What has changed from last meeting:

* Nothing

**Experience Using Robocat at meeting:**

* Bugs:
  + Color tracking filtering:
    - Intended function: use 5 sliders to filter out all colors from the image except the one the cat is desired to see. Used in color tracking (e.g. in “track red” all colors except for red are filtered out of the cat’s perceived image. The cat will then use this information to move its head to follow a color.
    - Problem: we’re unsure if colors are being saved incorrectly after filtering or if the phone isn’t communicating with the servos motor correctly
    - Fix: ? general debugging to identify cause
  + Menu
    - Intended function: developer menu with easy access to functionalities of cat.
    - Problem: only accessible via voice commands; voice commands aren’t always functioning properly.
    - Solution: add a way to access the menu via touch
  + Voice command recognition:
    - Intended function: the cat listens and recognizes the english words spoken to it
    - Problem: there’s currently no way to know if the cat heard the command or heard it correctly. We don’t know if commands aren’t working properly, or if the cat simply isn’t hearing the command sometimes
    - Fix: add option to display what the cat is hearing in the developer options of the app for debugging purposes
  + Servos motors
    - Intended function: various commands can activate the servos motors to perform different functions
    - Problem: no commands can cause the servos motors to do anything.
    - Fix: General debugging. Are the commands broken, or is the phone not communicating with the servos motor correctly
* Properly Functioning:
  + “Good” and “bad” commands
    - Function: changes face of cat to reflect command

**Immediate goals:**

1. Group - We will demo the only 2 known working functions on Thursday using Lukas’ phone. Explain intended functions, and the actual state of the RoboCat. Bug fixes and goals to be discussed
2. Voice Recognition Team
   * Alex -
     + document all of the voice commands which are currently supposed to be working correctly
     + Add a way to access the menu via touch
     + Longer term: improved accuracy of speech recognition
   * Kurtis -
     + Clean junk code out of project
     + Add option to display speech being heard by the phone
     + Longer term: Continuous voice recognition
3. Environmental Mapping
   * Research libraries to utilize ultrasonic sensors for environmental mapping
   * Add documents pertaining to mapping to github
   * Zach:
     + Implement battery indicator on the app:
   * Seattle
     + Log accelerometer data
4. Facial Recognition/color Tracking
   * Facial Recognition: OpenCV code was never properly functioning for this app; therefore, we’ve chosen to use the Google API for facial recognition going forward
   * We’ve also chosen to move the color recognition project to use the android API
   * Quintin:
     + Implement Facial Recognition HelloWorld using android API
     + Longer term: use legacy color tracking code to inspire how the cat’s head will move to follow colors
   * Lukas:
     + implement color recognition using the android API
     + Longer term: use legacy color tracking code to inspire how the cat’s head will move to follow colors