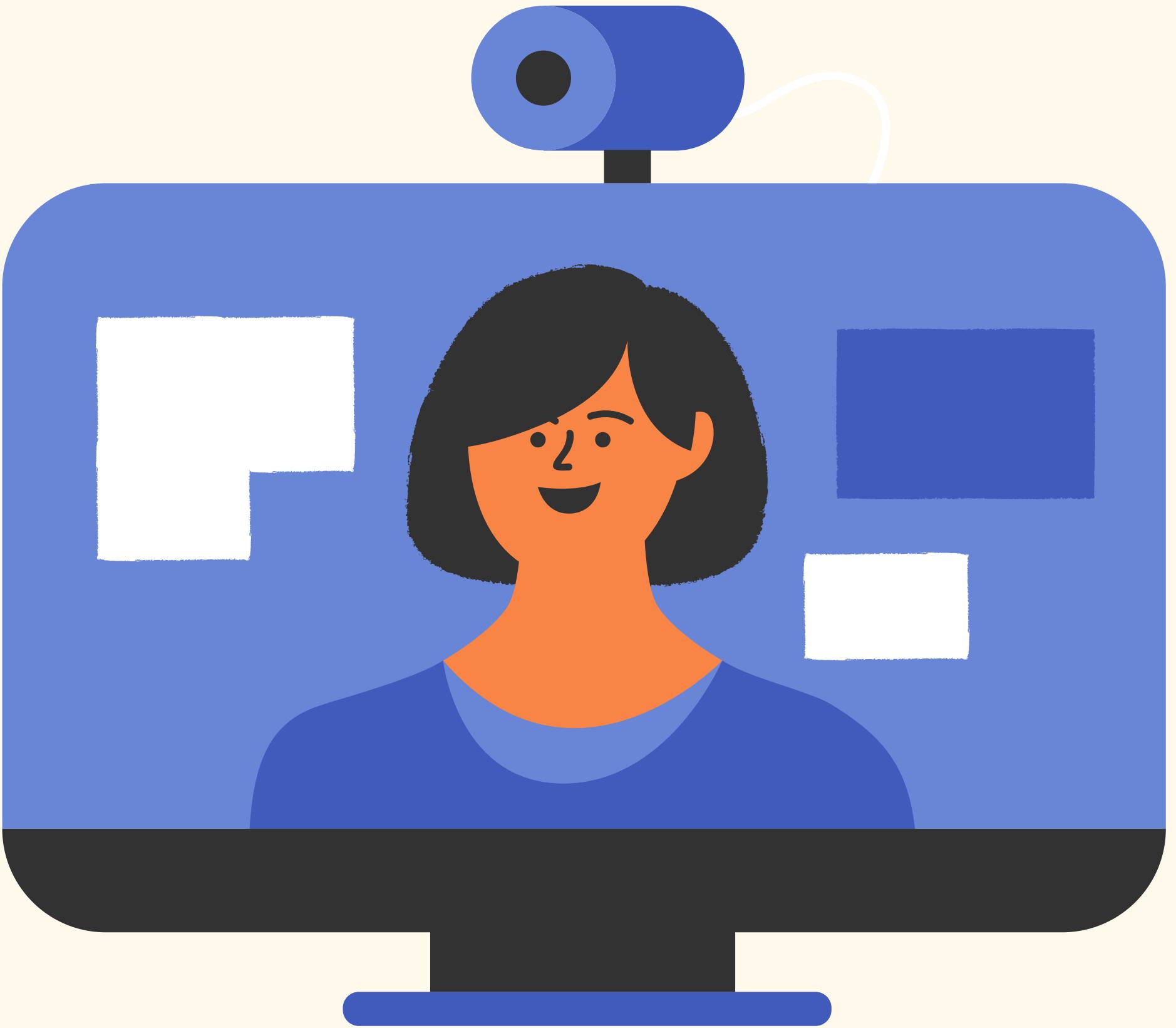




Overview

1. Login and Sign up
 2. Book Management
 3. Customer Information
 4. Bill Management
 5. Income Management
- 

Login and Registration



 Login

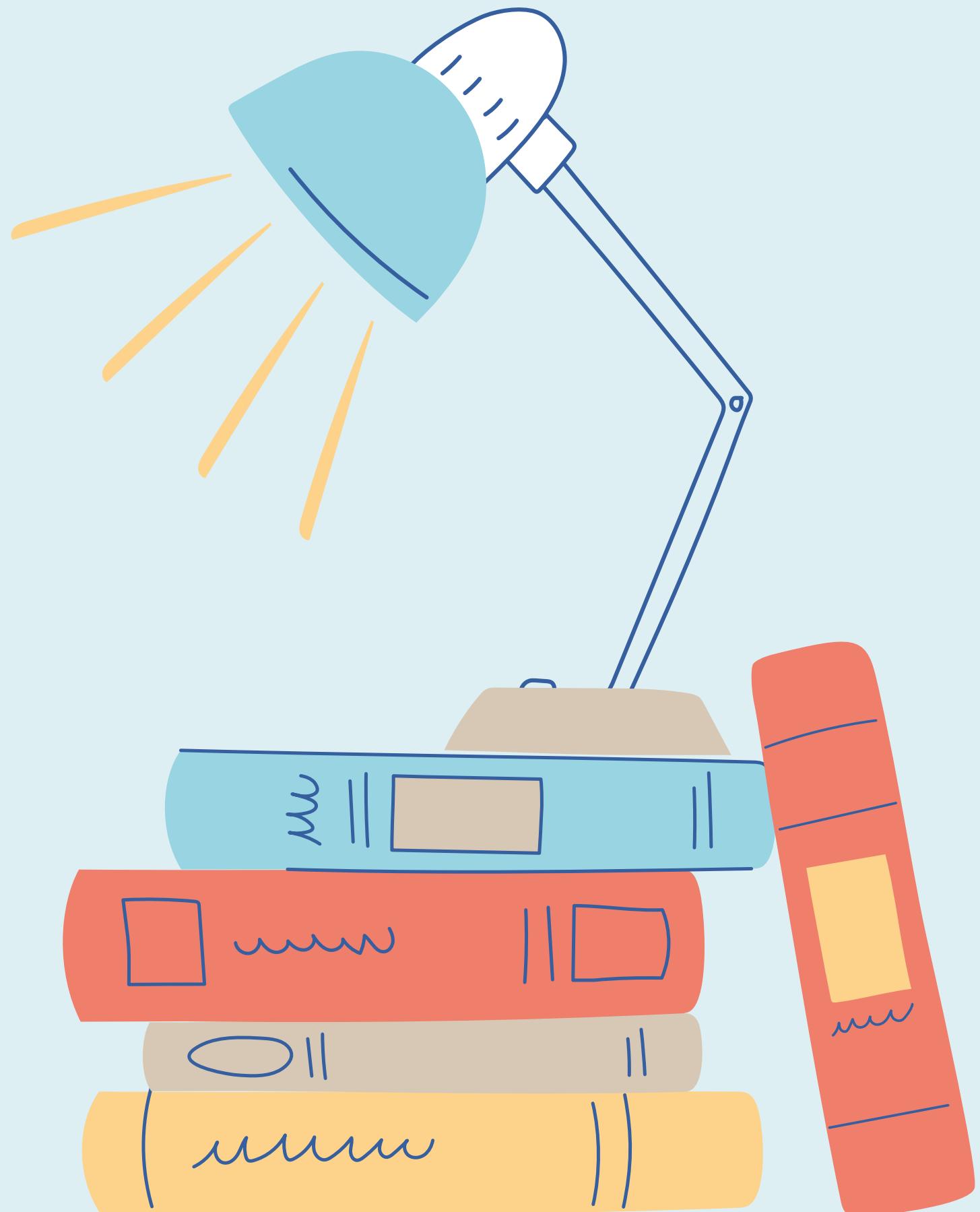
Login

Username:

Password:

Show/hide password

[Signup](#) [Login](#)



```
private void loginBTActionPerformed(java.awt.event.ActionEvent evt) {  
    if (usernameTF.getText().isEmpty()) {  
        JOptionPane.showMessageDialog(this, "Enter username!");  
        usernameTF.requestFocus();  
        return;  
    } else if (usernameTF.getText().contains(" ")) {  
        JOptionPane.showMessageDialog(this, "Invalid username!");  
        usernameTF.requestFocus();  
        return;  
    } else if (passwordTF.getText().isEmpty()) {  
        JOptionPane.showMessageDialog(this, "Enter password!");  
