

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

- * Program 2 is due 2/7/2012
 - * Make sure to hit the "submit" button in D2L *after uploading files into the dropbox!*
 - * Quiz #4 is a review for the midterm it is due: Monday at 11:59pm!
-

Midterms - soon!

* Next time - Review for the midterm

* Inclass Students:

12-1:50pm Thursday Feb 9th

* Online Students: 2 choices

#1) 5:30-7:20pm Thursday Feb 9th
in ASRC Room 001

OR

#2) 10am-11:50 Saturday Feb 11th
in CH 71

But... they fill up
so plan now!

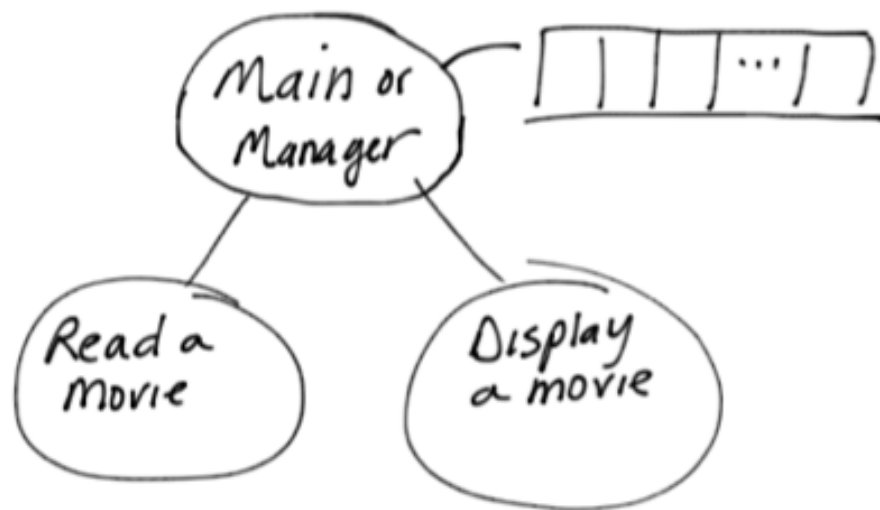
Look at your schedule! If these times don't work, make an appointment @ testing center

Next - Develop code using structs

1) Manage a List of Movies

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

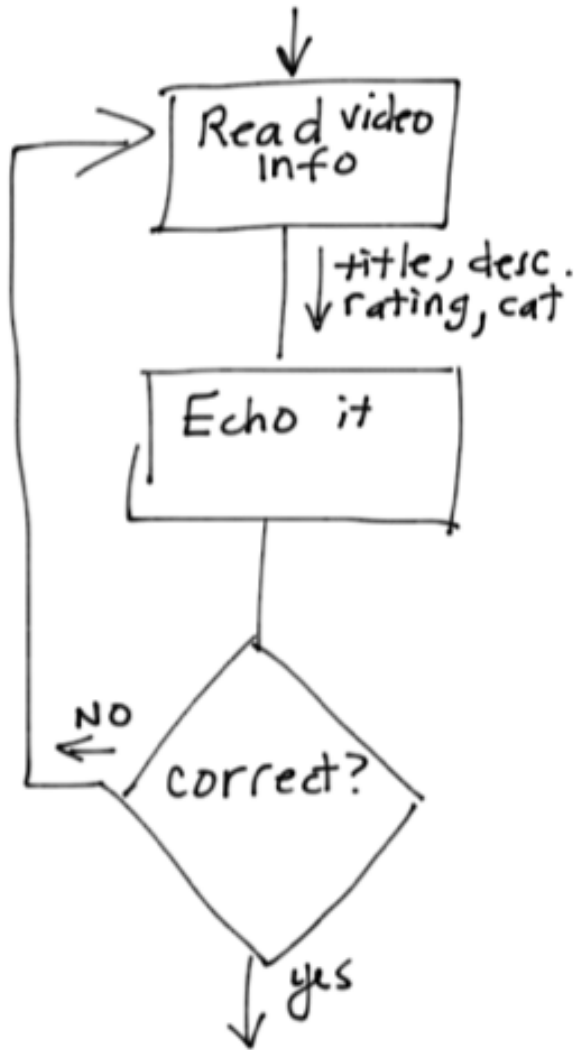
3) Then create an array of movies



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, 131, 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 ← "tag" name
{
    char title [13]; 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", 13, 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!)

