

Today - Lecture 7 - CS162

1) Topic 2 - Structures

- Experience using them in a program
- Creating a sample program using:

Functions, arguments, Arrays
and structures

Announcements

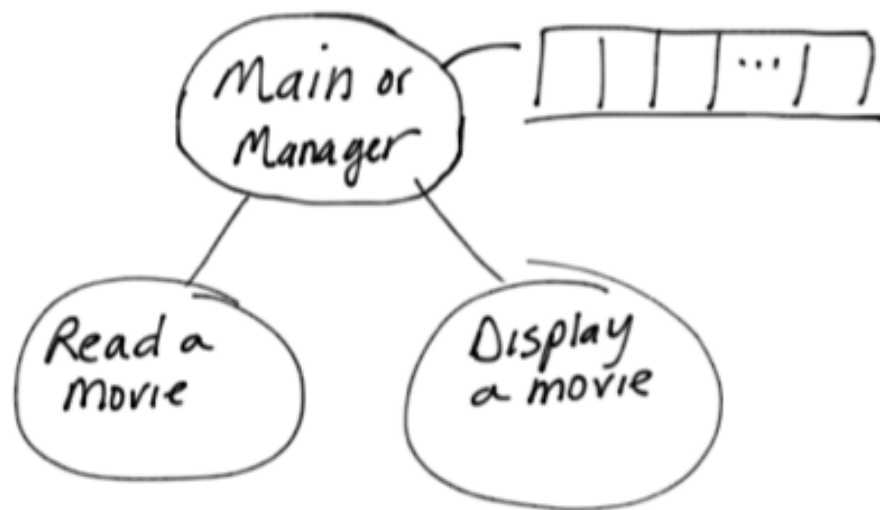
- * Make sure to hit the "submit" button in D2L *after uploading files into the dropbox!*
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Next - Develop code using structs

1) Manage a List of Movies

2) Step 1 - Create a structure to manage 1 movie

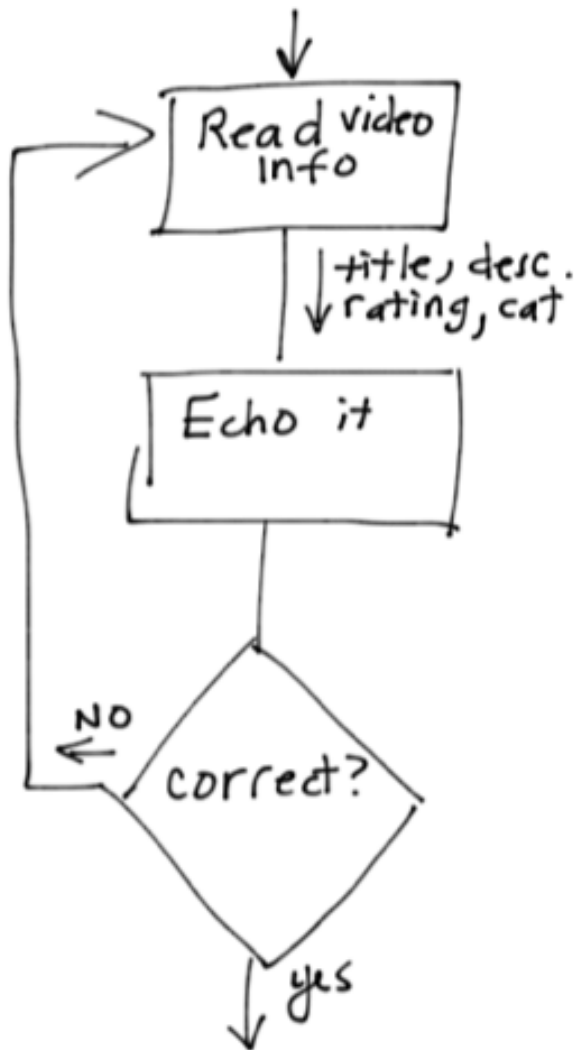
3) Then create an array of movies



4) Then, next lecture we will store the information in an external file!

If we didn't use structs (or classes...):

- A video will have a title, description, rating, category
 ↑ ↑ ↑ ↑
 131 chars 300 char max 6 chars 16



```
char title [131];  
char description [300];  
char rating [6];  
char category [16];  
  
do  
{  
    readall (title, description,  
            rating, category);  
  
    displayall (title, description,  
              rating, category);  
} while (!correct());
```

```
bool correct()
{
    char response = 'n';
    cout << "Is this correct? Y, N";
    cin >> response;
    if (toupper(response) == 'n')
        return false;
    return true;
}
```

Returns true when the user is satisfied

```
void readall(char n[], char d[], char r[], char c[])
    pick better names!
```

```
{
    read("Enter the title, 13", n);
    read("Description", 300, d);
    read("Rating", 6, r);
    read("category", 16, c);
}
```

uses other functions to assist!

But with structs:

Group the information as members in a structure :

```
struct video
{
    char title [131]; // use a constant!
    char description [300];
    char rating [6];
    char category [16];
}; // important!
```

```
-
main
video show;

do
{
    readall(show);
    displayall(show);
} while (!correct());
```

```
void readall(video &s)
{
    read("Title", 131, s.title);
}
```

Object of a structure member
↑ ↑
Direct member access operator

Our design....

- 1) A "show" item has a title, description, etc.
- 2) Allow the user to enter these, find the highest rating, find a particular show based on name and display all. (and more!)

