**Proposal for the Development of a  
Community Supported Agriculture Membership Manager**by Kurt Holliday

**Introduction**

Web Standards and Technologies (IS2560) is a Masters degree course taught by Dr. Rosta Farzan at the University of Pittsburgh School of Information Science. The course focuses on the standards-based development of Web applications with current Web technologies. As a final project, students are divided into teams of three to develop their own web application using the technologies taught in the class. Each team member will submit a proposal for a project. The team will then select which project to complete.

**Background**

One Woman Farm (OWF) is a farm located in Gibsonia and Valencia and operated by Margaret Schlass. It is a Certified Naturally Grown produce farm that has been in operation since 2008. OWF distributes produce through Community Supported Agriculture (CSA) membership program, Pittsburgh farmers markets, and restaurants. A CSA is a way for customers to buy a “share” in the farm before the harvest distributions begin. One Woman Farm offers two types of memberships: a weekly or bi-weekly box of produce, or a CSA Market Membership of prepaid credits. This proposal focuses on providing a tool to allow OWF to manage its CSA members through an online web application.

Currently, OWF uses a paper-based signup form to register for the CSA program. After customers sign up for the CSA, they are tracked in an Excel document. Box members are simple yes/no pickups at farmers markets. Whereas, market members need to have purchase totals deducted from their current balance. After the market, the tracking sheets are entered into the Excel document. Sometimes, the operation of OWF makes it difficult to allocate time to data entry for these records. Another risk with this method is human error. Manually calculating new balances at a busy farmers market can introduce inaccurate balances. Customers will also have to remember what their balance is between weeks and approximate how much to spend each week in order to have a zero balance at the end of the market.

**Proposal**

The team will develop a CSA Membership Manager web application to automate the process as much as possible by using a Web interface tied to a database.

Functional Requirements of the application

1. Customers shall sign up for the CSA online and receive a login.
   1. Optional: Current payment is done with check. Possible online payment options? To be decided later.
2. Customers shall monitor their accounts online.
   1. Market members shall track their remaining balance.
   2. Market members shall see an average spending per week to take their account to a zero balance by the final farmers market.
   3. Box members shall see the dates of their box pickup
   4. Box members shall see a pickup history (did they miss a pickup)
3. Customers shall renew their CSA memberships annually.
4. Administrators shall access customer account data.
5. Administrators shall input data for customers.
6. Sub-administrators shall have a mobile view to use during farmers markets
7. Sub-administrators shall see customer names to enter data during farmers markets (Did they pick up their box? What balance did they spend)
8. The application shall provide a password reset.
9. The application shall provide a username recovery.

As an early proposal, the functional requirements list may be revised to meet the scope of the class, or to meet the needs of OWF. If this project is selected, Ms. Schlass has offered to be available for 2-3 consultations, including one face-to-face consultation, to discuss the development and progress of the project. Holliday Design will provide a staging server and database to build the prototype system. At the conclusion of the project, OWF will provide a production environment for the final product.