

Web Environment

Product Choices

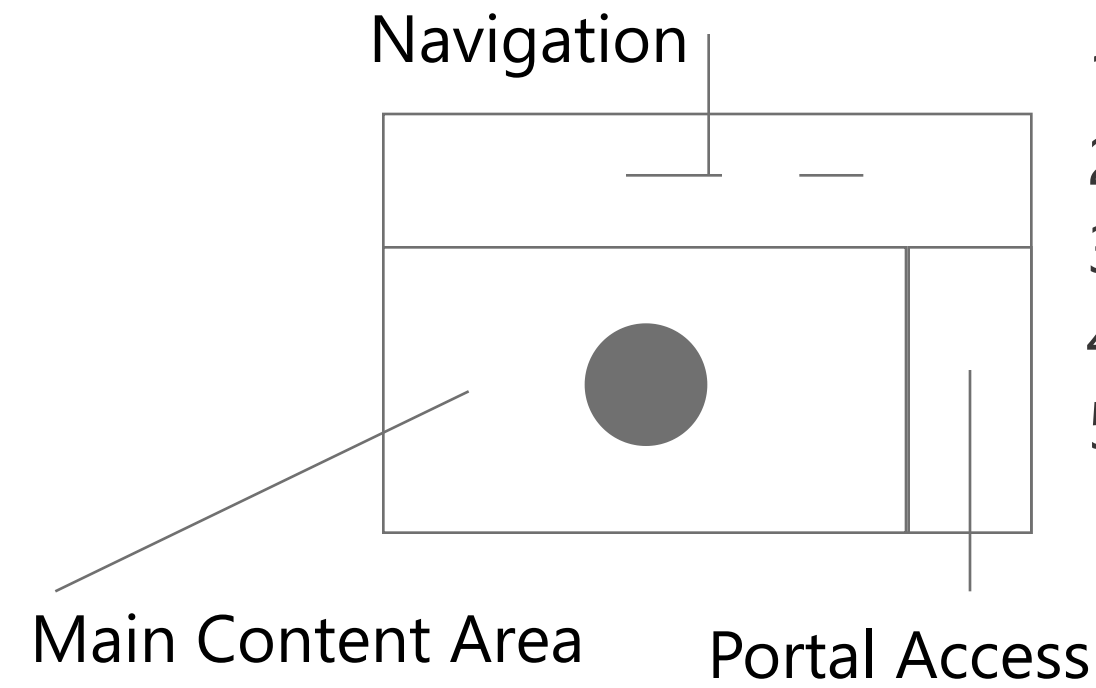
- 1 WordPress-SharePoint
- 2 .net
- 3 Drupal
- 4 Joomla
- 5 Atlassian

Additional Items for Portal

Web Hosting Services
 Domain *(name)*@woodbuffalo.ca or gc.ca
 FTP Access or Server
 Secure Site Environment
 SharePoint Server *if desired*.

Note:
 WordPress is a good choice for development *prebuilt themes* are very affordable. *Starting about \$90,00 dollars u.s.*
 The company owns a large portion of the development world
 Generally upgrade migrations are questionable to fair results, not mandatory but if you upgrade could be a problem.
 Works well with SharePoint. .net is a good choice complicated but secure.

UI Stage A



- Core User interface Languages.**
- 1 Basic Bootstrap Wordpress Theme
 - 2 PHP/HTML 5 Markup
 - 3 Javascript
 - 4 CSS, LESS, SASS
 - 5 PHP *controls for special behaviour.*

Could have:
 Python *Geomapping*
 Java *complex algorithms*
 Angular *inner applications*
 React *development speed*
 Redux *similar to React*
 Browser dependant for products and OS



UX Stage

Users - Who, When, Why, Type of Use, Level of Access,

| Site Access | Portal Access |
|----------------------|---|
| 1 Delta Institute | x Full Content add |
| 2 Community | x Partial Content add |
| 3 WBNP | x Partial Metrics, Analytics |
| 4 SEA | x Full Metrics Analytics |
| 5 Scientific | x Full Data Content add, edit , Delete? |
| 6 Federal/Provincial | x ? |