        passwordTF.requestFocus();  
        return;  
    } else {  
        if (checkUsername()) {  
            if (checkPassword()) {  
                JOptionPane.showMessageDialog(this, "Welcome to our app");  
                new Home().setVisible(true);  
                this.setVisible(false);  
            } else {  
                JOptionPane.showMessageDialog(this, "Wrong Password");  
                passwordTF.requestFocus();  
                return;  
            }  
        } else {  
            JOptionPane.showMessageDialog(this, "Wrong Username");  
            usernameTF.requestFocus();  
            return;  
        }  
    }  
}
```

Login button

 Sign up

Sign Up

Username:

Password:

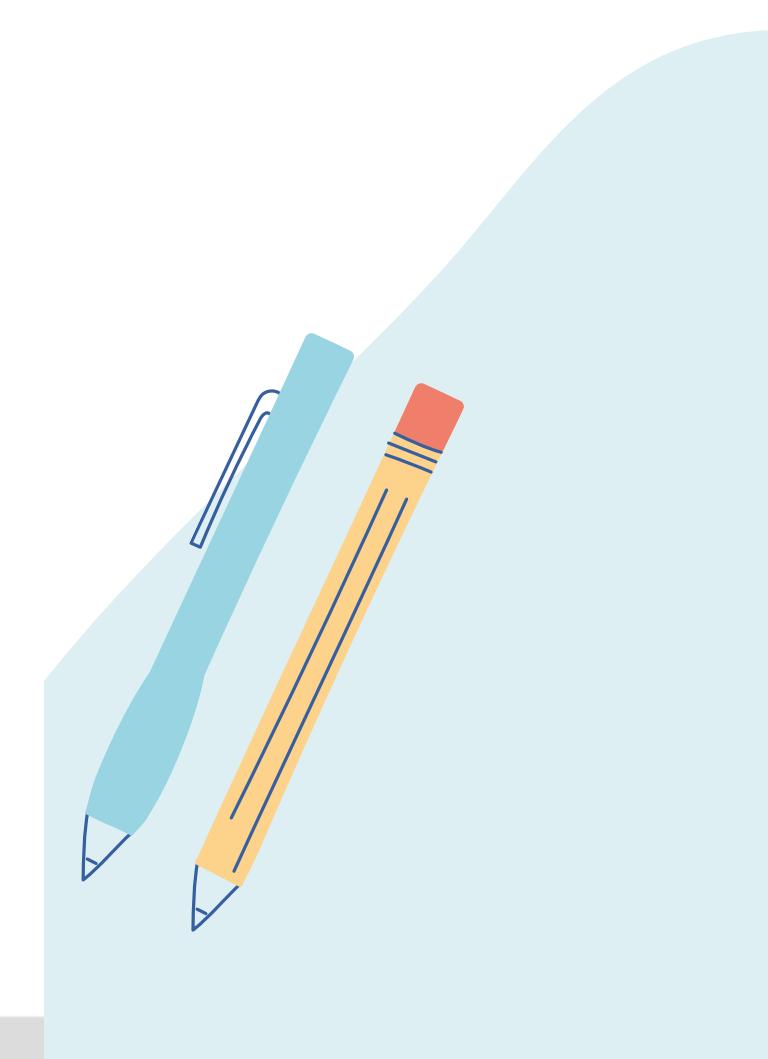
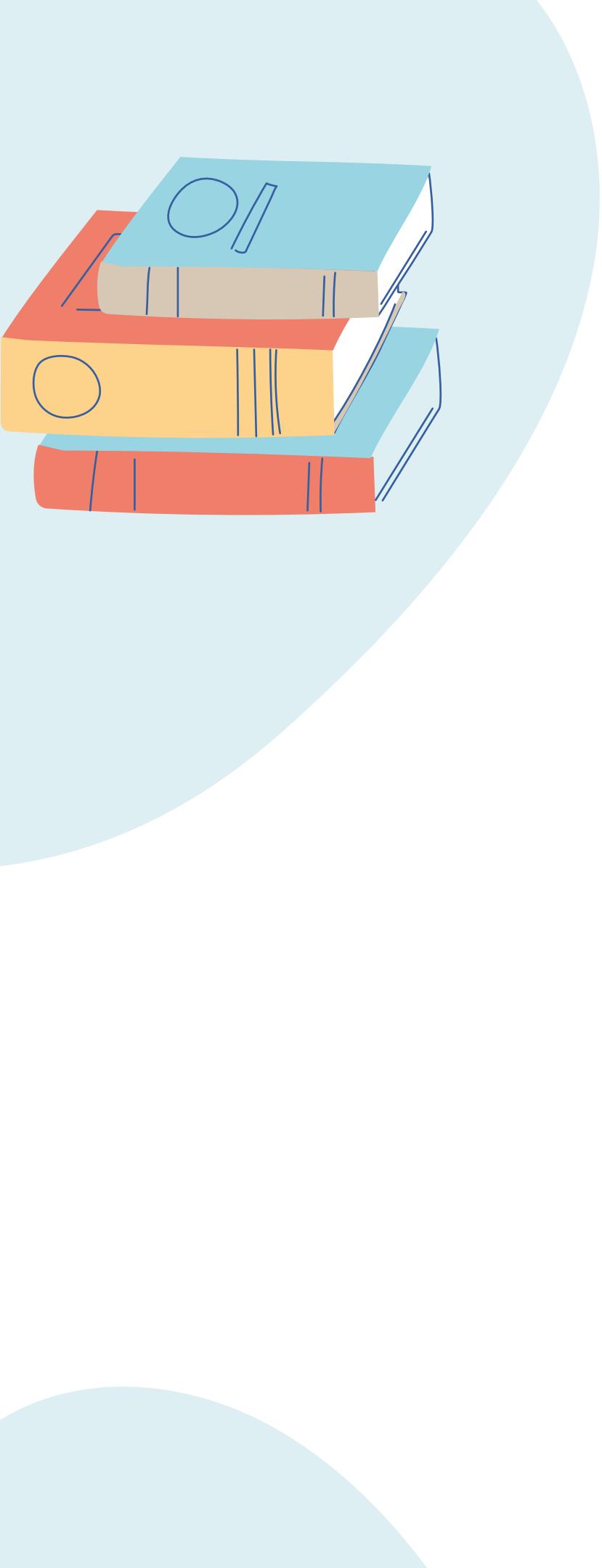
Confirm Password:

