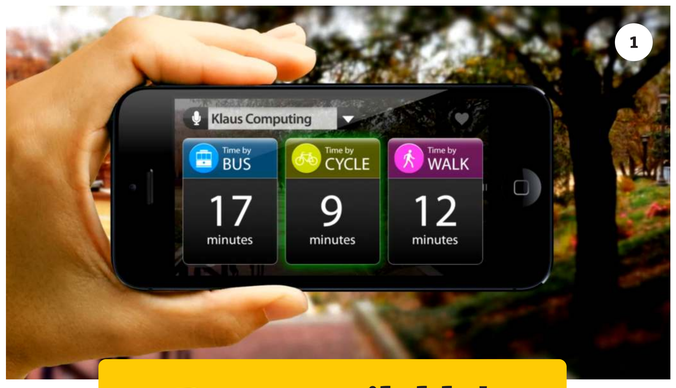
the peerspun PROJECT

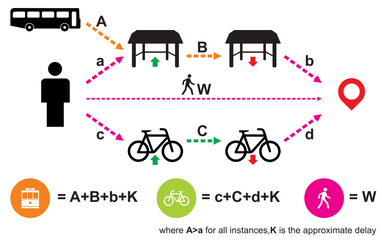
peerspot

"AR based iPhone app for intra-campus transit"



Demo available!

1. **Transit Option Suggestion**



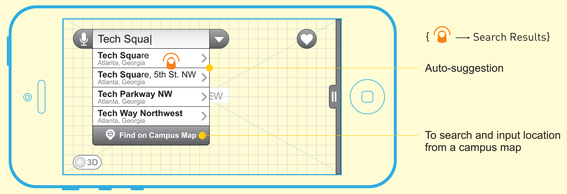
2. **Trolley Occupancy**
3. **ViaCycle location and availability**
4. **Unlock viaCycle from within the app**
5. **Distance / Time to destination**
6. **Favorite destinations**
7. **Track this bus**

   Pins a bus onto the viewport
8. **3D view to 2D maps**

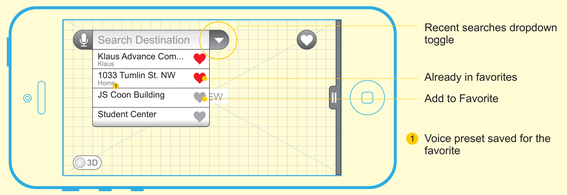
   Held upright shows the AR View, held flat shows the map view
9. **Slow movement alert**

   The system warns the users that their pace is too slow and is liable to miss a trolley

Concept Integration 6



Screen 3: **Type to Search**



Screen 5: **Recently Search Places**

Screen 12: **2D Map View**

7 Mockups & Wireframes

Summary

+ The overall impression - positive.
  Novelty of the AR view - see vehicles in realtime.
  Useful to users who were new to the campus.

− Concern that there were other systems with similar functionality.

* Favorites system has been updated to allow multiple modes of adding a search destination to the favorites list.

8 Prototype

9 Usability Testing

Participants unaware about **ViaCycles.**

Half of participants expressed a preference for **walking** over other modes of transport.

Participants had difficulties determining what the **occupancy bar** indicated.

At least one participant **preferred portrait** mode over landscape, regardless of the limitations.

Participants confused at **decision screen**. Alternate means of exiting should be made available.

The **transit options slider** and its functionality not readily apparent to users

The method of **adding a destination** to the favorites list was also not readily apparent to most users

5 Poster Presentation

Poster presentation on the 3 design concepts and get feedback on the ideas.

4 Three Design Concepts

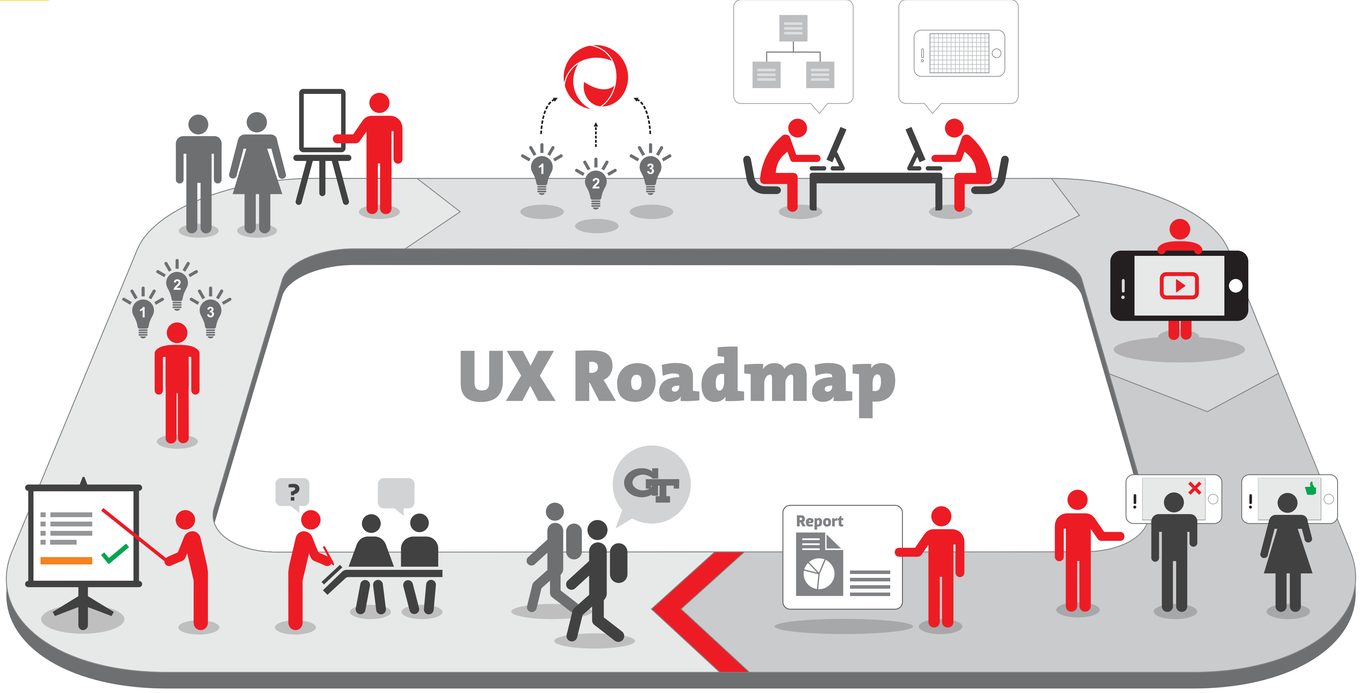
StepStop
GoGlow
SpinPointAR

3 Function Allocation

Analysed the constraints of the group: Short time between classes, uncertain bus schedules, users in transit

Prepared a feature list of the system

There is a need for a quick, convenient, efficient transit option to aid Georgia Tech students in navigating on campus without confusion!



2 Needs & Task Analysis

After preliminary interviews with our target group, we determined our problem space including issues and constraints involved, and the subsequent problem definition

1 Describing the Context & the User

We settled upon the user group comprised of GT students who have difficulty quickly and efficiently navigating around campus.

10 Usability Report & Future Work

Usability for **new users** may be aided by incorporating a **pop-up instructional message** when users first begin exploring the app. Additional help in the form of a '?' or 'info' icon may be useful as well.