Types of Content

Historical, Spiritual, Cultural, Social, Housing, Special Events Shared Content.
 Earth Sciences - Hydrology, Atmospherics, Air Quality, Forestry Management
 Types of Information - PDF, Wordfiles, Images, Spreadsheets, Graphs, Meta data
 Animal, Fish, Fowl - Migrations, Populations

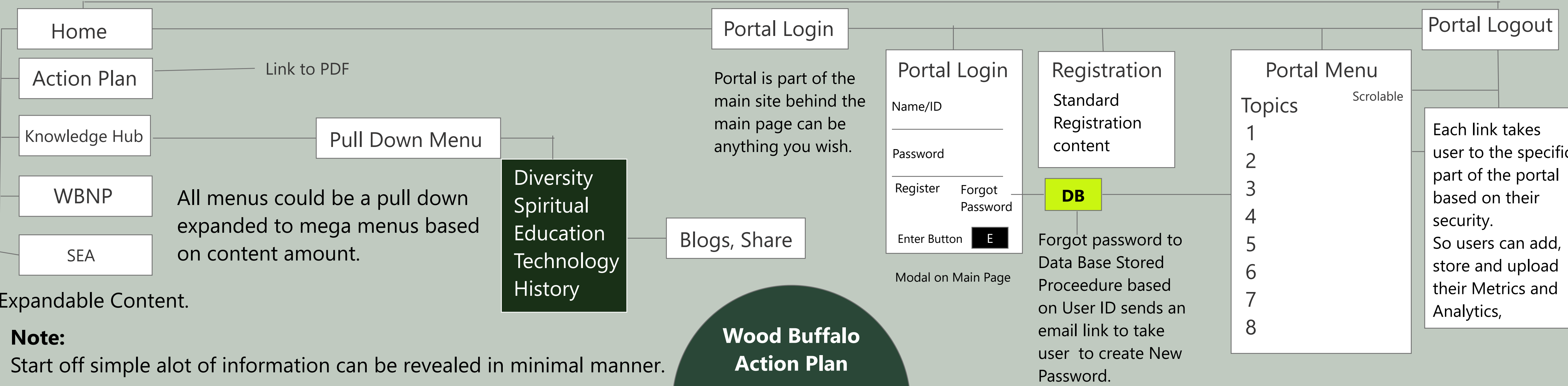
Location Types B

Local

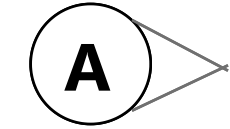
- 1 Closet Space
- 2 Band Width
- 3 Server Equipment
 Dell EMC PowerEdge T340 5U Tower Server
 1 x Xeon E-2234 8GB 1T B 1TB HDD ATA XDX
 \$1,758.99
- 4 Operating System
Apache, Windows, Oracle, Linux
- 5 Software
Web Services, Database Services FTP, SSL, HTTP etc...
- 6 Backups
Onsite tape recording, Off site Service should have both.