Show/hide pas...

Sign Up **Login**

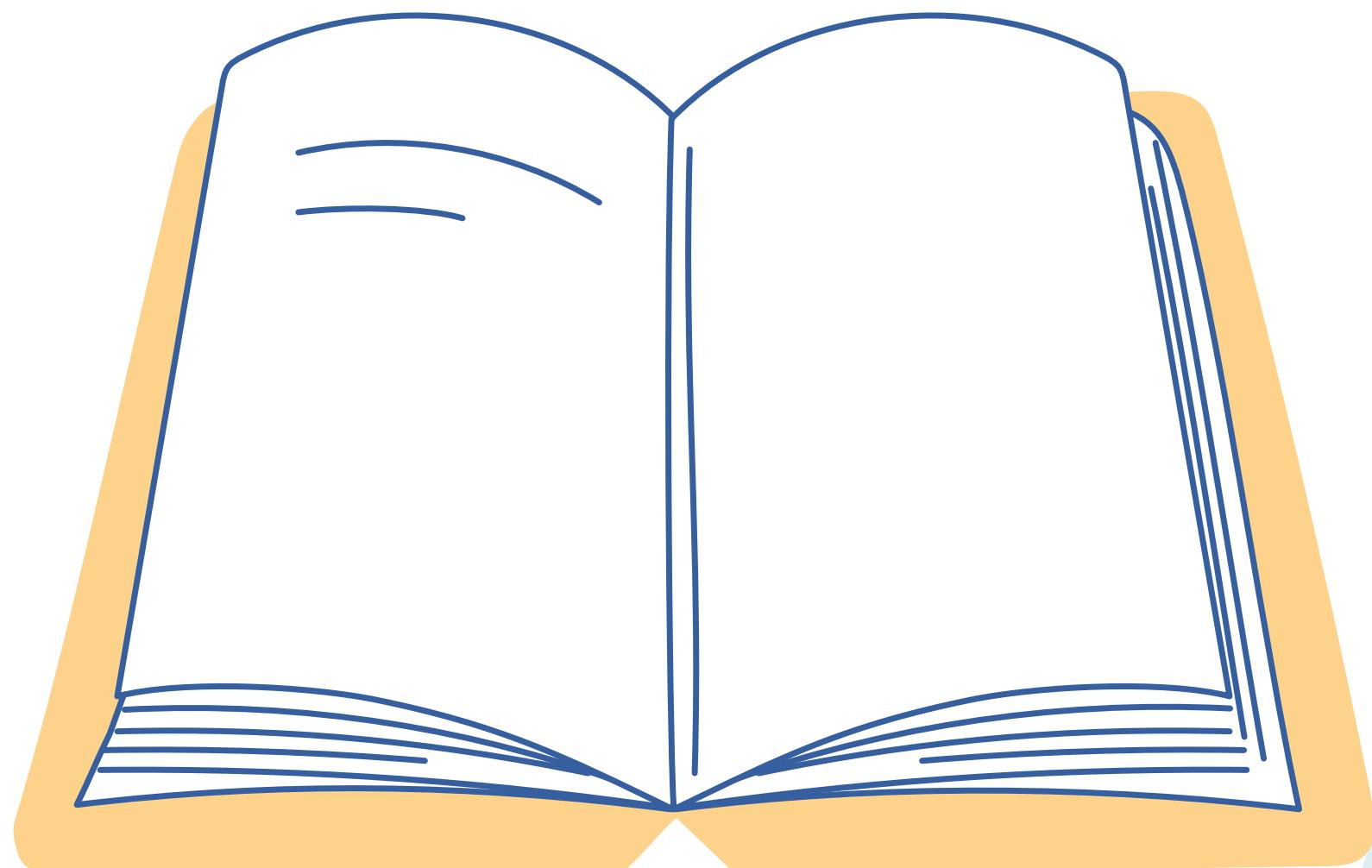


```
private void registerBTActionPerformed(java.awt.event.ActionEvent evt) {  
    if (usernameTF.getText().isEmpty()) {  
        JOptionPane.showMessageDialog(this, "Enter username!");  
        usernameTF.requestFocus();  
        return;  
    } else if (usernameTF.getText().contains(" ")) {  
        JOptionPane.showMessageDialog(this, "Invalid username");  
        usernameTF.requestFocus();  
        return;  
    } else if (passwordTF.getText().isEmpty()) {  
        JOptionPane.showMessageDialog(this, "Enter password.");  
        passwordTF.requestFocus();  
        return;  
    } else if (rewriteTF.getText().isEmpty()) {  
        JOptionPane.showMessageDialog(this, "Please confirm password.");  
        rewriteTF.requestFocus();  
        return;  
    }  
    if (!(new String(passwordTF.getPassword()).equals(new String(rewriteTF.getPassword())))) {  
        JOptionPane.showMessageDialog(this, "Your password does not match!");  
    } else {  
        String username = usernameTF.getText();  
        String password = passwordTF.getText();  
  
        User owner = new User(username, password);  
  
        if (manageOwner.searchUsername(username)) {  
            manageOwner.getListUser().add(owner);  
            JOptionPane.showMessageDialog(this, "New user has been added.");  
            saveOwners();  
            clearColorButton();  
            this.setVisible(false);  
        } else {  
            JOptionPane.showMessageDialog(this, "Username is used.");  
            return;  
        }  
    }  
}
```





