Objectives for Spring Semester 2006

Ubicomp Lab
Intelligence Space Laboratories
National Taiwan University

Graduate students: 滅 Hew (Bing), 葉 仇 (Shun-yuan), 錦 なもの (YiChao), 田木丰 (Ben), 張秋豪 (Kenghao), 將 女 (Willy), 吳 菲 (ShinJan), 鄭 潤 (Edwin), 林 明 (Toung), 吳 茭 (Haoji), 魏 榮 (Burt)
Undergraduate students: 濱 健 (Pei-yao), 陳 人 (Jen-hao), 王 淑 (Li-shan), 許佩伶 (Peggy), 張 倫 (Elefant)

Diet-aware Dining Table: Kenghao, Shih-yen, Toung

Deliverables
Deadlines
 Owners

□ Produce a longer version (3~5 minutes) of the demo video
□ Extend the Pervasive 2006 paper for a Journal paper submission (ACM TOCHI)

Persuasive Technology: Toung, Kenghao

□ [DONE] Complete an early evaluation of the smart lunch tracy
□ Extend it to a paper for UIST or Ubicomp conference
□ Collaborate with a NTU behavior psychologist (Prof. Chen) on a new persuasive technology

Geta Sandals: Shun-yuan, Kenghao

□ [Done] Complete the revision of the PUC paper

Energy-aware Location System: Bing, YiChao, Willy

□ [DONE] Implement a positioning engine optimized for the Zigbee/Telos
□ Implement energy-saving adaptation method (mobility-aware, accelerometer-aware, or dynamic offloading)
□ [DONE] Produce a video
□ [DONE] Produce a paper for IEEE SECON 2006
□ [DONE] Implement a demo system for NTU/IBM collaboration

Collaborative Location System: Willy, YiChao

□ Extend the Pervasive 2006 paper into a Journal paper submission (IEEE Transaction on Knowledge and Data Engineering, or IEEE Transactions on Mobile Computing)
□ [DONE] Extend the MSWM 2005 paper into a Journal paper submission (IEEE Transaction on Parallel and Distributed Computing, Mobile Computing, etc.)

Location tracking watch & ring: Shin-Jan

□ [DONE] Create a better looking prototype with Telos, RFID reader, and RFID antenna
□ Produce a journal paper on object location tracking (IEEE Transaction on Knowledge and Data Engineering)
□ Shoot a high-quality video with the new prototype

Smart Kitchen: Haoji

□ Produce a paper design of a smart kitchen (appliances, sensors, wiring, sinks, etc.), including an application scenario and consultation with domain experts
□ Prototype the smart kitchen

Context Slides: Jen-hao, Pei-yao, Lishan

□ [Done] Design a new presentation template & conduct first round of prototype and evaluation.
□ Conduct second round of refinement and evaluation.
□ Come up with an example of detecting & presenting addition classroom context (speaker’s context, etc.) and implement it.
□ Produce a Ubicomp poster
<table>
<thead>
<tr>
<th>Past as Shadow and Context: Jen-hao</th>
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<tbody>
<tr>
<td>□ Conduct an initial round of design, implementation, and evaluation.</td>
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<td>□ Produce a Ubicomp poster</td>
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<tr>
<th>Intimate object: Kenghao, Peggy, and Pei-yao</th>
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<th>Group Things</th>
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<tr>
<td>□ Better looking lab web pages (people webpage, pictures, etc.)</td>
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<td>□ Setup a new lab space in BL</td>
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