Cloud Services
 AWS
 Google
 Oracle...many others

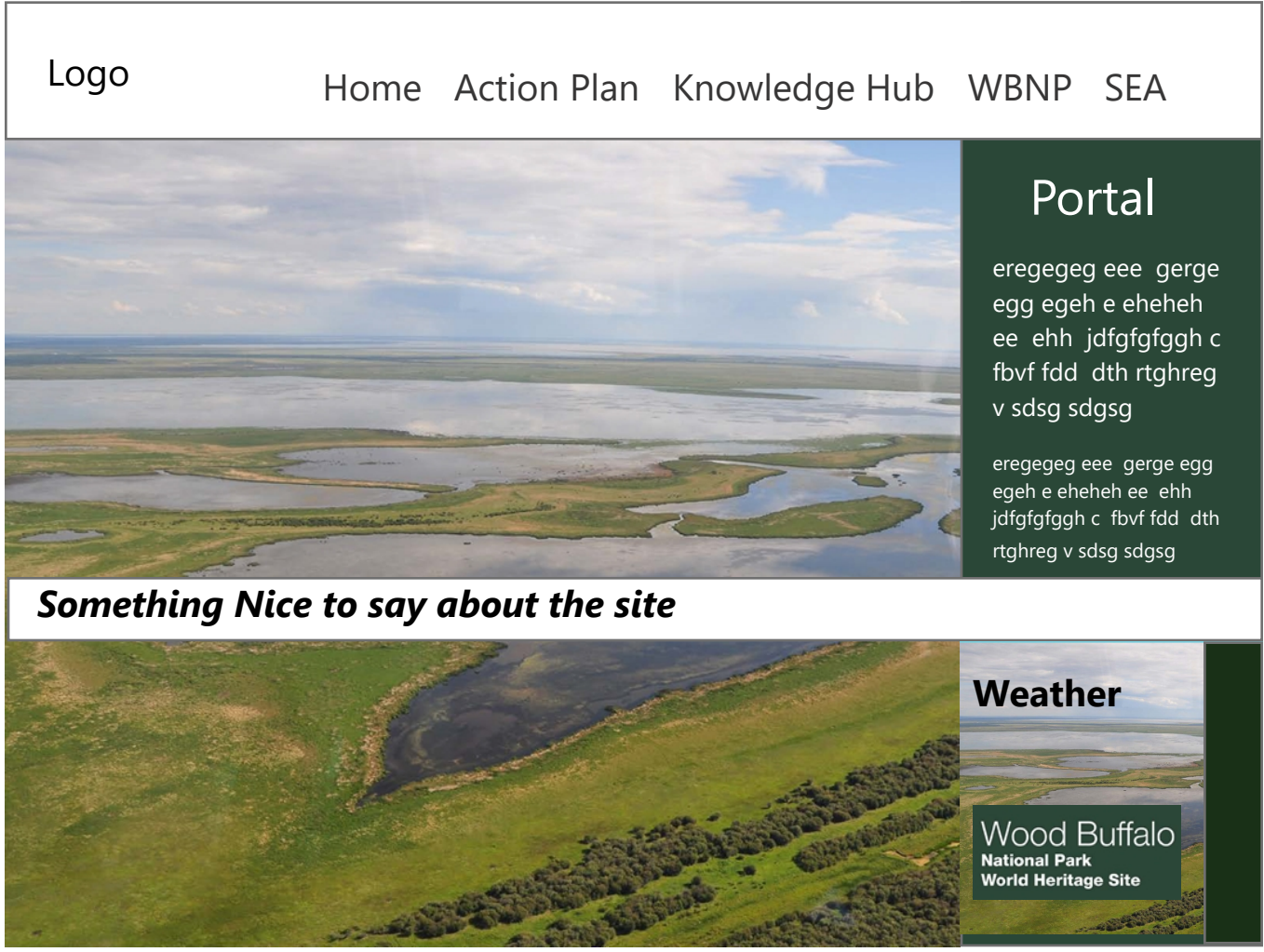
Delta Institute Site Map Example



UI Placement Example



On mouse over/click on menu items becomes bolder to identify focus and if is expandable shows menu content below the menu item



Each link in white area makes the page scroll down to each location The Menu stay at the top of the page Regardless of where you go. Portal information is fixed to the right regardless of where you go. When Portal is select a Modal will appear with options to close

