Hybrid Physical-Digital Spaces

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Hi, I'm Michael!

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Where Would You Rather Work?
The Project

Stage 1:

Design hypotheses about what makes indoor environments support human wellbeing. Validate in in small-scale lab study.

Stage 2:

Validate hypotheses in longitudinal office study.

Stage 3:

Based on findings develop digital interventions to support human wellbeing in indoor built spaces.

(This is where this app fits in!)
Informed Consent

• The study has yet to begin; we have not finished participant recruitment.
• Internal testing will be performed by people in the Stanford HCI lab before deployment.
• Participants will provide informed consent through the app as they are onboarded to the study.
Informed Consent - Deception

• "Digital Professional Development" – a new mobile-based series of professional development exercises.
Need Statement

**Problem:** there exists limited understanding of which features of built environments correlate most strongly with occupant wellbeing.

**Population:** group of ~50 participating office workers at a corporate partner's office.

**Outcome:** research-backed insights into indoor built space design to support occupant wellbeing.
Where We Left Off... (Midpoint)

- Short ESM (experience sampling method) surveys to capture emotional wellbeing.
Live Demo!
Contributing to CardinalKit

- iBeacon ranging for indoor location tracking, sensor data aggregation.
Feedback from Testers

**Stars:**
- "The revamped surveys are much better - this is great!"
- "Love the visualization of my steps that I've taken."
- "The checklist interface is really user friendly."

**Wishes:**
- "Modify the survey button to show 'incomplete' when the user has yet to take the survey twice."
- "Backend-to-app paradigm – want to be able to update more without making a new release each time."
The Road Ahead – Next Steps!

• **Backend-to-app paradigm** – update almost anything locally without requiring an app update.

• **Test New Beacon Code on Hardware Device** – I was unable to verify the beacon ranging functionality from within the Simulator. 😞

• **Medium-Scale Beta-Test** – test the application with ~10 participants from the HCI Lab for more feedback.