U.S. CYBER RANGE WEBSITE

CS 4624 - Multimedia, Hypertext, and Information Access
Dr. Edward Fox
Virginia Tech, Blacksburg VA 24061
December 14, 2021

Trenton Deel, Aiden England, Matthew Rogers, Vikramaditya Pratha
PROJECT REFRESHER

- U.S. Cyber Range website redesign
- Collaboration with FourDesign team
- Site will be client maintainable
CUSTOM THEME

- **Main deliverable to client**
- **Consists of**
  - **Wordpress overhead**
  - **Page templates**
  - **Widgets**
  - **Accompanying CSS/JS files**
<?php get_header(); ?>
<div class="about_page">
<div class="container page-title">
<?php dynamic_sidebar('about-title-widgetarea'); ?>
</div>
</div>
<?php dynamic_sidebar('about-description-widgetarea'); ?>

```php
class CRAboutTitle_Widget extends WP_Widget {

    /* Register widget with WordPress. */
    public function __construct() {}

    /* Front-end display of widget. */
    public function widget( $args, $instance ) {
        @see WP_Widget::widget()
        @param array $args Widget arguments.
        @param array $instance Saved values from database.
        */

    public function form( $instance ) {

        @see WP_Widget::form()
        @param array $instance Previously saved values from database.
        */

    public function update( $new_instance, $old_instance ) {
```
Welcome to WordPress!
We've assembled some links to get you started:

**Get Started**
- Customize Your Site
  - or, change your theme completely

**Next Steps**
- Edit your front page
- Add additional pages
- View your site

**More Actions**
- Manage widgets
- Manage menus
- Turn comments on or off
- Learn more about getting started

**Site Health Status**
- Should be improved
  - Your site has critical issues that should be addressed as soon as possible to improve its performance and security.
  - Take a look at the 8 items on the Site Health screen.

**At a Glance**
- 1 Post
- 2 Pages

WordPress 5.8.2 running CyberRange theme.

**Activity**
- Recently Published
  - Nov 13th, 3:25 pm  Hello world!

**Wordpress Events and News**
- Attend an upcoming event near you. 
- WordCamp Taiwan Online
  - Saturday, Dec 11, 2021
Some of the custom widgets created shown on the WordPress dashboard.

A snippet, from the WordPress dashboard, of using the services template that we created.
INDEPENDENT DEVELOPMENT

- Client unable to provide hosting environment in timeframe - couldn’t get an environment for us in a timely manner
- Running an instance of WordPress through XAMPP running mySQL and Apache concurrently
XAMPP DASHBOARD

- XAMPP is an Apache distribution that includes PHP, PERL, and MySQL for ease of development workspace setup and management.
WE PROVIDE CLOUD-BASED INFRASTRUCTURE
for educators, industry, and other organizations

cybersecurity training
Future Work

1. Implement Remaining Site Elements
2. Ensure site maintains accessibility standards (WCAG 2.1 Level AA)
3. Search Engine Optimization (SEO)
4. Implement further revisions as site develops
LESSONS LEARNED

- Time Management and Efficient Scheduling
- Team Communication
- Design Process (Design, Revisions, Approval)
ACKNOWLEDGEMENTS

Jeff Joiner – Leader of Four Design Team

Dr. Fox – Professor
REFERENCES


QUESTIONS?