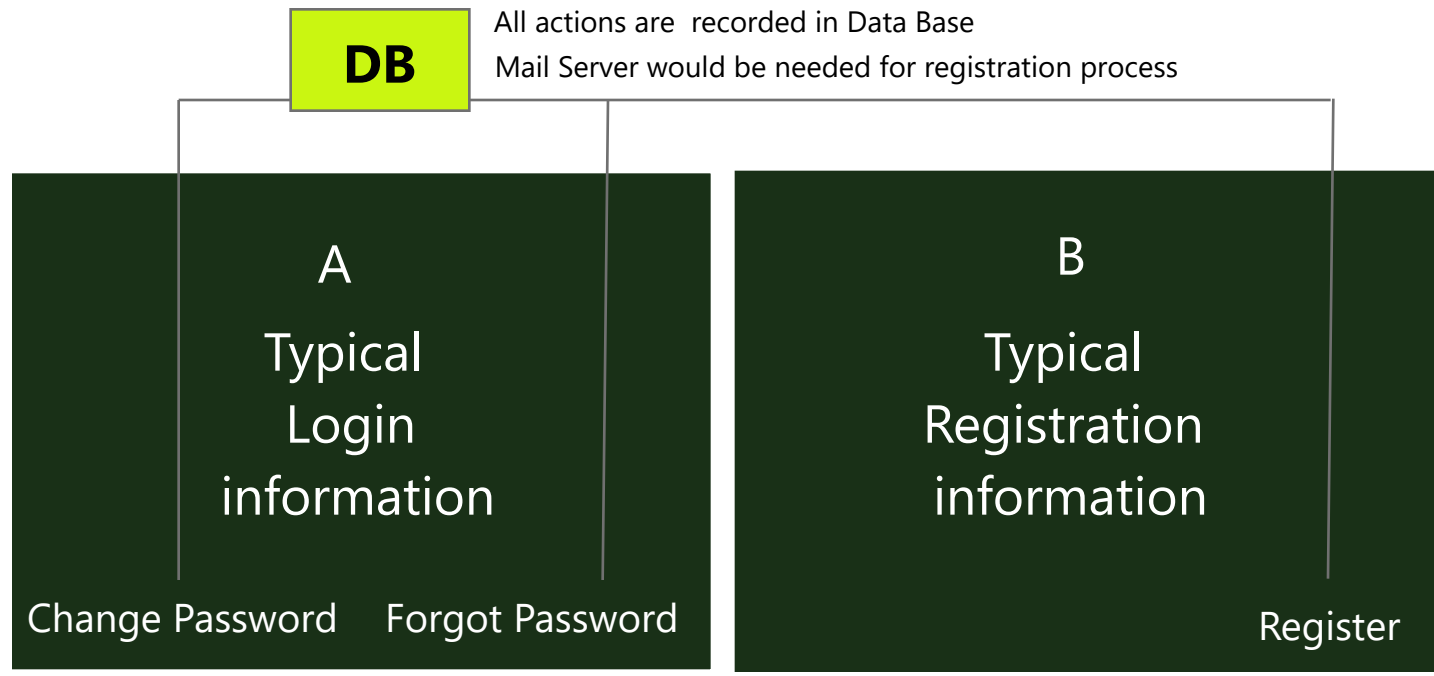
