Project VERITAS Preliminary Design Review

Sponsor PNNL Client Dr. Jessica Smith Lead Instructor Bruce Bolden



14 November 2017 | IRIC 105

Meet Team VERITAS



Alex Wezensky

Jocelyn Stadler

Animesh Pattanayak

Joel Doumit

The Project

- Create a web interface to dynamically communicate with a database in a secure manner
- Three Main Components
 - Web interface design and implementation
 - Database design
 - Including how to simply edit the contents given the proper permissions
 - Communication protocols between the two

Project Learning

- Our project revolves around writing lots of code in languages including
 - HTML5
 - CSS
 - JavaScript
 - PHP
 - SQL
- We were not all proficient in these languages
 - We had to learn the syntax of each language on the fly
 - As a problem arose, we had to learn how to resolve the issue

Viable Designs

- Hover Design Concept
 - Pro
 - It would be very sleek
 - o Con
 - Not very accessible for slower machines

Dynamic Refresh Concept

o Pro

- Works well for any machine or operating system
- Con
 - Requires large number of refreshes, uses lots of resources, slow

- Click Design Concept
 - Pro
 - Accessible, does not use as many refreshes, faster
 - Con
 - If data set is large, then the display page would scale linearly

Costs

- Recurring cost of Amazon Web Services
- Currently this cost is free based on resources needed
- Hosting costs will be covered by whoever picks up the project
 - PNNL
 - DOD

Main Webpage

- Main Webpage
 - Designed initial contents of main page
 - Includes
 - Logo placement
 - Hot Links
 - Search Section
 - Dropdown Menus
 - Checkbox options

\checkmark		
Pacific Northwest NATIONAL LABORATORY	HOME UIDAHO CLEAR PAGE	
Search	>GO	
MANU TYPE ITEM1 ITEM2 ITEM3		
SUBMIT		
Welcome to our website. We are not responsible for	anything that you would like to say is our fault.	

Postcard View

- Have some information displayed on home page after search
- Enough to identify product, but still have room for multiple postcards
- Current features
 - Appears when submit button is clicked
 - Entire postcard is a link to the product's page

	Search >GO MANU TYPE ITEM1 ITEM2 ITEM3	
	SUBMIT	
Name: Boeing 747 Type: Transport Description: Large passenger aircraft	Name: Lockheed Martin F-22 Type: Raptor Description: Fighter aircraft	Name: Bristol Scout Type: Antique Description: Old scouting 2 seated plane
For more info, click here	For more info, click here	For more info. click he

Welcome to our website. We are not responsible for anything that you would like to say is our fault.

Full Product Page

Separate webpage from initial view, accessed through small postcard

All information will be accessed using PHP to query the database using SQL

No way to edit database from this page

Includes : All product info in database for selected postcard



Databasing

- Database design and querying.
 Language chosen: mySQL
- Each page will query the database and have its' fields dynamically updated.
- Entry to the database will be non-web-based.



Schedule



Problems So Far

- Initially did not have resources
 - Communicated with sponsor and determined alternate route to allow work to begin
 - During this time, we were able to iron out some design specs and evaluate potential design concepts

