Web Application Development - Project Write Up

Kevin Donovan - x16104463 Daniel McDonnell x18104282 Aaron Ellis x17147379

Site: https://backstreet-kevinbdonovan650830.codeanyapp.com/login.php

Technologies Used:

In our project we decided to use 3 specific technologies for the website. With each of these there came both pros and cons with using them and they are as follows.

JavaScript:

Good:

We used JavaScript in the Contact Form Validation!

- The good thing about javascript and using it is firstly it is *fast*.
- Client- side javascript is very quick and easy because it can be run immediately
 within the client- side browser, then you have the *simplicity* of it, it is relatively
 easy to learn and implement.
- Next is the interoperability of it, meaning it plays and works very well
 and nicely with other languages and also it can be used in a huge variety of
 applications, unlike PHP and SSI, javascript can be implemented into any
 website regardless of the file extension.

Bad

But there are some disadvantages to using javascript and they are. Client-side
security because the code executes on the user' computer in some cases in can
be exploited for malicious purposes. Browser support, javascript is sometimes
interpreted differently by different browsers, whereas server-side scripts will
always produce the same output, client side scripts can be unpredictable.

PHP

The second technology we used was "PHP". We used PHP for the login part of the website, the contact form for the mailer, used it with XML and AJAX to call the album names in the Albums section. and on the login page the tabs we had were the "enter"

user name", and then the "enter password" along with a clear session button at the bottom of the tabs.

Good

The pros are that it is quick and easy server-side scripting language. It has a larg community and when and if a web developer comes face to face with a problem there is normally and always is a pre-existing solution. It also works well with databases, file systems and images

Bad

It is always constantly changing, there has not been a release of PHP that did not have a number of problems, and the only way to fix and get rid of these problems is to update and upgrade, but then face new problems. And global config parameters can and will change the language schematics thus complicating deployment and portability.

We personally found that when we started using PHP, we had to stick to it and keep using it, which it why its a huge thing in our website.

AJAX

We used AJAX along with PHP to call upon the album information from the XML file.

Good:

Improved user experience, AJAX allows webpages to update serially by exchanging a small amount of data with the sever. This is really good because it allows updates on part of thee page to update with-out reloading the entire web page. Reduced bandwidth usage and increased speed, AJAX uses client-side scripting to communicate with the web server and exchange some data by using one of the technologies we used earlier, javascript. By using AJAX the user can cut down on the network load and bandwidth usage and retrieve only the relevant data thus giving the user faster interfaces and better response times.

Bad

AJAX highly depends on javascript which like mentioned above is implemented differently in some browsers this is problematic because AJAX has to work across many browsers. The next con is insecurity, webpages can be difficult to debug and this then leads to code size of your webpage and leaves the webpage prone to server security threats.

Conclusion

Over the course of the project we faced a few different problems, these were mainly in the sense of trying to implement certain technologies such as the AJAX and PHP. Getting the site onto a cloud based hosting service was very difficult and trying at the best of times.

Another difficulty at times was the coding of the website. Upon completion of the project we wanted to have a website that looked nice and clean but also that when looking at was easy to understand, read and navigate through. We also wanted to do it on something that was and is popular and this led us to doing it on music and certain bands.

We also found using CodeAnyWhere and their time limit was extremely challenging.

If we had more time, the site would look that little bit neater, we felt some aspects of the site, although they work, could look much nicer. Also we would love to implement a Spotify Web Player API in a revised version of this website.