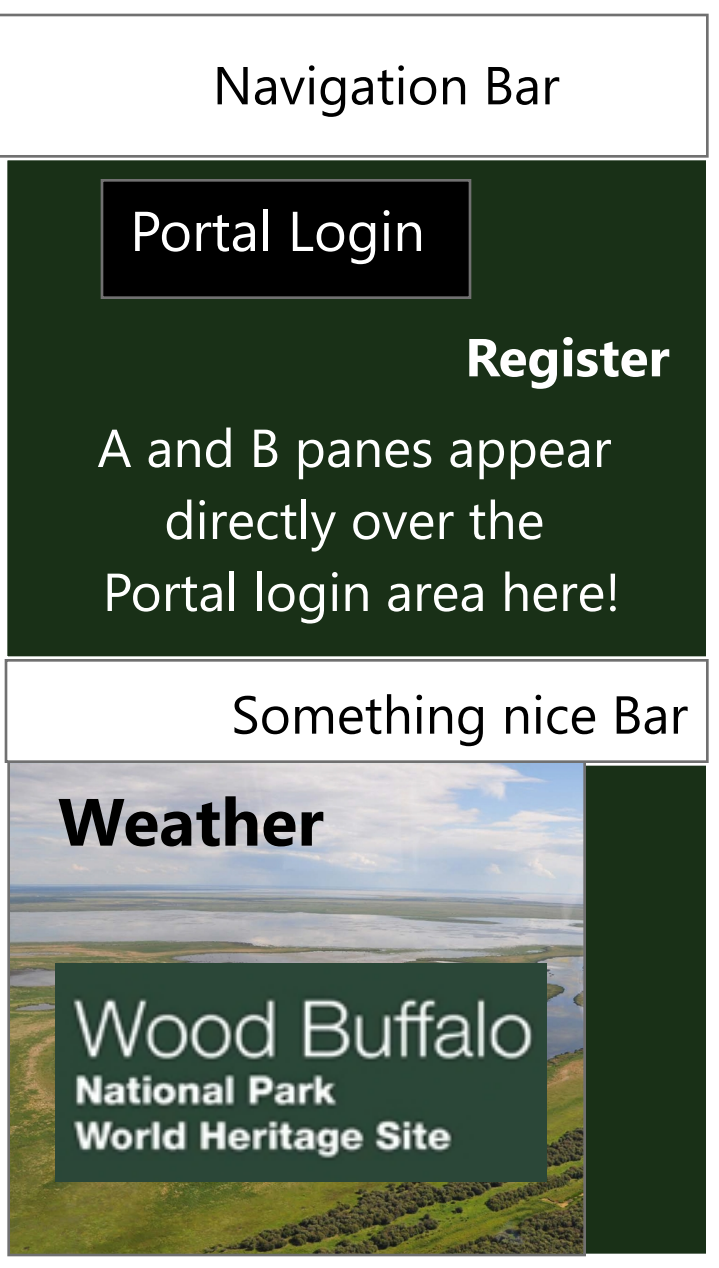
Navigation fixed to top of Browser



