NHOHVA Digital Registration System

Project Sponsor: Dr. Brad Allen, CoBA, Plymouth State Univ.
Project Advisor: Dr. Zhizhang Shen, CS&T, Plymouth State Univ.
Product Team: Marcus Gobis, and Matthew Ferland, CS&T, Plymouth State Univ.

Contact Information:

Contact	Email	Phone	Address
Brad Allen	callen@plymouth.edu	(603)455-1614	17 High St. Plymouth, NH 03264
Zhizhang Shen	zshen@plymouth.edu	(603)535-2533	17 High St. Plymouth, NH 03264
Marcus Gobis	mg1021@plymouth.edu	(603)703-9673	5 Maple St. Hooksett, NH 03106
Matthew Ferland	mtf1014@plymouth.edu	(603)443-1921	12 Daniels Dr. Enfield, NH 03748

Project Description:

Current system of registration is done through a decentralized system. With the new laws requiring owners to register for an ATV club by 2018, there is a necessity for a more centralized, online system, with easy functionality. We aim to create a clearly defined, well-designed, user friendly, and well documented web site that allows ATV owners to login to a customized user account, register their ATV, join one of the various ATV clubs, and pay the fees associated with each through a secure transaction system.

Objectives include increased Revenue (ATV owners have to pay to enter a club to maintain trails.), resource cost saving, process improvements, customer satisfaction, and icreased compliance

Project Budget:

After analyzing the projected workload, we believe that the project can be accomplished in roughly 200 cumulative hours between us. With a pay rate of $20/hour, and Dr. Shen receiving $1,000 for advising, it will bring us up to a budget of $5,000.

We came to these figures by estimating the project time using industry standards. The system can be worked on through the summer of 2017 and will receive about 16 cumulative hours. Once we return to school, we will move the project into a beta version, and through client feedback, apply changes where necessary. Once the client feels that all feedback has been applied, the project can then be moved to its completion and a public release.

Project Timeline:

Deadlines:

1. Alpha – Monday August 28th, 2017
2. Beta – Monday November 20th, 2017 (Week of Thanksgiving)
3. Final Product – February 1st, 2018
4. Site goes live – April 1st, 2018

Phase 1: Planning

- What will be accomplished. Complete by start of summer 2017.
- Discuss legal ramifications of transactional system
- Research databases and find best fit.
- Research security (encryption salt)

Phase 2: Design (Mid-May→End of June)

- Come up with preliminary Database design.
- Basic Web design setup with workable user interface.
- Transaction system.

Phase 3: Basic Implementation (July→Alpha Deadline)

- Implement database.
- Transactional system.
- User Interface
    - Professional looking, user-friendly, interface.
    - Meet with students from graphic design.
    - Integrate a clean, professional taskbar.
    - Looks good on mobile devices.
    - User profile page with information specific to the user.

Phase 4: User Testing & Feedback/Update Alpha (September→Thanksgiving)

- User testing
- Get feedback from client
- Apply updates to Alpha
- Release Beta

Phase 5: More user testing & Feedback/Implement finalized product (New Year's→Final Release Date)

- User testing
- Get feedback from client
- Apply updates to Beta
- Release Final Product

Special Issues or Constraints:

a. Ensure there is security on transactions
    - PayPal – Provides great, secure transactions however, it takes a commission (2.9%) from the total transaction. Legal ramifications are unknown for government purposes.
b. Find transaction system software that is reliable and cost effective.
c. System support: Both Matt and Marcus will graduate by the end of Spring 2018. So, the support will become an issue after their graduation.

   One option is to come up with one or two training session(s) to help the users to convert current data from paper to a computer based data base, which will also pave the way for future data entry.