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# MINGLE

# Mingle

- ◎ Fervor for mobile
  - Public interface to Fervor
  - Incorporates accident data and heat map visualizations on mobile devices
  - Simple interface for viewing multiple data sources
  - Simple filtering on similar conditions/time period

# Why??

- ◎ Public wants to know:
  - Commuters
    - Where to live
    - What is the commute like
    - Is it safe
    - What are the alternative routes
  - Motorists/Tourists
    - Lack of knowledge of surrounding area
    - Weather conditions to be aware of and areas to avoid

# Data Sources

- ⦿ Accident and Speed data provided by CATT Lab
  - Accidents from 10/03 – 12/05 for the Maryland/DC region
  - Speed data for February 2007 collected from sensors along Maryland highways
- ⦿ Live incidents collected from Yahoo, restricted to severity 3 and above

# Data Layers

- ⦿ Each source encodes the information into a collection layer
- ⦿ Layers are stacked as overlays on the map to show geospatial relation
- ⦿ Sample layers
  - 0 – Map Controls
  - 1 – Accident archive (Catt Lab)
  - 2 – Speed Data (Catt Lab)
  - 3 – Incident Data (Yahoo)

# Basic Controls

- ⦿ Two unmarked buttons for showing/hiding menus:
  - Top left corner toggles filter panel
  - Bottom left corner toggles layer controls
- ⦿ Buttons along the top switch the active layer

# Layer Control

- ◎ Basic controls for all layers:
  - Show/Hide/Activate layer
  - Adjust transparency and intensity
- ◎ Unique layer controls:
  - Map API (0): Zoom controls
  - Accidents and Incidents (1,3): Toggle heat map, adjust the heat map spread and icon size
  - Traffic speed (2): Sensor link intensity

# Filter Panel

- ⦿ Panel displays filters for the active layer
- ⦿ Sample filters:
  - Accident layer
    - Show all accidents that occurred on Tuesdays
    - Show all accidents that occurred in May
  - Speed layer
    - Restrict sensors with high or low recorded traffic speed

Demo