Navigation can have static links, Pull Down Menus, Mega menus, is solely based on the amount of content or how display a menu item like a picture the control.



Mobile Navigation User selects Hamburger menu to reveal a pull down Menu for selection.



Note: After making selection if mouse moves out of the location it will disappear. Just a simple JavaScript code for "Hide" and "Show"



Covers Area below Navigation Bar

Off Site

Note:

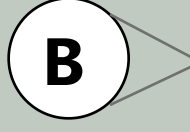
Suggested Vendors that will be capable to either do it all or Farm each part out based on SLA.

Vendor controls all aspects of the **Virtual Private Network** Full Stack Development Cycle Delta Institute members can access it any time to gather metrics update content or send in change requests based on SLA agreement. or Vendor adds updates to your web server and post it on the cloud.

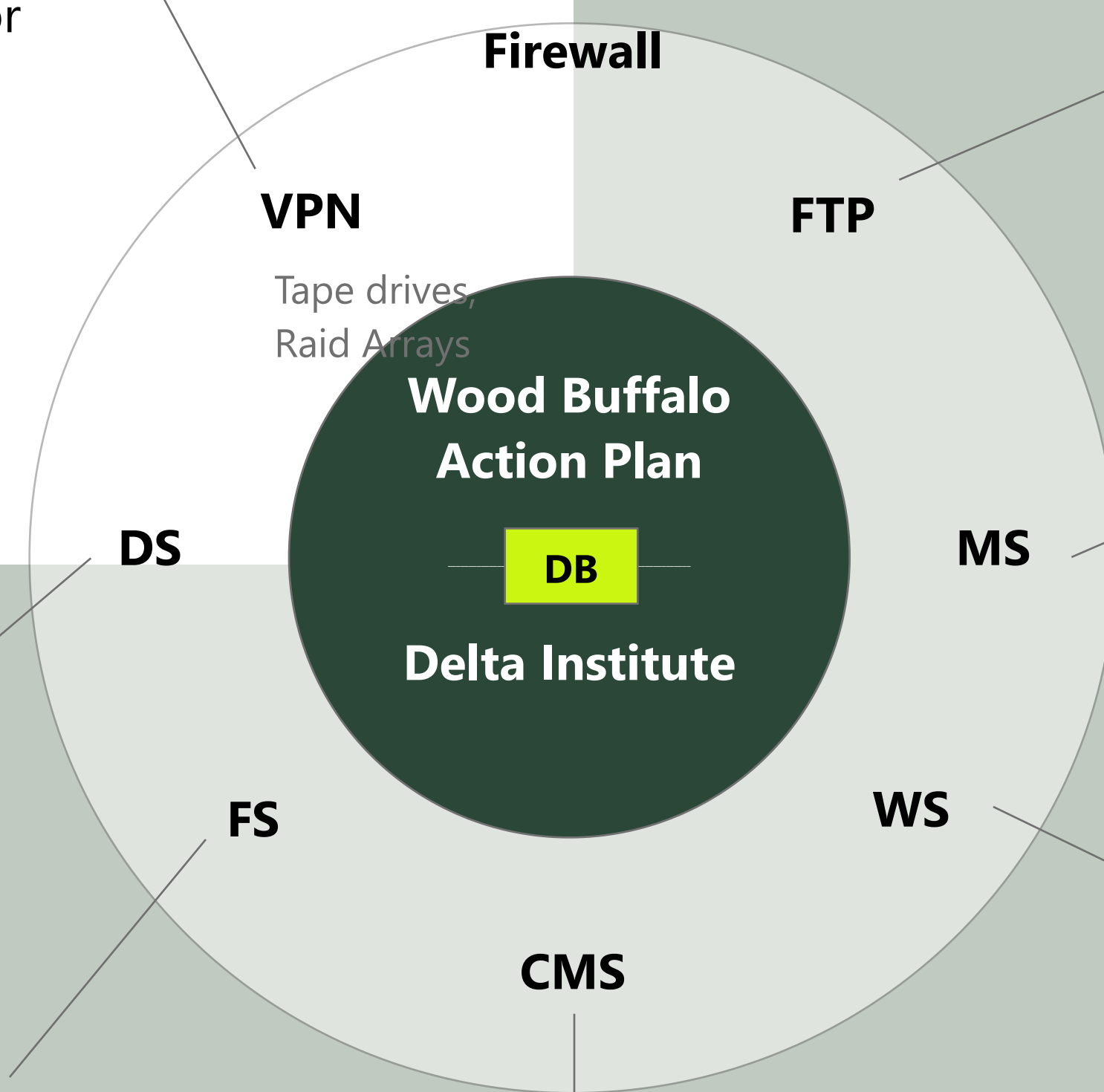
Cloud

| | |
|--------|--|
| Amazon | Cloud Services the duplication of the Static location. |
| Google | |
| Oracle | Can do full service based on SLA. |

OnSite



All equipment is at the Delta Institute with the following
Small IT Department 1-2 people
Web Master 1 person
2 UI Web Developers, 2 Database Developers,
1- Information Architect, 1- UX Developer
1 Content Developer, 1 - Technical Writer



File Transfer Protocols

Onsite Webmaster would FTP content to the file server Scientist could update there pages this way as well. Other option a VPN connection to Delta Institute.

Mail Server (exchange)

This would provided by an Internet Provider main vendor in this case Provincial Telus, Shaw? The use of this is comms from all the users Forgot password, Change Password, Register, Special events, Alerts.

Web Server Site Hosting (Domain)

On site Webmaster responsible for Web activities As well as a Database specialist to assist the webmaster.

(name)@WoodBuffallo.ca stored at providers location. Main Website and Portal location that commiunicates to the Database Either On Site or Off Site or in Cloud

Tape drives, Raid Arrays

Data Server

SQL Server, Oracle, Mongo DB
(works well with PHP)
Licences apply based on usage.

File Server

Main OS File structure.
Search, Backups Tape drives, Raid Arrays, Robotics, IT member.

