

Objectives

- Facilitate continuous input and feedback from the BVI community
- Identify and obtain consent from a facility to conduct long term pool testing of the passive device
- Develop user and staff surveys and consent forms for the passive device testing
- Develop and administer a user-needs survey to reference when developing BUOY assistive devices
- Create Website Interface
- Create a threaded discussion involving BVI individuals

Team Division

Team members were divided into two teams each focusing on a technology to be tested. The team was also divided into 3 sub-teams focusing on outreach with equal representation of disciplines. The three sub-teams include:

- Documentation Team
- Media Team
- Survey Team

Documentation

Responsibilities:

- Project Plan
- Midterm /Final Reports
- Daily Agenda / Minutes
- Budget Management
- Weekly Status Reports



Conclusion

The major accomplishments of our semester was our outreach to the BVI community through visits to the Chicago Lighthouse, the creation, modification and IRB approval of multiple surveys and consent forms, and the design and production of a functional website. Additionally, the documentation of our progress for future IPRO's has dramatically improved over previous semesters.

Recommendations

- Maintain involvement with the BVI community
- Ensure website is accessible to entire BVI community
- Load both passive device surveys and user needs survey on website
- Promote documentation for future IPRO teams to ensure continuity

Documentation

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Lorne Turrentine
Ryan Freund

Survey

Maggie Ng
Meghan Murdock
Hsuen Yew
Kevin Kruse

Media

Li Li
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Mohammed Rehman
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Advisors: Dr. Frank Lane & Dr. Ken Schug

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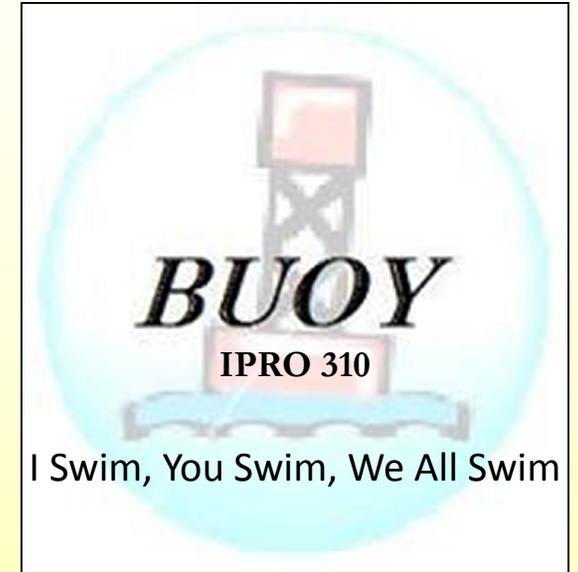
A Special Thanks to:

 **The Chicago Lighthouse**
for People Who are Blind or Visually Impaired



Outreach

Assisting Blind and Visually Impaired Individuals



MISSION STATEMENT

Our mission is to develop, test, and implement assistive technology with the community to promote safety and improve independence of blind and visually impaired individuals (BVI).

Outreach

Designing and Building Prototypes for Assisting Blind and Visually Impaired Swimmers

Survey Team

Responsibilities:

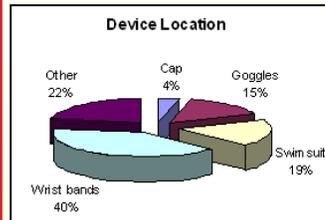
- Surveys and Consent Forms
 1. Create surveys & consent
 2. IRB Approval of survey consent
 3. Administration of surveys
 4. Compile & reporting results
- Passive Device
 1. Coordinate long-term field testing
 2. Maintenance of device
 3. User and staff feedback of device
- Community Coordination

Passive device

- Long term testing of the passive device is scheduled with the Wisconsin Center For the Blind and Visually Impaired
- User surveys for the passive device for both swimmers and staff members have been written and approved by the IRB and will be administered by the Wisconsin Center during testing in the Summer 2009 term.

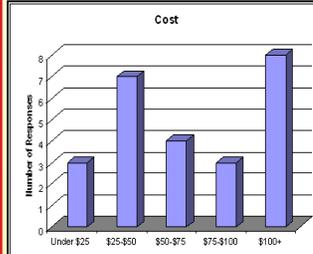
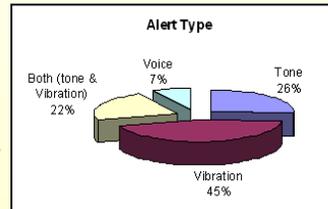


User-Needs Survey Results

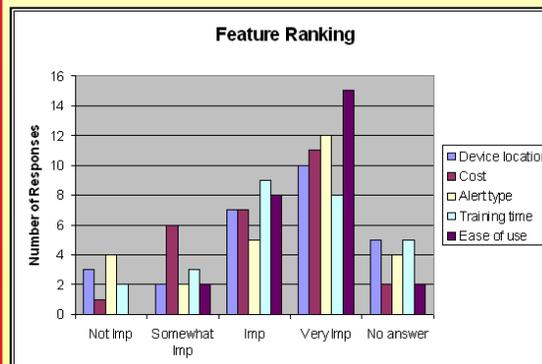


The majority of BVI individuals surveyed preferred a low-profile wrist-band device

Almost one half of the responses received indicated a preference for a vibration alert over any audio signal



The two most popular price ranges were \$25-\$50 and \$100+, reasons for the high price choice may include the opportunity for financial assistance

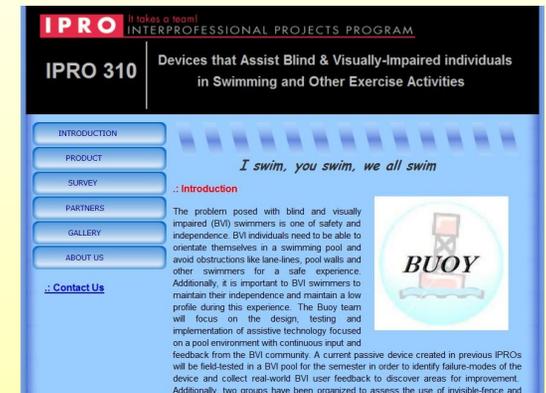


All device features were ranked as very important in the design, but ease of use and alert type were ranked as the most important of all the features

Media

Responsibilities:

- Develop an accessible website
- Create brochures / abstracts
- Create poster
- Create PPT presentation
- Create deliverables CD
- Manage iGroups



<http://www.iit.edu/~ipro310s09>

Impact of Website

The website is intended to network with the BVI community; allowing for the outreach and receipt of ideas and progress. The user needs survey as well as the passive device surveys will be more assessable to a larger community, increasing their amount of influence and feedback.