Team Sddec24-14: Website Migration Project

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https://sddec24-14.sd.ece.iastate.edu/
Advisor: Professor Judith Islam
Client: John Stuifbergen, Buildertrend

Client: Buildertrend

- Constructs and host sites
  - Home builders
  - Remodelers
  - Specialty Contractors
- Ended Partnership with Duda
  - Clients satisfied with Duda sites
- Switched to WordPress

Problem Statement

- Migrate existing Duda sites to WordPress
- Maintain or improve on quality
- Simplistic design structure
  - Inexperienced users
  - Easier to update
  - Maintainable

Project Overview

- Migrate sites
- Reference original site
- Similar site structure
- Tools: WordPress, Elementor & Flywheel
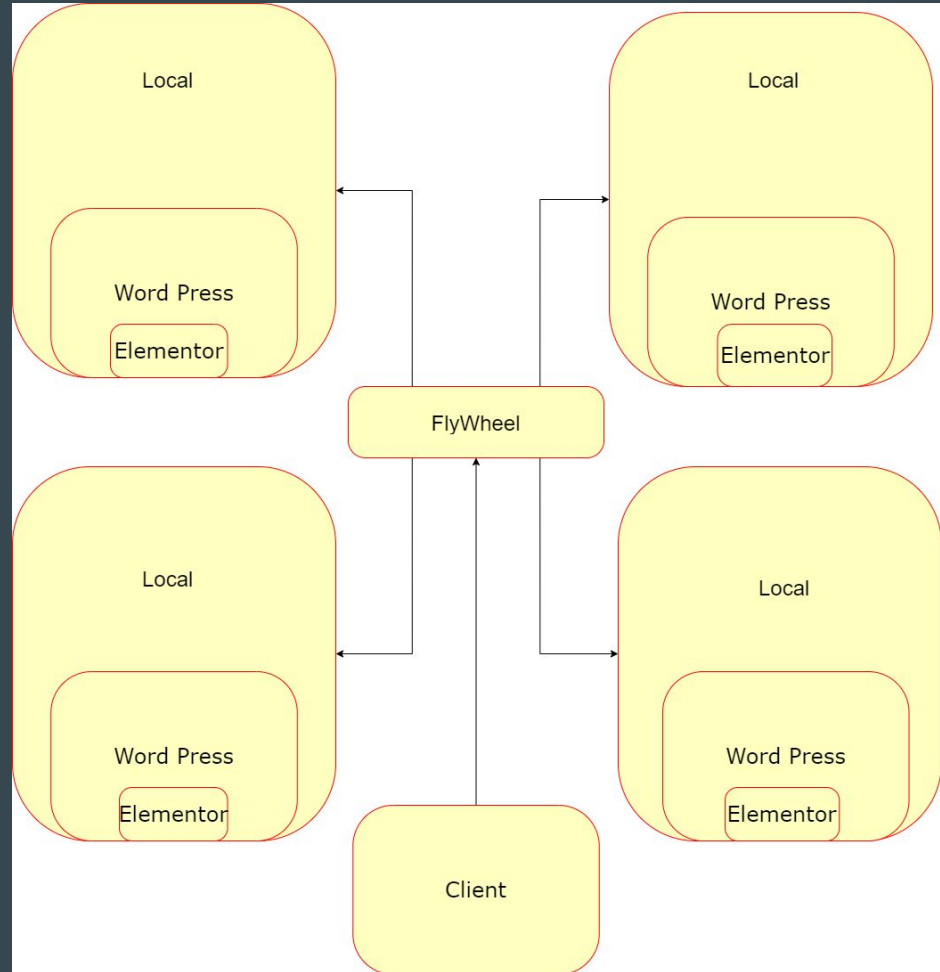- Satisfy needs of the personas

