

CprE 491 Weekly Report**May1610****Week 7(October 19, 2015)**

Project Name: Geospatial Mapping for Coverage Analysis

Advisors: Akhilesh Tyagi & Swamy Ponpandi

Client: John Deere (Benazir Fateh)

Group Members:

- Luke Milius - Team Leader
- Frankie Nelson - Team Key Concept Holder
- Sarah Ulmer - Team Webmaster
- Brenda Lopez - Team Database Leader
- Jake Caithamer - Team Communication Leader

Attendance:

- Luke Milius (3)
- Frankie Nelson (3)
- Sarah Ulmer (2)
- Brenda Lopez (3)
- Jake Caithamer (3)
- Swamy Ponpandi (1)

<u>Team Member</u>	<u>Individual Accomplishments</u>	<u>Hours Contributed [week(total)]</u>
Luke Milius	Meetings, Contributed to Design Document, researched database management layer options with Spring MVC	3(16)
Frankie Nelson	Meetings, Worked on design document	3(15)
Sarah Ulmer	Meetings, contributed to design document and website	3(15)
Brenda Lopez	Meetings and contribution to design document	3(16)
Jake Caithamer	Meetings, design document	3(16)

Accomplishments from last week:

- Nearly finished initial draft of design document
 - Discussed all and created all sections of design document
 - Based on a design document template from ComS 309
 - Includes sections about risks, mockups, goals, technical details, and interface specifications, as well as diagrams and links to our other documents.
 - Presented to Dr. Ponpandi for review
- E-mailed the professor to ask about inconsistent deadlines for this class
 - Professor's e-mail says that the design document is due at the end of this week
 - Professor's syllabus says that it's due on the 28th.
 - Very confuse
- E-mailed John Deere to cancel our weekly meeting last Tuesday, as we had nothing to discuss with them.
 - Used the normal phone meeting time to convene as a group and work on the design document some more.
 - There was no mower this week, yay!

Topics Discussed:

- High level project design (framework, block diagram, etc)
 - Talked about different languages which we could use for our project.
 - Ended up deciding on Java, since we all know it.
 - Also considered Javascript (Node.js), C#, C
 - Discussed different MVC frameworks and their pros/cons and our experiences with them
 - Decided on Spring, since it is the industry standard Java MVC framework
 - Talked about some different database management layers and which we would like to use
 - Discussed JDBC and how much we don't like it

- Learned a bit about PostgreSQL and PostGIS.
 - Ended up deciding on using the Hibernate framework, since it is easy to integrate with Spring and widely known.
- Sections and content appropriate for our design document
 - Found an old template from CS 309 to base our document on
 - Looked through the rubric for 491 and removed sections from our template as necessary
 - Broke the document into sections so that each of us was working on something different.
- Server and Client interactions using Java Servlets and AJAX
 - Thought about different ways to exchange information between server and client.
 - Did some research on AJAX. Not all of us were very familiar with its purpose or use.
 - Learned about Java Servlets and how they interact with the rest of the Spring framework
 - Discussed some potential issues with hosting our server and database on Amazon's servers
 - Made several revisions to our block diagram to reflect what we learned and decided.

Upcoming Week

- Revise design document for submission based on feedback from John Deere.
 - Most likely will consist of adding more software interfacing functions and their specifications
 - Will also be working on formatting, adding more diagrams/links as necessary, and aesthetic appearance of the document.
 - Once feedback has been responded to, we will host our document on the team webpage.

- If the document due date really is the end of this week, then our next task will be to begin implementing our project
 - Starting with the database and basic server/controller
 - If we can finish that, then we'll work on an interface to allow data uploads to the database.