

DVA231

Assignment 2 – Server Side Programming

Introduction – News Admin Service

In this assignment we are going to continue our work on fake-NASA website and develop a service that allows the admins of NASA website to upload new pieces of news to the website.

Part 1

News in text files

The contents of our page are statically defined at the moment. We need to change that. In order to make this change we are going to store the information in a text file, store it on the server and use PHP (or ASP.NET) to read the contents of the file and display it in the boxes that we have on the page. These files should contain the title, image and content for a news piece. We also want to have at least 3 news pieces in the file.

In order to achieve this, we need to define a format for the contents of the file. For doing so, we have the following options:

- Define our own format.
- Use a standard format:
 - o JSON (you can learn about JSON here: https://www.w3schools.com/js/js_json_syntax.asp)
 - o XML (you can learn about XML here: <https://www.w3schools.com/xml/default.asp>)

Sample text, JSON and XML files are provided with the assignment. Open them in a text editor and understand the format. Also replace the **imgurl** fields with valid **uris**. (All the news pieces are taken from www.space.com)

For the "own format" version, we have simply put every new property in a new line. So for example the title for news1 is in first line, its imgurl is in the next line and its content is in the next. Starting from line 4 news2 starts with the same order.

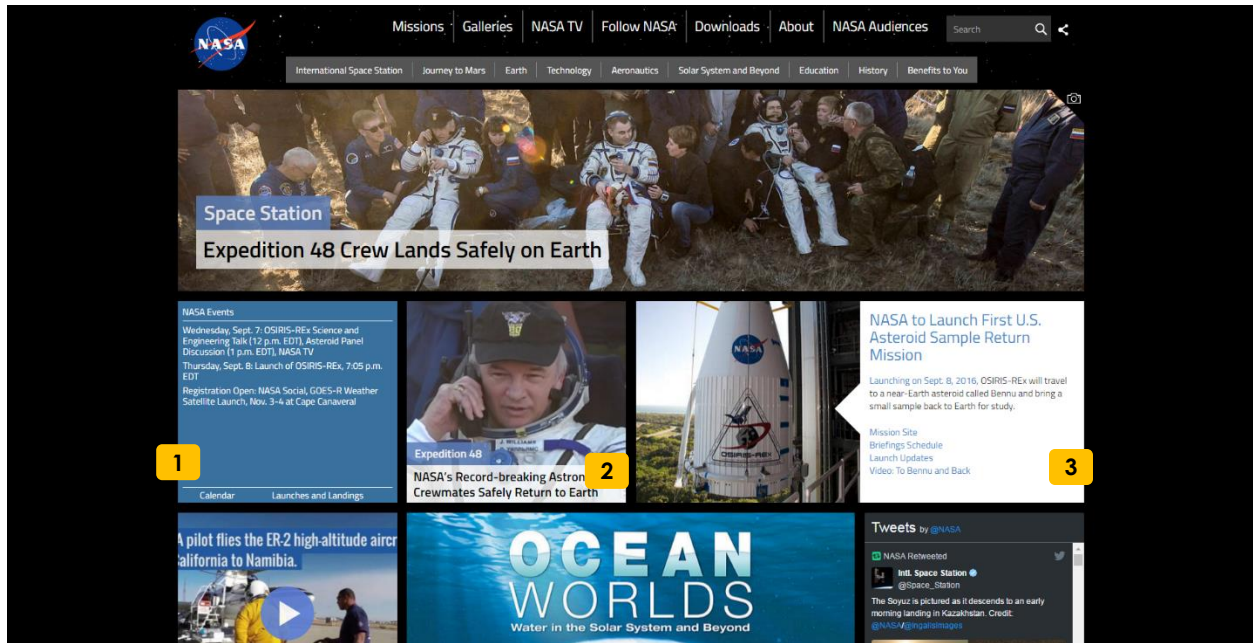
PHPfy the page

Now we can change the page that we have created for assignment 1 to read the contents of text file and populate the page with its content instead of the static text. Change your page in a way that content of boxes which are marked with numbers 1, 2 and 3 are replaced with the contents of the text file. Do not forget that the images for the boxes should also change accordingly. Please note that the provided text files require you to replace the **imgurl** field with a valid **uri** to an image.

The Admin Page

The admin of the NASA website might want to change the contents of the page. For this part, first create a new text file (your own format, JSON or XML) with new news pieces. Then do the following:

- In the main page of your website, there should be a link or a button that takes the user to the Admin page.
- On the Admin page the user should be able to choose a new text file for the news pieces. You can simply provide them with a text field to type the name of the new file.
- On this page there should also be an "apply" button. When this button is pressed the user should be redirected back to the main page and the new pieces of news from the new text file should be in the boxes 1, 2 and 3.



Part 2

The sign in page

In order to use the Admin page, users need to sign in. Create a simple sign in page that asks for username and password. No "remember me" or "I forgot my password" options required. Since we do not have any database connections yet, there is no need to actually check for validity of the entered data, we will do this later.

Connecting the two pages

Use the session object to check if the user is logged in or not when they want to use the Admin page. If not, then forward them to the sign in page first. After signing in, you should directly forward them to the Admin page. If the user tries to access the Admin page again, their "logged in" status should be remembered by the server. This means that they can go to the Admin page without signing in.

Hints

First of all learn how to read the contents of a text file using PHP or ASP.NET. Write a sample code that opens a file, reads it and shows the contents on a simple page. Then try to solve the assignment.

If you decide to use JSON or XML, then learn them first. Also learn how to parse them using JavaScript.

If you decide to develop your own format, then learn about PHP string functions, to be able to break down the strings that you read from the file.