Book Management



[Back](#)

Book Management

ID:

Name:

Type:

Price:

Quantity:

[Add](#)[Save](#)[Reset](#)

ID	Name	Type	Price	Quantity
01	How to go pro in coding.	Romantic	25.0	200
02	Doraemon	Horror	17.0	277
03	Valorant	Light Novel	20.0	286
04	Genshin of Zelda	Thriller	15.0	300
05	Shinosuke Nohara	Thriller	10.0	500
06	Omachi	Poetry	10.0	500
07	CS GO is better than CS2	Mystery	50.0	592
08	Free Fusion	Mystery	50.0	600
09	God of war	Self-help	50.0	279
10	Father of life	Horror	20.0	129
11	Cornhub	Light novel	20.0	250
12	Detective Conan	Romantic	15.0	310
13	How to use Google	Self-help	5.0	270
14	How to reset your life	Self-help	42.0	175
15	Honisekai	Thriller	12.0	102
16	EldenKid	Mystery	29.0	340
17	Unbeatabe Loser	Horror	23.0	530
18	Among Asus	Thriller	15.0	400
19	The girls season 4	Romantic	30.0	450

Search:

Class Book Item



```
private String bookId;  
private String bookName;  
private double price;  
private String bookType;  
private int quantity;
```

```
public double calculatePrice(int quantity) {  
    ...  
    return price * quantity;  
}
```



```
private ArrayList<Book> bookList = new ArrayList<>();
```

```
//check exist id
public boolean addBookItem(Book foI) {
    for (Book fi : bookList) {
        if (fi.getBookId().equalsIgnoreCase(foI.getBookId())) {
            return false;
        }
    }
    return true;
}
```

```
public Book findBookItemById(String id) {
    for (Book fi : bookList) {
        if (fi.getBookId().equalsIgnoreCase(id)) {
            return fi;
        }
    }
    return null;
}
```

Class Book Manager



[Back](#)

Book Management

ID:

Name:

Type:

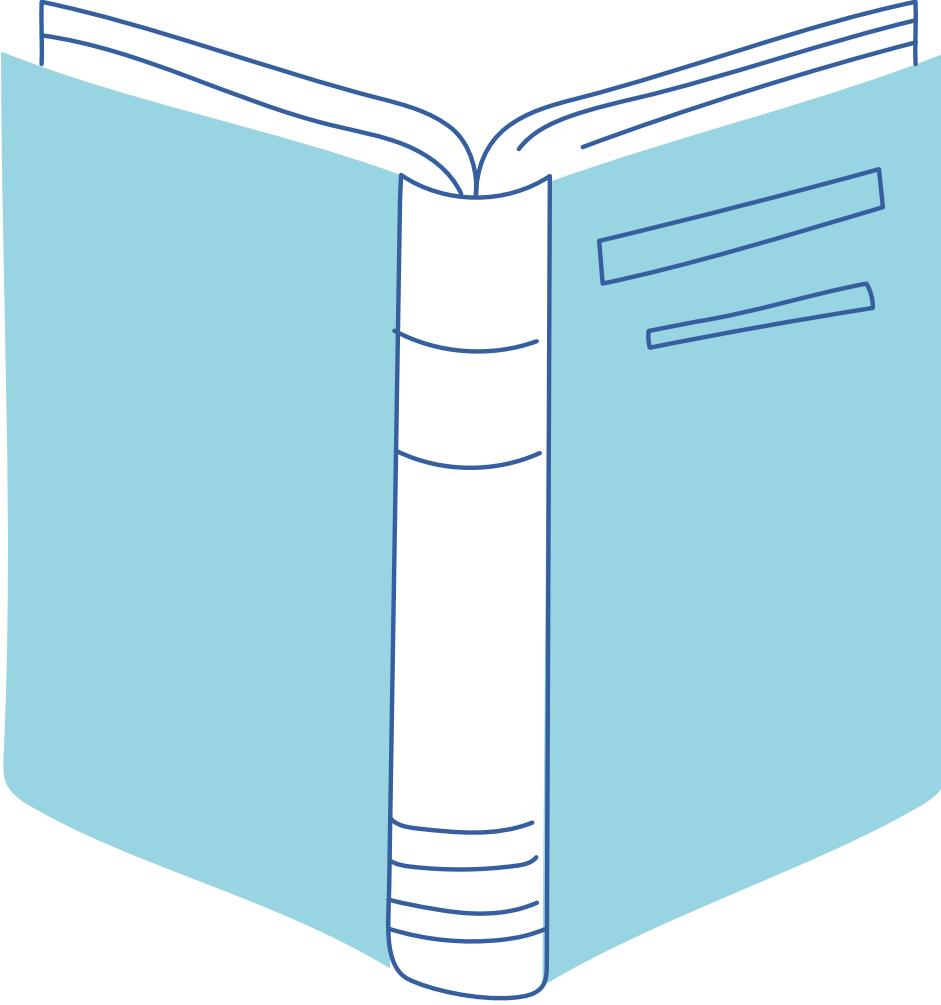
Price:

