

Lesson 11: Making an Online Movie Finder

In this lesson we will be building on the XML reader app from last week - to get the data on a film directly from the web, rather than reading from a file.

Step 1: Reading from the website rather than a file.

- Like last week - go to omdb.com → click on “Examples” and enter a **ONE WORD** film name.
- Don’t forget to select **XML** as the response!

By Title

Title: Year: Plot: Response:

Request:

<http://www.omdbapi.com/?t=frozen&y=&plot=short&r=xml>

- Save the link (like we did last week) and load that file.
- But that takes a long time right?
- Now copy the link address and put that in the `loadXML` function in your code (like below). Then run it! What film data shows up on your program?

```
XML filmXML =
loadXML ("http://www.omdbapi.com/?t=frozen&y=&plot=short&r=xml") ;
```

Can you see the film name in the web address?

```
"http://www.omdbapi.com/?t=frozen&y=&plot=short&r=xml"
```

- Try changing that, replace it with another ONE WORD film title (eg. tangled, brave, shrek, cars etc.) Run the program again!

Two word title

Go back to omdbapi.com and enter a multiple word title.

By Title

Title: Year: Plot: Response:

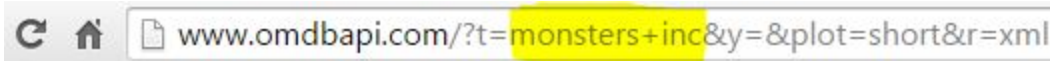
Request:

<http://www.omdbapi.com/?t=toy+story&y=&plot=short&r=xml>

- Now click on the link.
- Look at the website name, can you see your film name there? But what is different?



- Search for a new film - by changing the film name in the website address.
- Then hit enter - does the XML on the page change?



```
XML filmXML =
loadXML("http://www.omdbapi.com/?t=toy+story&y=&plot=short&r=xml");
```

Step 3: Replace spaces with '+' sign

Now we want to replace the spaces (" ") in our film names with plus signs ("+").

Helpfully we can use the `.replace()` function on String variables.

- Make a **new program** to try this out! Copy the code below to start!

```
String myMovieName = "the lego movie";
String myMovieNamesNoSpaces = myMovieName.replace(" ", "+");
text(myMovieName, 10,20);
text(myMovieNamesNoSpaces, 10,70);
```

- What happens? Try it with other **Strings**!
- Add **size**, **textSize**, and **fill** to the above program.

Step 4: Get the film name from the user.

As did with the number guesser we need to get the name of the film from the user - and show it on the screen.

We will do this in a **new program** by:

1. Making a **String** variable to contain the film name
2. Showing that **String** variable on the screen (can you remember what function does that?)
3. Adding the released **key** to the **String** variable in the **void keyReleased** code block.
4. We need something to happen when we press the **ENTER** button. In the movie finder, when we press the **ENTER** button we will get the new information about the film.
5. When we press **ENTER** replace the spaces (" ") with plus signs ("+") like we did above. (In the **void keyReleased** block, we need to check if the **key** is equal to (==) **ENTER**)
6. Show a new string to the screen, with the film name and the rest of the web address. eg:

```
text("http://www.omdbapi.com/?t="+myMovieNamesNoSpaces+"&y=&plot=short&r=xml", 10,100);
```

Step 5: Bringing it all together:

- Copy the code from your XML program into your new program
- Make it so that you only loadXML when you press enter.
- What you load will be the web address - with your movie name in it - as we showed above.