Personas

- Persona 1: Buildertrend
- Goal: Give client a quality website

- Persona 2: Site owner
- Goal: Connect services to users

- Persona 3: Users
- Goal: Get information

Conceptual Sketch

Functional Requirements

- Content Migration
  - Transfer all contents
- Design Replication
  - Replicate Layout of Duda
- Feature Parity
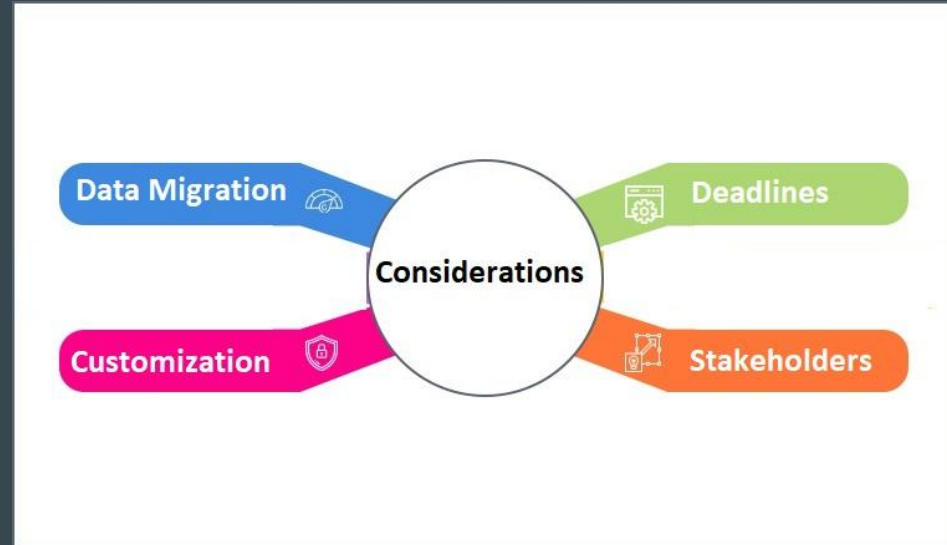 - Recreate all Features
- Responsive Design

Non-functional Requirements

- Maintainability

- Scalability

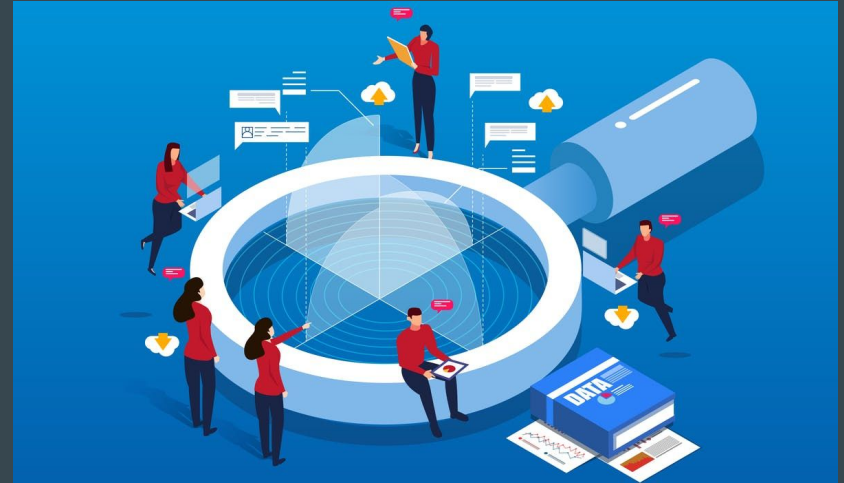- Usability

- Availability

- Consistency

Technical/Other Constraints/Considerations

- Data Migration Challenges
  - Lack of Auto Migrator
- Customization Complexity
  - Complex Features to Replicate
- Time and Deadlines
  - Start to Deployment
- Stakeholders Expectations
  - Communicate with Client

Market Survey/Research

- Advantages:
  - Structured approach
  - Offer security & analytics
  - Have specific tools/services
- Disadvantages
  - Cost
  - Needs access to resources
  - Different restrictions for each service
  - Varying complexity

Potential Risks - Security

- Harmful plugins
  - Some have malware
  - Older versions are more vulnerable
- Solution:
  - Frequently update plugins
  - Don't download old plugins
  - Use popular plugins