Quantity:

[Add](#)[Save](#)[Reset](#)

ID	Name	Type	Price	Quantity
01	How to go pro in coding.	Romantic	25.0	200
02	Doraemon	Delete	17.0	277
03	Valorant	Edit	20.0	286
04	Genshin of Zelda	15.0	300
05	Shinosuke Nohara	Thriller	10.0	500
06	Omachi	Poetry	10.0	500
07	CS GO is better than CS2	Mystery	50.0	592
08	Free Fusion	Mystery	50.0	600
09	God of war	Self-help	50.0	279
10	Father of life	Horror	20.0	129
11	Cornhub	Light novel	20.0	250
12	Detective Conan	Romantic	15.0	310
13	How to use Google	Self-help	5.0	270
14	How to reset your life	Self-help	42.0	175
15	Honisekai	Thriller	12.0	102
16	EldenKid	Mystery	29.0	340
17	Unbeatabale Loser	Horror	23.0	530
18	Among Asus	Thriller	15.0	400
19	The girls season 4	Romantic	30.0	450

Search:



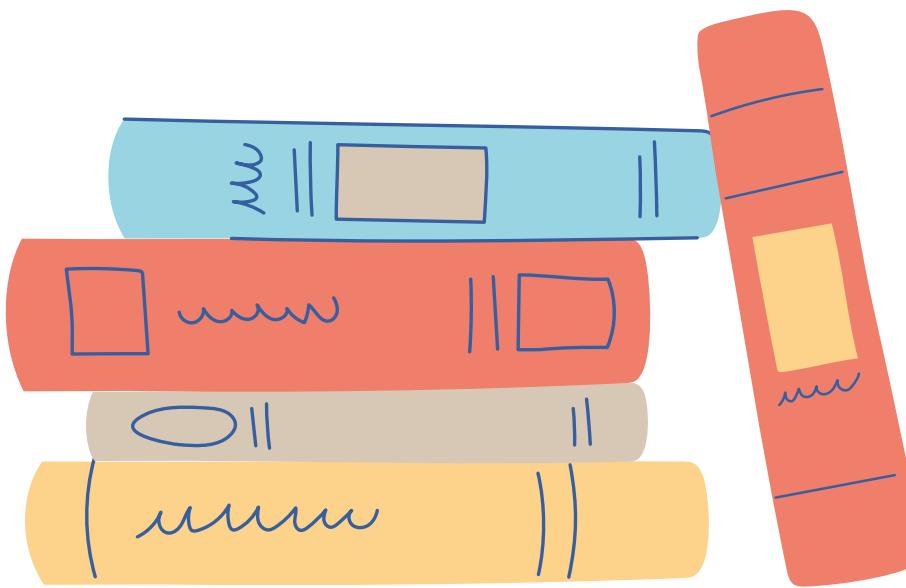
Customer Management

Class Customer

```
private ArrayList<Customer> listCustomer = new ArrayList<>();
```

Method

1. Getter setter
2. AddCustomer
3. DeleteCustomer
4. FindCustomer
5. SearchCustomerByID
6. SearchCustomerByName



[Back](#)

Customer Management

ID:

2231456125

Name:

Jonny Deep

[Delete](#)[Edit](#)

Phone:

124528465

Address:

Atlantis

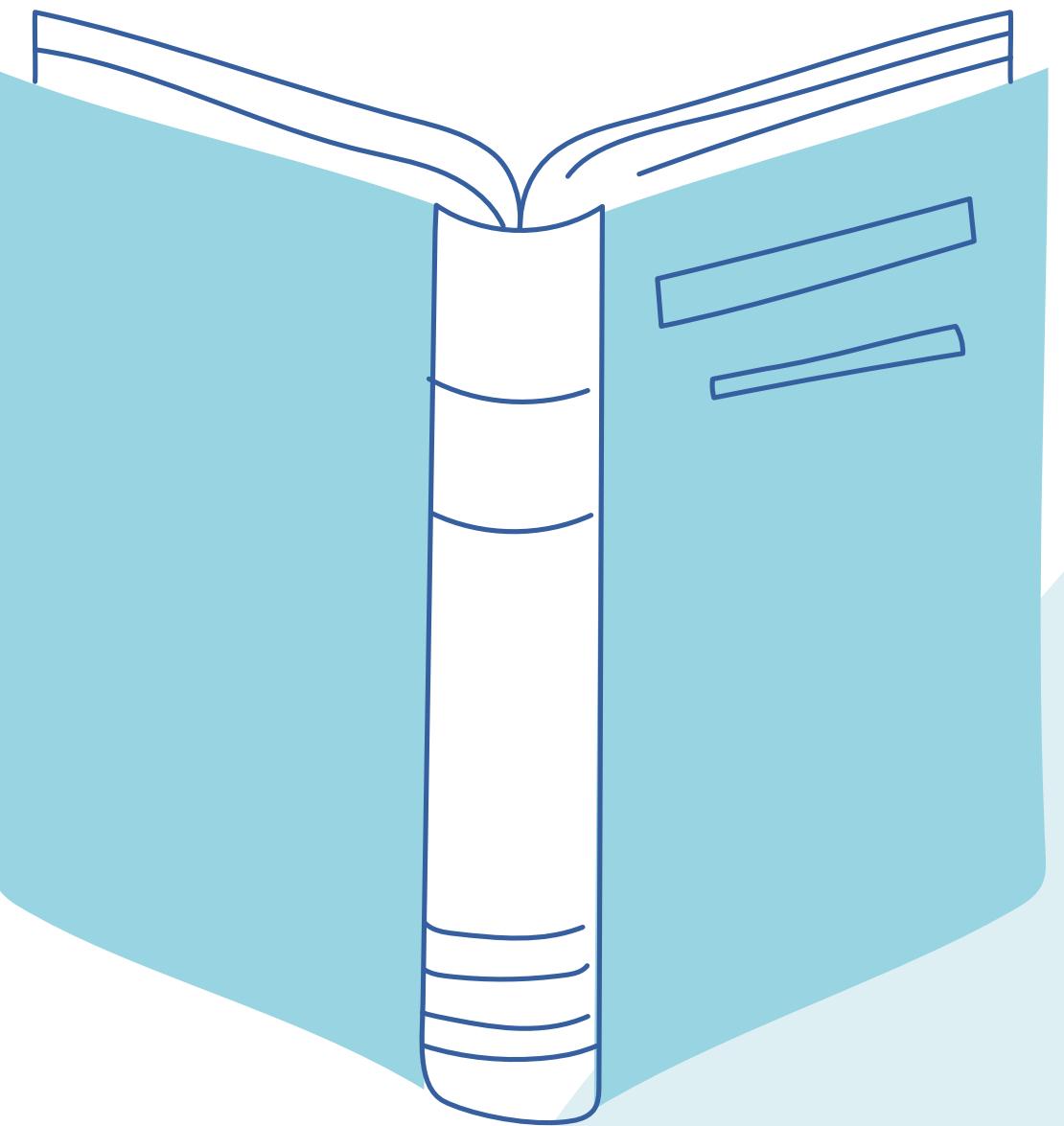
Email:

