**#Prathamesh Nagargoje**

# include<iostream>

# include<stdio.h>

using namespace std;

class publication                 // declaring class Publication

 {

 private:

 string title;

 float price;

 public:

 void add()

 {

 cout << "\nEnter the Publication information : " << endl;

 cout << "Enter Title of the Publication : ";

cin.ignore();

getline(cin, title);

cout << "Enter Price of Publication : ";

 cin >> price;

 }

 void display()

 {

 cout << "\n--------------------------------------------------";

 cout << "\nTitle of Publication : " << title;

 cout << "\nPublication Price : " << price;

 }

 };

 class book : public publication  // declaring class book which inherits class publication in public mode.

 {

 private:

 int page\_count;

 public:

 void add\_book()

 {

 try

 {

 add();

cout << "Enter Page Count of Book : ";

 cin >> page\_count;

 if (page\_count <= 0)

 {

 throw page\_count;

 }

 }

 catch(...)

 {

 cout << "\nInvalid Page Count!!!";

 page\_count = 0;

 }

 }

 void display\_book()

 {

 display();

cout << "\nPage Count : " <<

page\_count;

 cout << "\n--------------------------------------------------\n";

 }

 };

 class tape : public publication     // declaring class tape which inherits class publication in public mode

 {

 private:

 float play\_time;

 public:

 void add\_tape()

 {

 try

 {

 add();

cout << "Enter Play Duration of the Tape : ";

 cin >> play\_time;

 if (play\_time <= 0)

 throw play\_time;

 }

 catch(...)

 {

 cout << "\nInvalid Play Time!!!";

 play\_time = 0;

 }

 }

 void display\_tape()

 {

 display();

 cout << "\nPlay Time : " <<

play\_time << " min";

 cout << "\n--------------------------------------------------\n";

 }

 };

 int main()

 {

 book b1[10];            // object of class book

 tape t1[10];            // object of class tape

 int ch, b\_count = 0, t\_count = 0;

 do

 {

 cout << "\n\* \* \* \* \* PUBLICATION DATABASE SYSTEM \* \* \* \* \*";

 cout << "\n--------------------MENU-----------------------";

 cout << "\n1. Add Information to Books";

 cout << "\n2. Add Information to Tapes";

 cout << "\n3. Display Books Information";

 cout << "\n4. Display Tapes Information";

 cout << "\n5. Exit";

 cout << "\n\nEnter your choice : ";

 cin >> ch;

 switch(ch)

 {

 case 1:

 b1[b\_count].add\_book();

    b\_count++;

break;

 case 2:

 t1[t\_count].add\_tape();

 t\_count++;

 break;

 case 3:

 cout << "\n\* \* \* \* BOOK PUBLICATION DATABASE SYSTEM \* \* \* \*";

 for (int j=0;j < b\_count;j++)

 {

 b1[j].display\_book();

 }

 break;

 case 4:

 cout << "\n\* \* \* \* TAPE PUBLICATION DATABASE SYSTEM \* \* \* \*";

 for (int j=0;j < t\_count;j++)

 {

 t1[j].display\_tape();

 }

 break;

 case 5:

 exit(0);

 }

 }while (ch != 5);

 return 0;

 }

**Output:**

\* \* \* \* \* PUBLICATION DATABASE SYSTEM \* \* \* \* \*

--------------------MENU-----------------------

1. Add Information to Books

2. Add Information to Tapes

3. Display Books Information

4. Display Tapes Information

5. Exit

Enter your choice : 1

Enter the Publication information :

Enter Title of the Publication : Pragati

Enter Price of Publication : 520

Enter Page Count of Book : 700

\* \* \* \* \* PUBLICATION DATABASE SYSTEM \* \* \* \* \*

--------------------MENU-----------------------

1. Add Information to Books

2. Add Information to Tapes

3. Display Books Information

4. Display Tapes Information

5. Exit

Enter your choice : 2

Enter the Publication information :

Enter Title of the Publication : techno

Enter Price of Publication : 432

Enter Play Duration of the Tape : 6.20

\* \* \* \* \* PUBLICATION DATABASE SYSTEM \* \* \* \* \*

--------------------MENU-----------------------

1. Add Information to Books

2. Add Information to Tapes

3. Display Books Information

4. Display Tapes Information

5. Exit

Enter your choice : 3

\* \* \* \* BOOK PUBLICATION DATABASE SYSTEM \* \* \* \*

--------------------------------------------------

Title of Publication : Pragati

Publication Price : 520

Page Count : 700

--------------------------------------------------

\* \* \* \* \* PUBLICATION DATABASE SYSTEM \* \* \* \* \*

--------------------MENU-----------------------

1. Add Information to Books

2. Add Information to Tapes

3. Display Books Information

4. Display Tapes Information

5. Exit

Enter your choice : 4

\* \* \* \* TAPE PUBLICATION DATABASE SYSTEM \* \* \* \*

--------------------------------------------------

Title of Publication : Techno

Publication Price : 432

Play Time : 6.2 min

--------------------------------------------------

\* \* \* \* \* PUBLICATION DATABASE SYSTEM \* \* \* \* \*

--------------------MENU-----------------------

1. Add Information to Books

2. Add Information to Tapes

3. Display Books Information

4. Display Tapes Information

5. Exit

Enter your choice : 5

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