Potential Risks - Complexity

- Complex design and elements
    - Hinder site performance
    - Inexperienced users
    - Difficult to update/change
- Solution
    - Aim for simplicity
    - Use original site as guide
    - Keep the users in mind
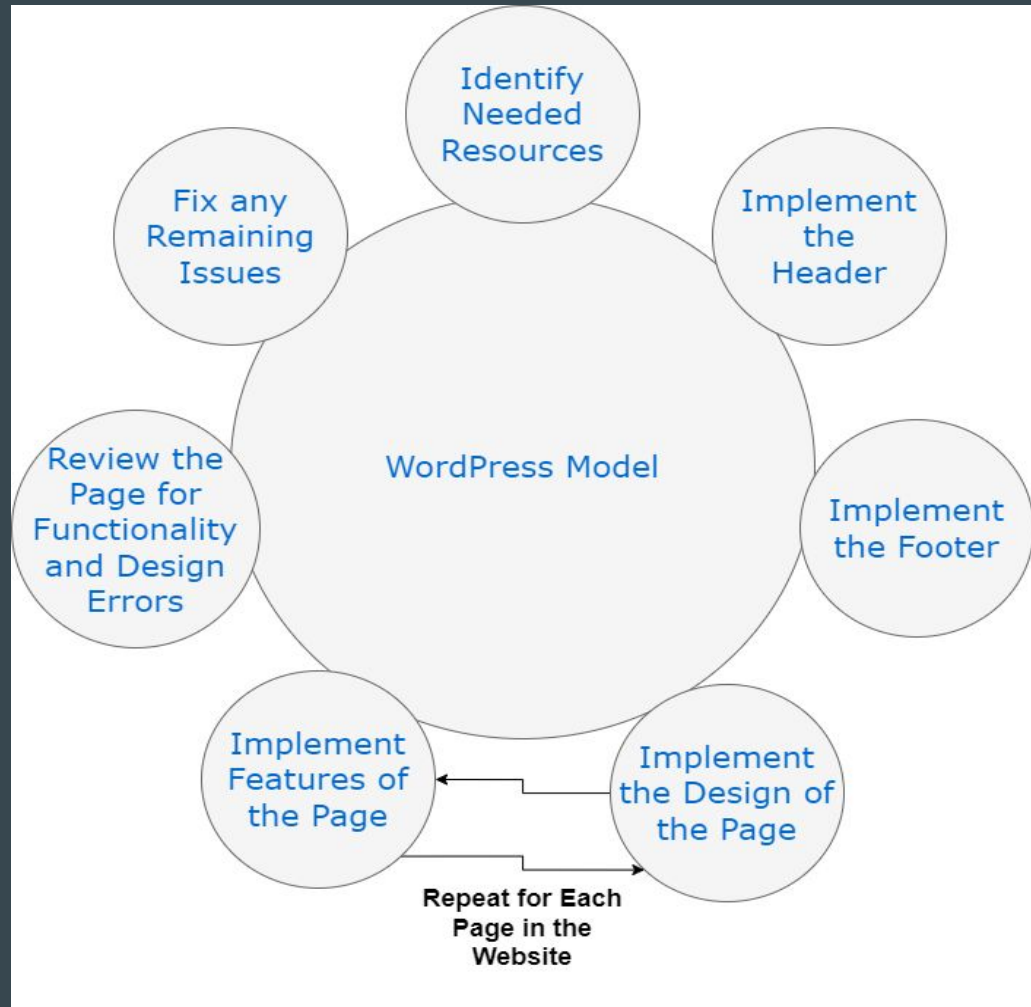
Project Milestones & Schedule