shepooped@gmail.com

[Add](#)[Save](#)[Reset](#)

ID	Name	Phone	Address	Email
2231200081	Henry Cavill	113114115	Missouri	callmesup...
2231400003	Elon Musk	744785212	Binh Duong	therichestg...
2231255645	Billy Butcher	155495321	My Phuoc	oyoyoy@g...
2231211345	Harry Potter	455831513	Bien Hoa	alibabalma...
2231456125	Jonny Deep	124528465	Atlantis	shepooped...

Bill Management





Bill

**Back**

ID:

Name:

Book:

Price:

Quantity:

Add**Reset**

Product Price

Name	Price	Quantity	Total Price

Print**Delete****Reset**

Menu

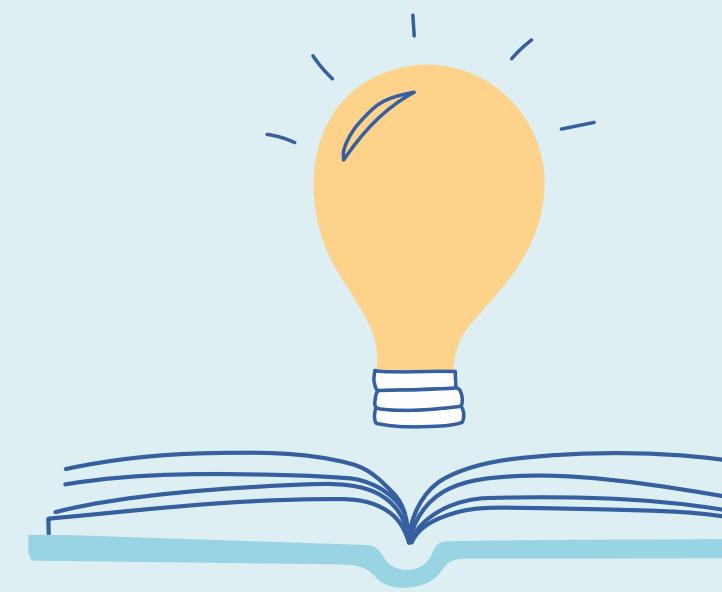
ID	Book	Type	Price
01	How to go pro...	Romantic	25
02	Doraemon	Horror	17
03	Valorant	Light Novel	20
04	Genshin of Zel...	Thriller	15
05	Shinosuke No...	Thriller	10
06	Omachi	Poetry	10
07	CS GO is bett...	Mystery	50
08	Free Fusion	Mystery	50
09	God of war	Self-help	50
10	Father of life	Horror	20
11	Cornhub	Light novel	20

Bill

2024-06-23 22:46:24			
Book Name	Quantity	Price	Total Price
<hr/>			

Class Manage Book Bill

```
private ArrayList<Bill> bills = new ArrayList<>();  
  
public ManageBookBill() {  
}  
  
public ArrayList<Bill> getBills() {  
    return bills;  
}  
  
public void setBills(ArrayList<Bill> bills) {  
    this.bills = bills;  
}
```



Class Main Bill

```
private float calculateGrandTotal() {
    float total = 0;
    for (Bill item : items) {
        total += item.getTotalPrice();
    }
    return total;
}

public String generateBillText(DecimalFormat df) {
    StringBuilder sb = new StringBuilder();
    DateTimeFormatter formatter = DateTimeFormatter.ofPattern("yyyy-MM-dd HH:mm:ss");

    // Header
    sb.append("Time: ").append(formatter.format(dateTime)).append("\n");
    sb.append("Customer ID: ").append(customerId).append("\n");
    sb.append("Customer Name: ").append(customerName).append("\n");
    sb.append("\nBook name\tQuantity\tPrice\tTotal Price\n");
    sb.append("-----\n");

    // Items
    for (Bill fb : items) {
        sb.append(fb.getBookName()).append("\t")
            .append(fb.getOrderQuantity()).append("\t")
            .append(df.format(fb.getPrice())).append("\t")
            .append(df.format(fb.getTotalPrice())).append("\n");
    }

    // Footer
    sb.append("-----\n");
    sb.append("\nTotal: ").append(df.format(grandTotal));

    return sb.toString();
}
```

