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#include <iostream>
#include <cstdlib>
#include <string.h>
using namespace std;
struct dt_node
{
    char caption[20];
    int chapters;
    struct dt_node *cnode[20];
} *root;
class BOOK
{
public:
    void create_tree();
    void display(dt_node *rl);
    BOOK()
    {
        root = NULL;
    }
};
void BOOK::create_tree()
{
    int chp_cnt, i, j, k;
    root = new dt_node();
    cout << "Enter name of book :";
    cin >> root->caption;
    cout << "\nEnter no. of chapters in book :";
    cin >> chp_cnt;
    root->chapters = chp_cnt;
    for (i = 0; i < chp_cnt; i++)
    {
        root->cnode[i] = new dt_node;
        cout << "\nEnter Chapter name: ";
        cin >> root->cnode[i]->caption;
        cout << "\nEnter no. of sections in Chapter " << root->cnode[i]->caption<<":" ;
        cin >> root->cnode[i]->chapters;
        for (j = 0; j < root->cnode[i]->chapters; j++)
        {
            root->cnode[i]->cnode[j] = new dt_node;
            cout << "\nEnter Section " << j + 1 << "'name:";
            cin >> root->cnode[i]->cnode[j]->caption;
        }
    }
}
void BOOK::display(dt_node *rl)
{
    int i, j, k, chp_cnt;
    if (rl != NULL)
        cout << "\n-----Book Hierarchy--";
    cout << "\n Book title: " << rl->caption;
    chp_cnt = rl->chapters;
    for (i = 0; i < chp_cnt; i++)
    {
        cout << "\n Chapter: " << i + 1;
        cout << " " << rl->cnode[i]->caption;
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        cout << "\n Sections: ";
        for (j = 0; j < rl->cnode[i]->chapters; j++)
        {
            cout << " " << rl->cnode[i]->cnode[j]->caption;
        }
    }
}
int main()
{
    int choice;
    BOOK BOOK;
    while (1)
    {
        cout << "\n----Book Tree Creation--- " << endl;
        cout << "1.Create" << endl;
        cout << "2.Display" << endl;
        cout << "3.Quit" << endl;
        cout << "Enter your choice :";
        cin >> choice;
        switch (choice)
        {
        case 1:
            BOOK.create_tree();
        case 2:
            BOOK.display(root);
            break;
        case 3:
            exit(1);
        default:
            cout << "Wrong";
        }
    }
}
```