**Current Functionality**

* Post management and creation
* Dynamic sidebars with user customization
* Dynamic live coverage indicator
* User customizable display settings
* Mobile-ready and modern design
* Moderated comments
* User roles

**Implemented User Stories**

Post Content

User Role: Content Publisher, Administrator

Goal: To post content for users to view

Reason: Core functionality of the site, allows users to see media

Pre-Conditions: Content Publisher or Administrator is logged in.

Post-Conditions: Content is posted to front page

Create Account

User Role: Unregistered user

Goal: Allows users to interact with the rest of the functionality of the website

Reason: To allow contribution and distinction between permissions

Pre-Conditions: User does not have an account

Post-Conditions: User can login and perform actions according to their user class

View Content

User Role: Administrator, Content Publisher, Registered User, Unregistered User

Goal: Allow user to view published content

Reason: Core functionality of website, users need to see posted content

Pre-Conditions: Content has been posted

Post-Conditions: Users can see posted content

Update Live Coverage

User Role: Administrators

Goal: To view real-time updates for news coverage

Reason: To provide the most current and updated information possible

Pre-Conditions: Administrator is logged in

Post-Conditions: Content is displayed in live coverage section

Comment on Content

User Role: Administrator, Content Publisher, Registered User

Goal: For replies to appear on posted content

Reason: To allow for discussion of posted content

Pre-Conditions: User is logged in and viewing some posted content

Post-Conditions: The reply is visible beneath the original content

Delete Post/Comment

User Role: Administrator, Content Publisher, Registered User

Goal: To delete a post or comment (permissions for deleting varies based on user classification)

Reason: Not all content or comments are necessarily desirable

Pre-Conditions: Comment or post exists

Post-Conditions: Comment or post no longer exists

Edit Post/Comment

User Role: Administrator, Content Publisher, Registered User

Goal: To edit a post or comment (permissions for editing varies based on user classification)

Reason: To allow changes to content for things like update or mistake correction

Pre-Conditions: Comment or post exists

Post-Conditions: Comment or post is changed to desired output

***New Implemented User Stories***

Set Category Display Order

User Role: Administrator

Goal: The user can adjust the display of the category order on the main page.

Reason: The user may want to emphasize certain categories or move others to the bottom.

Pre-Conditions: The logged in user is an Administrator, some categories exist.

Post-Conditions: The categories are displayed in the chosen order.

Set Live Coverage Indicator

User Role: Administrator

Goal: To allow users to observe that live coverage has begun.

Reason: To bring traffic to the live stream.

Pre-Conditions: The logged in user is an administrator

Post-Conditions: The live coverage link now indicates there is a live stream.

Update Sidebar Display

User Role: Administrator

Goal: To update and maintain the sidebars of the website.

Reason: To provide a feature-rich user experience.

Pre-Conditions: The logged in user is an Administrator

Post-Conditions: The sidebars are updated with the required content.

Assign Glyph to Category

User Role: Administrator, Content Publisher

Goal: To assign a glyphicon to a category.

Reason: To provide a clean, neat looking interface.

Pre-Conditions: The logged in user has permissions to adjust categories.

Post-Conditions: The new glyph is saved and appears when the category is referenced.

View Mobile Site

User Role: Administrator, Content Publisher, Unregistered User, Registered User

Goal: To view content using a mobile device.

Reason: The desktop website is not appropriate for mobile.

Pre-Conditions: The user is on a mobile device.

Post-Conditions: A page is requested and displayed.

**Explanation**

Wordpress assisted in implementing many of these user stories. The majority of the work involved in the creation was based upon designing the website views and programmatically calling to WordPress’s backend functionality to build the pages and post data. These changes were immediately implemented as this is the last iteration.

**Lessons Learned**

There were a few things learned during the on-going creation of the website.

***Communication***

There was a disconnect between what was initially provided on the project document and what we were asked for by the product owner during meetings. The product evolved from a site specifically created for the 2016 elections to a more general website for the Journalism department (students included) to post, share, and discuss content on a wide range of topics. Because of this disconnect, we were unsure at points what was really required. This could have been rectified with more efficient communication between all parties involved.

***Building to the Requirements***

We recognized a fundamental issue with our first iteration implementation using Glassfish and Java servlets/server pages when we were brainstorming to port the current platform over to a content management system. We considered that the product owner would be using a basic hosting solution, so we would most likely not have the capability to run a Java virtual machine and have our own Glassfish server. The only content management system that is almost always available on hosting solutions is WordPress. If we had recognized this earlier, the project would have gone much more smoothly.

***Accounting for the Future***

Yet another reason for the switch to a content management system. If the Journalism department was going to implement and use the system, it would have to be able to be supported by existing documentation. WordPress provides a *ton* of documentation online for the wide feature set, as well as troubleshooting help. After we leave, this documentation that is already all over the internet can help solve any future issues. With a non-CMS based system built by us, this would have been a huge issue down the line.

***Building for the User***

Building our own custom application from the ground up would mean a whole new learning experience for the users. This would be supplemented by the user manual, but as a general rule, a familiar approach for the user is much better than a foreign one. The switch to WordPress meant a familiar workflow for the product owner.

***Don’t re-invent the Wheel***

As fulfilling as it would have been to provide a full featured content management system, it was just not possible. These systems already exist and are put in place because designing one is not a simple task and requires a lot of forethought. We simply did not have time nor resources to justify continuing with ours.

**Conclusion**

We were able to provide just about 100% of the functionality requested from the product owner. Overall, we implemented all required user stories and some additional ones. We believe that the product owner is happy with what was accomplished and is an accurate representation of what was requested. If there was more time, however, I would have liked to implement WordPress’s dynamic menu design feature to allow for even more user customization.