Meeting 2/1

Justin, Jordan, Nick

* We labeled all of our beacons with their major:minor (duct tape and marker on outside).
* We set the beacons to broadcast continuously at 1s intervals (before, they only broadcast after being tapped)

We came up with a to do list, due by 3pm on Tuesday:

* Get Pi to 'see' beacons
  + LATER: Finish Pi - scan, upload, and automated.
* Firebase - change where heatmap info is stored  
  Put info into seniorprojectbym > heatmap
  + Later, delete "locations"
* Remove heatmap button from app (note: do not have Pi's upload *for now*)
* Fix security rules for database access - in app and server
* Check firebase settings…
* Look at and fix firebase stats - simultaneous connections
* Firebase: Fix pruning functions. Maybe tune frequency.
* iOS GUI - enough for a CS major
* Android GUI - enough for a CS major
* iOS Error handling? Android Error handling?
  + No permissions
  + Bluetooth, gps, or wifi off
  + Can't connect to firebase properly
  + If user kills app (ungently)
* iOS deployable? Make sure it compiles all nicely
* Android deployable?
* User stories:
  + Add new beacon (should not be able to add another's beacon)
  + Scan for beacons in background
  + Upload
  + Download and display
* After someone adds a beacon: (Jordan’s idea)
  + Change the default password (to some thing we pick for now)
  + Uploads to database seniorprojectbym > claimedBeacons > "major:minor"
* Upload to github

Meeting 2/6

Justin, Jordan (Nick was on job interview - good luck)

* Justin: Figured out all the Pi functions (how to scan, how to upload, how to automate).  
  Just need to integrate and write readme for github.
* Based on evidence in Firebase, Nick has worked on updating Android’s heatmap features, and the claimed beacons feature.  
  However, when Jordan and Justin installed the Android app, it did not work. It crashed whenever we tried to make a database request. So, we let Nick know this.
* Justin finished with editing firebase settings.
* Justin edited firebase functions (new database heatmap structure helped!). Done.
* Jordan is continuing to have difficulty with iOS. Says he will continue to work, should have something deliverable for Dr. Bulut on Thursday.
* Nick pointed out: Our apps are not authenticating at all!  
  We want to limit db access to only signed-in users. But, it seems that Justin implemented sign-in using some other google service… The sign in is not integrated with firebase.  
  So, for now, db is still exposed. Justin will have to resolve later (this is background issue, so not immediate issue).

Meeting 2/8

Dr. Bulut, Justin, Jordan, Nick

* Pi: Done. Justin demoed by simply plugging Pi into an outlet, and within a couple minutes we could see it updating in Firebase.
* Dr. Bulut says we can order 3 more Pis.  
  Justin will submit this order form.  
  Dr. Bulut will talk to someone about placing these in Engineering building.
* Android: Nick demoed. It seems all the user stories have been implemented! We were even able to test the ‘claimed beacons’ with Justin manually editing the db.
  + May have had a couple bugs pop up as Dr. Bulut tested.
  + Dr. Bulut’s main priority/complaint was the UI! He wants better graphics, and more so wants better “flow,” i.e. intuition for users.
* iOS: Jordan says he’s really having trouble with background scanning. He’ll have to continue working with Dr. Bulut and other iOS people on this.
* Dr. Bulut says eventually we will want to implement a “patrol route visualization” feature.  
  Otherwise, let’s just focus on a small beta test with us, then with some friends, then maybe larger.
  + Dr. Bulut wants us to implement a feature where all observations uploaded are assigned a rotating id chosen by user’s device.  
    That way, if we want, we can run some data science on the observations.
  + Also, he wants us to get rid of db pruning functions, so we can retain some data over more time.  
    *This is good, since the functions were exceeding their quota on firebase!!*

Meeting 2/13

Justin, Jordan, Nick