- Project Initiation (Week 1 -2)
- Requirements Gathering (Week 3 -4)
- Planning and Strategy (Week 5 -6)
- Design and Theme Development (Week 7 -10)
- Development and Integration (Week 11 -14)
- Testing and Quality (Week 15 -16)
- Deployment and Go-Live (Week 19 -20)
- Post-Launch Monitoring/Optimization
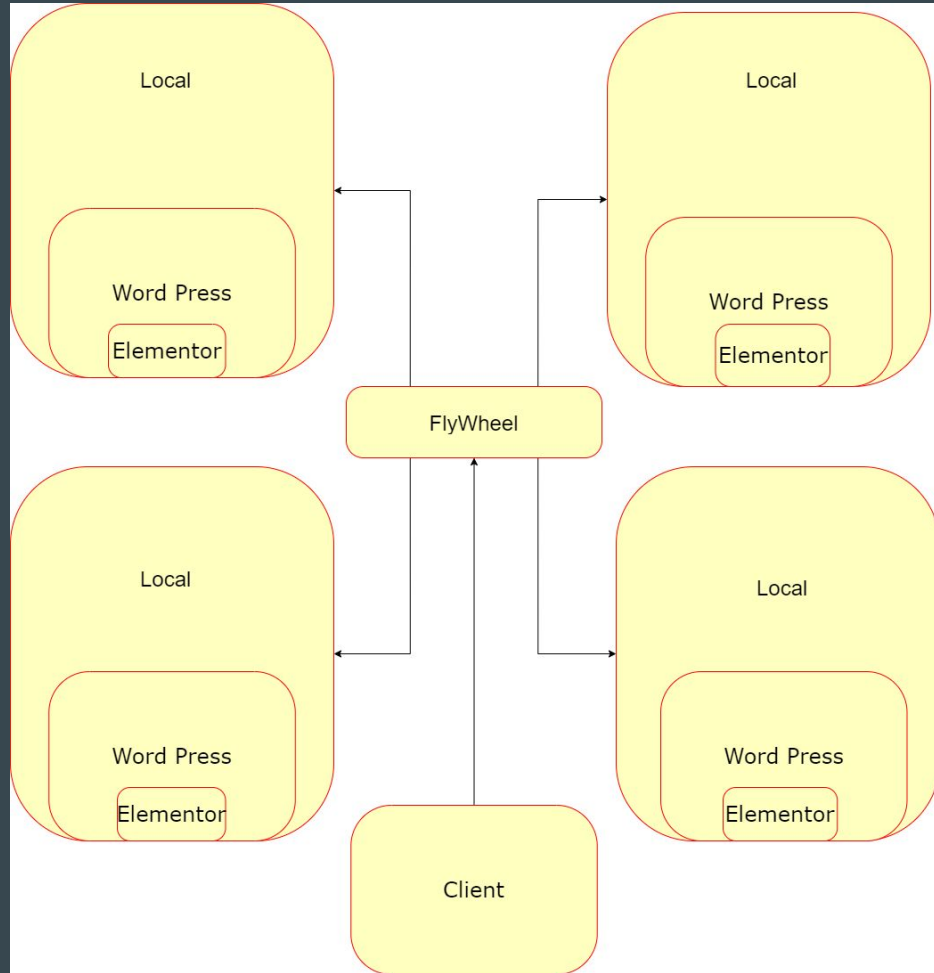
Functional Decomposition

- Content Migration
- Design Replication
- Feature Implementation
- Responsive Design
- Performance Optimization

Detailed Design

Identify Needed Resources

Fix any Remaining Issues

Implement the Header

Review the Page for Functionality and Design Errors

WordPress Model

Implement the Footer

Implement Features of the Page

Implement the Design of the Page

Repeat for Each Page in the Website
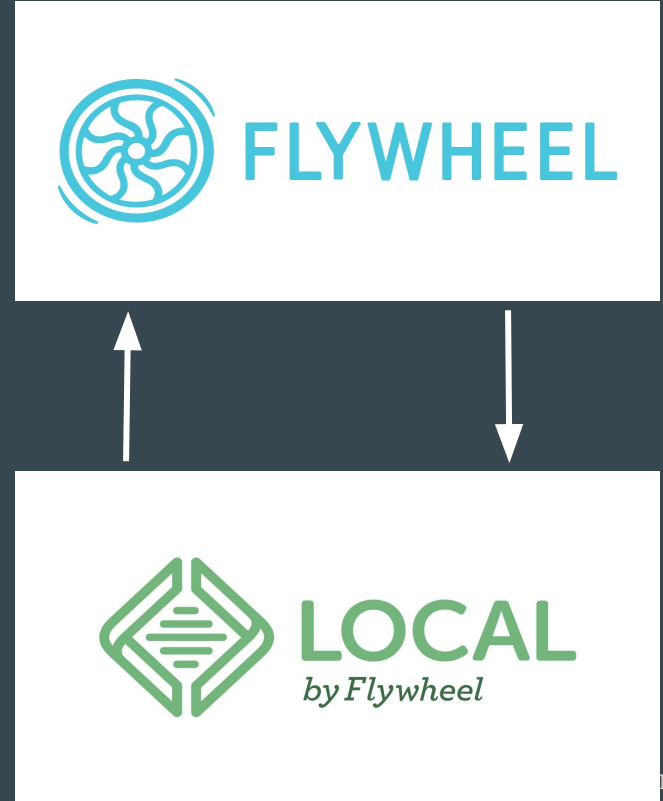
Detailed Design