Content Management System

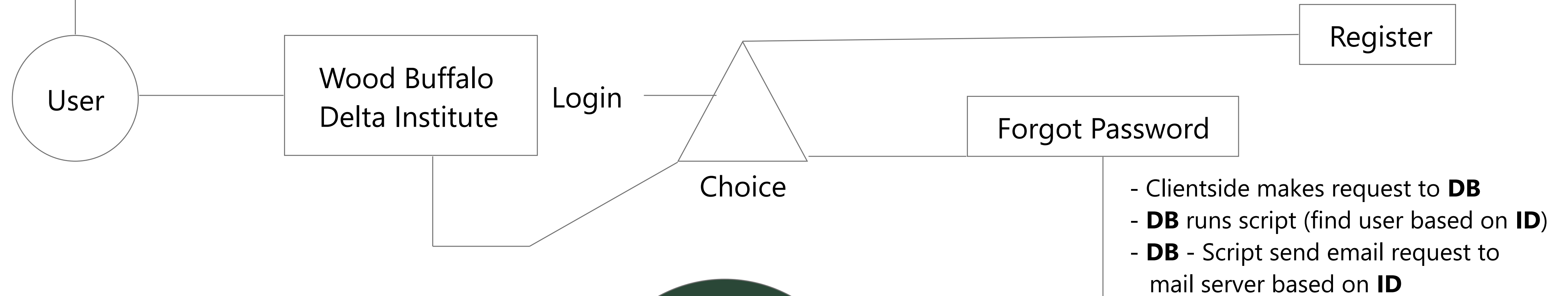
WordPress

This the core **CMS** for managing content images, uploads, Analytics Metrics. This would part of the file system

Off Site Backup

Backups Tape drives, Raid Arrays, Robotics, IT personel.

UX Workflow example



Surveys, QA User Responses (Beta)

Once the component is completed a group of individuals are assigned to Review the User Experience.



To grade the experience:

Content Clear, Helpful, Layout (pleasing to the eye), Speed, Response time for the Email, Ping to-from server to respond to new password entered. to login to Portal.

Quality Assurance For WCAG Accessibility Bill C-81

Must meet 38 compliances for wcap 2.2 should also have keyboard only access and work with a screen reader.

<https://www.w3.org/TR/WCAG21/>

- Client side makes request to **DB**
- **DB** runs script (find user based on **ID**)
- **DB** - Script send email request to mail server based on **ID**

Mail Server has received request from **DB** Script to email user based on user name email.

Email contains:

Standard letter head Wood Buffalo credentials with a common statement. Instructions to go to link.

Link takes user to the Site with a box above the web site called a Modal Where user makes password change Submits the change Via PHP, JavaScript On submit Pings Server

A message appears that the Password has been changed and unlocks the Login button,

Knowledge Hub

Why is Knowledge Base Indispensable in This Day and Age?

Knowledge Base Types

Characteristics of an Ideal Knowledge Base

How to Create a Knowledge Base in Seven Simple Steps

1. Know Your Customers
2. Develop a Strong Structure
3. Write Knowledge Base Articles
4. Add Visuals at the Right Places
5. Work on Its Searchability & SEO
6. Review, Revise, & Publish
7. Measure Effectiveness & Improve Performance

Knowledge Base Best Practices

Knowledge Base Templates & Examples

<https://www.proprofs.com/knowledgebase/blog/how-to-create-a-knowledge-base/>

**Wood Buffalo
Action Plan**

Delta Institute



13 Data Centers across four continents for ultimate performance and availability
Customized and Tailored Made VPS Hosting to fit your needs
Scalability: Allows you to quickly add load balancers, firewalls, private networks and apps such as: pfSense, Docker, CPanel, Drupal, Jenkins, WordPress, Magento, node.JS and many more.
All SSDs with UNLIMITED TRAFFIC. 99.95% Up-Time Guaranteed
Scale across hundreds of servers in seconds
Billing options – Per Month or Per Day
24/7/365 Tech Human Support
30 Day Free Trial to test the services

Cloud Computing Service Provider

Cloud Service providers are vendors which provide Information Technology (IT) as a service over the Internet. Cloud computing is a term which is used for storing and accessing data over the internet. It doesn't store any data on the hard disk of your PC. Cloud companies helps you to access your data from a remote server.

Cloud computing companies services range from full application development platforms to servers, storage, and virtual desktops. Here is a handpicked cloud service providers list. This cloud provider list contains various types of cloud computing services

