Talking Points 2010 Infosession

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What is Talking Points?

- Video
History of Talking Points

- Jim Knox and the RFID cart
  - ASSETS short paper
  - ATCS demo

- GROCS 2008 Team
  - WinMo-based client, Bluetooth tags
  - Ubicomp & ADDW papers
  - Ubicomp demo
  - SI Research Fair demo
  - 1st press release

- Talking Points v3 (2009)
  - Symbian & Android clients, Bluetooth and GPS location
  - South U. user tests
The Talking Points Team(s)

- **Winter 2008**
  - Jason Stewart, Jakob Hilden, Michelle Escobar, Kumud Bihani, Sara Bauman, Travis Yoo, Peter Kretschman, Josh Rychlinski

- **Fall 2009**
  - Jakob Hilden, Travis Yoo, Peter Kretschman

- **Winter 2009**
  - Jakob Hilden, Travis Yoo, Peter Kretschman, Rayoung Yang, Eunice Shin, Ashu Kaushik, Sang Koh, Zhenan Hong, Andres Montejo, Dan Marano, Taeho Ko, Tammy Greene, Pablo Quinones

- **Fall 2009**
  - Travis Yoo, Peter Kretschman, Rayoung Yang, Eunice Shin, Ashu Kaushik, Sang Koh, Zhenan Hong, Tammy Greene, Pablo Quinones, Zhenan Hong

- **Winter 2010**
  - ???
The Next Step: Talking Points 2010

- We have attracted the interest of University administration
  - Royster Harper, VP of Student Affairs at UM
  - $10,000 to support installation of Talking Points in Michigan Union
  - Also, outdoor tagging of central campus
- Limited pre-pilot installation in Shapiro 1st floor as well
## A Rough Timeline

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Date</th>
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<tbody>
<tr>
<td>Shapiro Testbed Plan</td>
<td>Feb 1, 2010</td>
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<tr>
<td>Shapiro Testbed Deployment</td>
<td>March 1, 2010</td>
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<tr>
<td>Mich Union plan</td>
<td>April 1, 2010</td>
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<tr>
<td>Mich Union install start</td>
<td>June 1, 2010</td>
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<tr>
<td>Mich Union install complete</td>
<td>August 1, 2010</td>
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<tr>
<td>Launch</td>
<td>Sept 1, 2010</td>
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<tr>
<td>Full-campus proposal</td>
<td>Dec 1, 2010</td>
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UX Team

- Client UI design(s)
- Tag deployment locations
- Content creation
- Work with other stakeholders
- Deployment planning
- User testing
- Research contributions
UX Team Open Questions

- How do we do iterative testing?
- How does content and tag range interact?
- What are the right places to tag?
- How would we add navigation capabilities?
- What are the commercial opportunities?
- What are the research contributions?
Tech Team: System Architecture
Client Team

- Build and maintain Symbian and Android versions
- Decouple client code from tag detection code
- Add navigation functionality
- Test and verify on all supported clients
- Determine recommended configurations
- Design installation, deployment, upgrade processes
- Possibly: explore alternative clients (e.g., iPhone, Palm Pre)
Tag Team

- Gain a deeper understanding of the limitations of tagging/location technology
- Explore tagging hardware options
- Build a portable pilot testing kit
- Figure out how to control the range & precision of tags
  - Build a custom tag
  - Explore triangulation
  - Understand how tag placement effects detection range
- Explore support for navigation (Android’s built in compass)
- Possibly explore other tagging/location approaches (RFID, QR codes, WiFi triangulation)
Server Team

- Update and maintain database and client protocol
- Explore integration with other Location-Based Information systems (e.g., Google, Yahoo, Yelp)
  - Revisit “build vs. buy” decision: should we be using a standard protocol?
- Design the Talking Points Information Service
Talking Points Information Service

- Talking Points as an infrastructure for multiple applications
  - Wheelable: LBI for wheelchair accessibility
  - Rayoung’s international student guide
  - Self-guided campus tours
  - Freshman orientation application
  - Building maintenance application
  - Friend finders (Facebook plugin)
  - Etc., etc.

- Task: defining the TP web service interface to support multiple client development efforts (in the future)
Scope

~ 40 tags in Michigan Union
~ 10 client devices for checkout at info desk

20 – 100 Outdoor locations to tag on central campus
This is a pilot

- Leading up to what?

- A truly useful service
  - What would it take to make this available to all visually impaired students and visitors to campus?

- Full campus deployment proposal
  - Use the pilot to attract a big funder

- Business opportunity
  - Dr. Harper thinks that other campuses will be beating down our doors to get one
Interested?

- Please fill out form here

http://mwnewman.wufoo.com/forms/talking-points-2010-interest-survey/