Code:

```cpp
#include <iostream>
#include <string.h>
using namespace std;

class publication
{
    protected:
    string title;
    float price;
};
class book:public publication
{public:
    int pagecount;
    void setdetails(){
      try{
       cout<<"Enter the title of the book";
       getline(cin,title);

       int t=title.length();
      cout<<"Enter the price of the book";
       cin>>price;
       cout<<"Enter the page count";
       cin>>pagecount;
       if (t<3){
          throw title;
       }
       if (price<0){
```

```cpp
            throw price;
        }
        if (pagecount<0){
            throw pagecount;
        }
    }
    catch(string){
        cout<<"Title has less than 3 characters\n";
        title="";
        price=0.0;
        pagecount=0;
    }
    catch(float){
        cout<<"Price cannot be negative\n";
        title="";
        price=0.0;
        pagecount=0;
    }
    catch(int){
        cout<<"Pagecount cannot be negative\n";
        title="";
        price=0.0;
        pagecount=0;
    }

    }
    void displaydetails(){
        cout<<"The title of the book is "<<title<<endl;
        cout<<"The price of the book is "<<price<<endl;
        cout<<"The page count is "<<pagecount<<endl;
    }
};
class tape:public publication
{  public:
    float playtime;
    void setdetails(){
        try{
```

```cpp
cout<<"Enter the title of the tape";
cin.ignore();
getline(cin,title);
int t1=title.length();
cout<<"Enter the price of the tape";
cin>>price;
try{
cout<<"Enter the playtime in minutes";
cin>>playtime;
    if (playtime<0){
    throw playtime;
}}
catch(float){
    cout<<"Playtime cannot be negative\n";
      title="";
   price=0.0;
   playtime=0.0;
}

  if (t1<3){
    throw title;
}
if (price<0){
    throw price;
}
if (playtime<0){
    throw playtime;
}
}
catch(string){
   cout<<"Title has less than 3 characters\n";
   title="";
   price=0.0;
   playtime=0.0;
}
catch(float){
   cout<<"Price cannot be negative\n";
```

```cpp
            title="";
            price=0.0;
            playtime=0.0;
        }


    };
    void displaydetails(){
        cout<<"The title of the tape is "<<title<<endl;
        cout<<"The price of the tape is "<<price<<endl;
        cout<<"The playtime is "<<playtime<<endl;
    }

};
int main(){
    book b;
    tape t;
    b.setdetails();
    t.setdetails();
    b.displaydetails();
    t.displaydetails();
    return 0;
}
```

Output:

```
107        };
108 -      void displaydetails(){
109            cout<<"The title of the tape is "<<title<<endl;
110            cout<<"The price of the tape is "<<price<<endl;
111            cout<<"The playtime is "<<playtime<<endl;
112        }
113
```

input

```
Enter the title of the bookxyz
Enter the price of the book20
Enter the page count5
Enter the title of the tapeabc
Enter the price of the tape65
Enter the playtime in minutes-65
Playtime cannot be negative
The title of the book is xyz
The price of the book is 20
The page count is 5
The title of the tape is
The price of the tape is 0
The playtime is 0

...Program finished with exit code 0
Press ENTER to exit console.
```