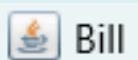


Class Manage MainBill

```
private ArrayList<MainBill> listMainBills = new ArrayList<>();
```

```
public void saveBills() {
    try (ObjectOutputStream oos = new ObjectOutputStream(new FileOutputStream("Bills.dat"))) {
        oos.writeObject(manageMainBill.getListMainBills());
        JOptionPane.showMessageDialog(this, "Bills saved!");
    } catch (IOException e) {
        JOptionPane.showMessageDialog(this, "Error saving to file: " + e.getMessage());
    }
}

public void loadBills() {
    try (ObjectInputStream ois = new ObjectInputStream(new FileInputStream("Bills.dat"))) {
        manageMainBill.setListMainBills((ArrayList<MainBill>) ois.readObject());
    } catch (IOException | ClassNotFoundException e) {
        JOptionPane.showMessageDialog(this, "Error loading.");
    }
}
```



Bill

**Back**

ID:

2231200081



Name:

Henry Cavill

Book:

CS GO is better than CS2

Price:

50.0

Quantity:

2

Add**Reset**

Menu

ID	Book	Type	Price
01	How to go pro...	Romantic	25
02	Doraemon	Horror	17
03	Valorant	Light Novel	20
04	Genshin of Zel...	Thriller	15
05	Shinosuke No...	Thriller	10
06	Omachi	Poetry	10
07	CS GO is bett...	Mystery	50
08	Free Fusion	Mystery	50
09	God of war	Self-help	50
10	Father of life	Horror	20
11	Comhub	Light novel	20

Bill

Product Price

Name	Price	Quantity	Total Price
CS GO is bet...	50	2	100

Print**Delete****Reset**

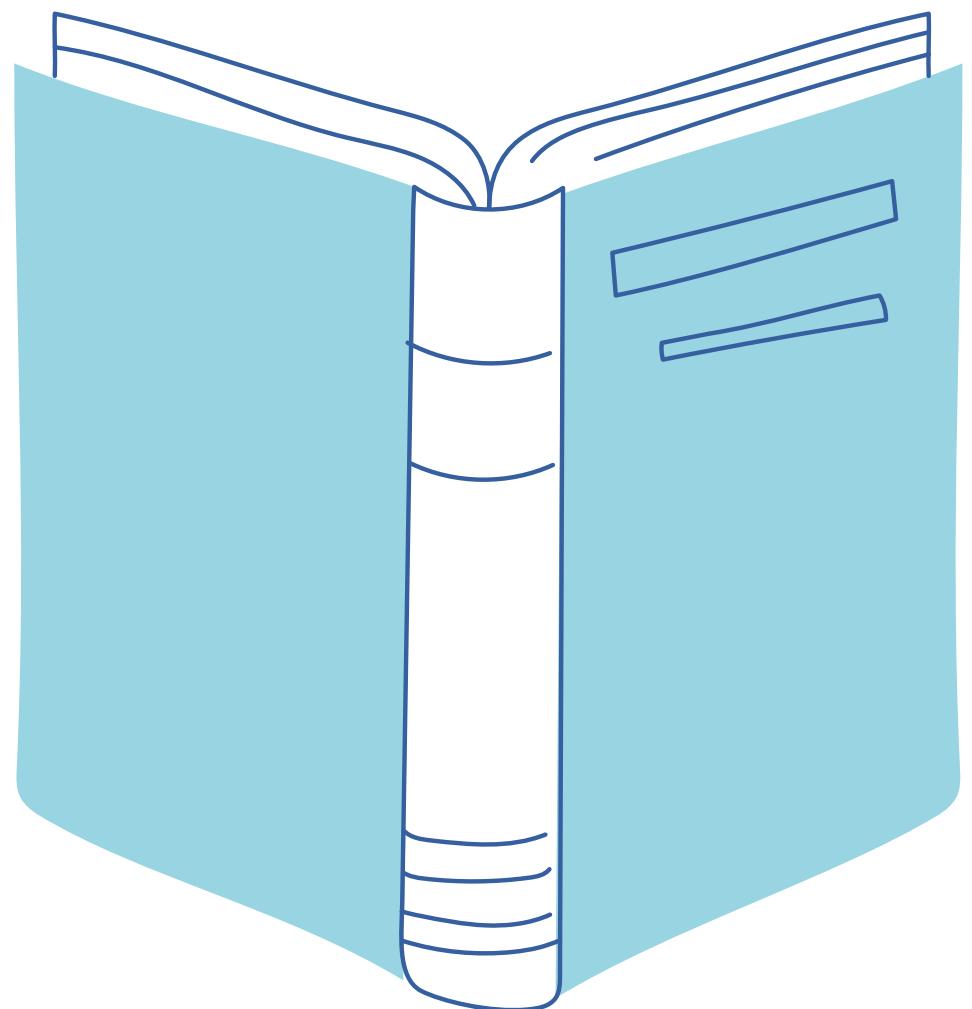
Time: 2024-06-23 23:30:11

Customer ID: 2231200081

Customer Name: Henry Cavill

Book name	Quantity	Price	Total Price
CS GO is better than CS2	2	50.00	100.00

Total: 100.00



Income Management



Income

**Back**

Income

Date	Customer Name	Food Quantity	Bill

From:

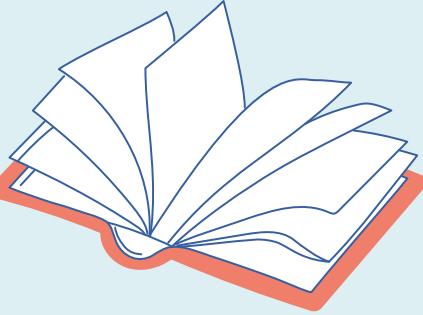
2024-06-23T10:12:19.2...

Total

To:

2024-06-23T10:12:19.2...