SW Technology Platforms Used - Elementor

- Drag & Drop Plugin
- Easy Modifications
- Responsive Design
- Learning curve

SW Technology Platforms Used - Flywheel & Local

- WordPress Hosting Provider
- Security
- Scalability
- Easy Site Management
- Merging issues

Test Principles

- Manual
- Unit Testing
- Functional testing
- Integration Testing
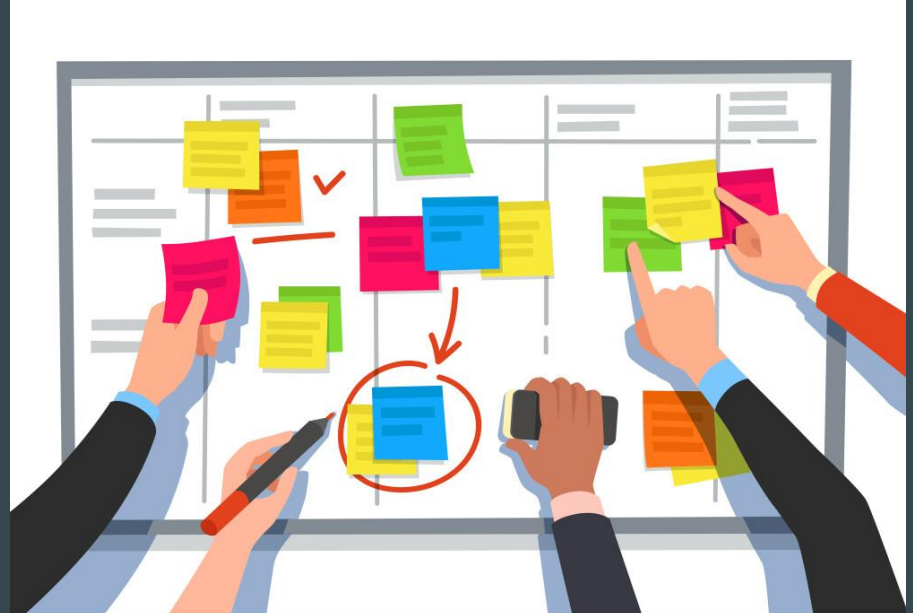- Acceptance Testing
- Regression Testing

Current Project Status

- Extensive familiarity with the process of utilizing the given tools to replicate a website.
- Completed or working on the following websites:
  - Aune Brothers Construction
  - JCLC Homes
  - Britestreet
  - Cherry Building Group
  - Bigger Staff Co
- Script to convert Duda Collections into SQL Statements for defining a table and inserting data.
- Wordpress theme templates for different aspects of the website i.e Header, Footer, Post, etc.

Task Responsibility/Contributions

- Piper Ideker
    - Fully finished Aune Brothers Construction website
    - Started work on Bigger Staff Co website
- Danh Hoang
    - Worked on Brittestreet website
    - Created general templates
- Chiran Subedi
    - Manually migrating JCLCHomes
    - Creating templates for themes
    - Script for converting Duda Collections to mySQL
- Bryant David
    - Cherry Building Group
    - Applied Themes/Plugins

Plan for Next Semester

- Unfortunately we recently discovered that this project ends in June of this year and it won't continue next semester.
- We talked to Professor Shannon and Fila about this issue, and they said that we would have to join a different group and join a continuing project.

QUESTIONS?