Search



```
public void setTable(LocalDateTime start, LocalDateTime end) {  
    DefaultTableModel model = (DefaultTableModel) revenueTable.getModel();  
    model.setRowCount(0);  
  
    float totalRevenue = 0;  
  
    for (MainBill bill : manageMainBill.getListMainBills()) {  
        LocalDateTime billDate = bill.getDateTime();  
        if (!billDate.isBefore(start) && !billDate.isAfter(end)) {  
            String customerName = bill.getCustomerName();  
            float grandTotal = bill.getGrandTotal();  
            int quantity = 0;  
            for (Bill f : bill.getItems()) {  
                quantity += f.getOrderQuantity();  
            }  
  
            totalRevenue += grandTotal;  
  
            Object[] rows = new Object[]{billDate.toLocalDate(), customerName, quantity, grandTotal};  
            model.addRow(rows);  
        } else if (billDate.toLocalDate().isEqual(LocalDate.now())) {  
            String customerName = bill.getCustomerName();  
  
            float grandTotal = bill.getGrandTotal();  
            int quantity = 0;  
            for (Bill f : bill.getItems()) {  
                quantity += f.getOrderQuantity();  
            }  
        }  
  
        totalField.setText(String.format("%.2f", totalRevenue));  
  
        pack();  
    }  
}
```



```
private void updateTable() {
    LocalDateTime start = LocalDateTime.parse(startDateComboBox.getSelectedItem().toString());
    LocalDateTime end = LocalDateTime.parse(endDateComboBox.getSelectedItem().toString());

    setTable(start, end);
}
```

```
public void setDateComboBox() {
    startDateComboBox.removeAllItems();
    endDateComboBox.removeAllItems();
    for (MainBill m : manageMainBill.getListMainBills()) {
        startDateComboBox.addItem(String.valueOf(m.getDateTime()));
        endDateComboBox.addItem(String.valueOf(m.getDateTime()));
    }
}
```



Income

[Back](#)

Income

Date	Customer Name	Food Quantity	Bill
2024-06-23	Henry Cavill	76	2075.0
2024-06-23	Elon Musk	53	1017.0
2024-06-23	Elon Musk	2	40.0
2024-06-23	Elon Musk	2	20.0
2024-06-23	Harry Potter	2	60.0
2024-06-23	Billy Butcher	2	0.0
2024-06-23	Henry Cavill	2	100.0

From:

2024-06-23T10:12:19.2...

Total

3312.00

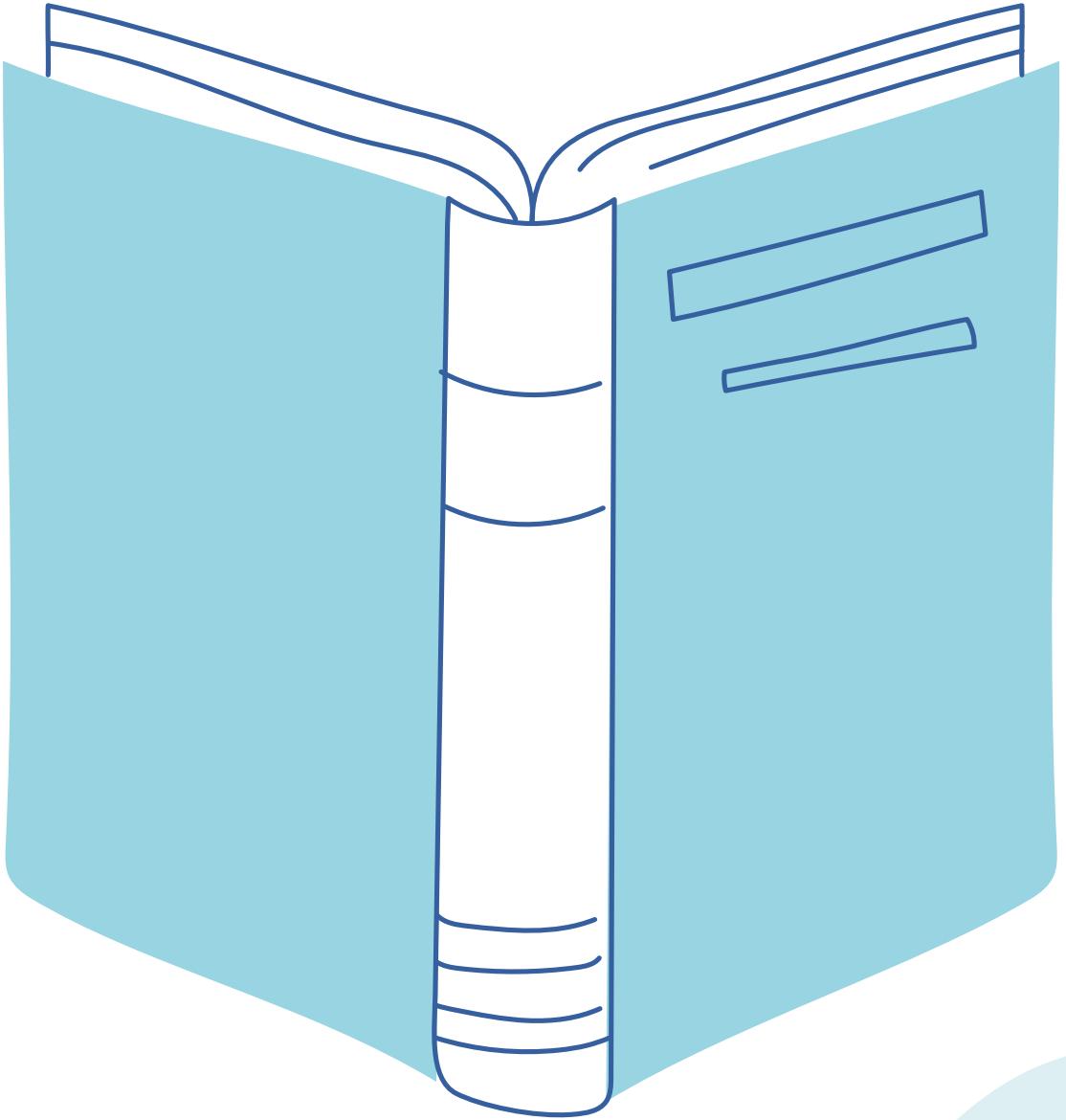
To:

2024-06-23T23:30:11.0...

[Search](#)

Future Plan

1. Voice Assistant Integration
2. Interactive Chatbot
3. Loyalty Program





Thank you
for your listening!