Meeting 11/6

Justin, Jordan, Nick

* Justin still working on Sternheimer stuff  
  Checked: Nobody has issues with public speaking
* Nick: Has worked on database upload.
  + Had issue with authentication. Server would not accept.
    - So, for now, server accepts all requests
    - Will have to troubleshoot later (Justin will help once code pushed to github)
  + Will work on finishing upload, download, and cleaning up GUI before meeting tomorrow.
* Jordan:
  + Spent time learning about iOS background tasks and asynchronous tasks.
    - Still not sure how to make app run automatically in background. Will talk to Dr. Bulut.
  + Plans to work on database upload and download, merging iOS sign in, and maybe the GUI tonight.
* Nick and Jordan found interesting feature of firebase: Firebase can manage a local version of the database while waiting to upload to the server.  
  So, we may be able to avoid managing our own data storage locally.
* Dr. Bulut confirmed iPhone has been ordered
* Had a long conversation about what beacons to order
  + Only cheap/affordable choice domestically is Gimbal, at $5 each.
  + But, all USA companies we looked at sold HW and SW as a SAAS package. We would have to use their SDK.
    - This breaks all security. Either makes it difficult to change tag names, or there’s a central database of tags and owners, ….
  + So, we will look at Alibaba.
    - Justin will get quote asap.
    - Jordan and Nick would also still like to order a couple Gimbals to test.

Meeting 11/7

Dr. Bulut, Justin, Jordan, Nick

* Jordan asked about having an app automatically run in the background, from startup, with no user input.  
  Dr. Bulut used example of current Tile app. Every so often, if the app is closed, he’ll get a push notification “Tile is not running. Please start it.” Basically, appears that a server will occasionally push something to your device to check if it’s running.
  + We will want to eventually implement this.
* Demoed our progress
* Discussed Alibaba order - Sounds good, just need to get him the order form and details.
* Dr. Bulut encouraged us to focus on the Sternheimer presentation. Focus on features important in that presentation. We’ll catch up after this.

Meeting 11/9

Justin, Jordan, Nick

* Justin suggested we order these beacons <https://www.alibaba.com/product-detail/iOS-Android-iBeacon-Smart-Anti-Lost_60440491871.html?spm=a2700.8443308.0.0.j6kluR>
  + Group agreed. Decided to order 6 beacons.
  + Justin will work with Dr. Bulut and Tracey to order asap.
* Sternheimer: Application packet due Monday at noon.  
  Then, Powerpoint due Thursday at noon and presentation Friday morning.
  + Justin will work on application over weekend and send out draft.
  + Group will meet at 10am Monday and finalize packet.
* Dr. Dahlberg wants us to meet 2x a week from now on.  
  And, he wants presentations from each group.
  + Jordan volunteered for us to present next Thursday, the day before our Sternheimer presentation.  
    This will be an opportunity to practice.
  + We will also practice once before that.
* Nick and Jordan will work to finish by Monday:
  + Make GUI ‘pretty’
  + Finish implementing download
  + Having map display whatever ‘extra’ string is stored in database (used for static beacons), even if we’re not yet uploading that.
  + Jordan needs to implement now that he’s learned it.
  + Nick needs to filter his scanning by UUID
* Other notes, from Nick::
  + - Only storing locally and then uploading 1 most recent observation of each tag
    - For now, also only going to download 1 most recent observation.
    - Nick also has a map of All tags, in addition to individual tag.
* After Sternheimer, we still need: trim database, heatmap, security, static beacons,

Meeting 11/13

Justin, Jordan, Nick

* As a group, finished Sternheimer application and submitted.
  + Justin’s draft was unfinished in morning.
  + Nick and Jordan helped correct budget, and edit essay.
* Presentation due Thursday at noon
  + Justin will make draft.
  + Will meet Wednesday at 1 to finalize practice
* Will not meet with Dr. Bulut tomorrow. Will continue working on presentation.

*On 11/14, Justin met with Tracey.*

*iPhone was delivered. Handed off to Jordan.*

*Ordered beacons with Tracey.*

Meeting 11/15

Justin, Jordan, Nick

* Finished preparing our presentation for the Sternheimer award
* Practiced presentation

Meeting 11/16

Justin, Jordan, Nick

* Practiced presentation in class.  
  Comments were positive. But, still need to cut off about 2 minutes.
* Continued to practiced presentation together after class.
* Will be presenting tomorrow morning

11/20

* Notified that we were awarded the Sternheimer award!  
  Award of $660
* Will not be meeting this week (Thanksgiving). Will resume next week.
  + Jordan communicated this to Dr. Bulut.
* Also, beacon order should arrive sometime over break.

Meeting 11/27

Justin, Jordan, Nick

* Tags arrived last week. Jordan picked them up.
* Justin was emailed the software and documentation for tags. We’ll need to work with it to learn how it works.
* This is what we still need to do (total):
  + Integrate new tags
  + Have server prune old records automatically
  + Battery management - how often to upload/scan/etc
  + Talk to VCUPD, ask what features they need, ask how to implement long term.
    - Ask Dr. Bulut: Do we still want heatmap? We are convinced that it will actually be useful.  
      And, when can we meet?
  + Clean everything up, including code and UI.  
    So, we’ll need to test.
  + Security features
  + Plan and rollout beta test.
    - Order raspberry pi’s (ask Dr. Bulut if we can order.  
      And program them.
    - Order more beacons
    - May need to post apps to app store? - how to distribute to users?
    - Have a plan: Who? When? … do we want the tags back? Etc etc etc
* Ask Dr. Bulut: Is end goal really still for VCU to implement? Is that feasible?  
  Just so we understand.
* Until next Monday:
  + Jordan and Nick: Integrate new tags with iOS and Android
  + Justin: Any paperwork, plus have server prune old records

Meeting 11/28

Justin, Jordan, Nick, Dr. Bulut

* Says okay, order the Raspberry Pi’s. Send him the order form.
* Says yes, goal is really to have VCU implement our system.  
  Not 100% sure how that will look long-term though, like who will maintain the system?
* No meeting with VCU PD yet.  
  Instead, if he’s satisfied with results at end of this semester, he’ll set up meeting for beginning of Spring.
  + This would require a working demo, and a plan we can provide them by presentation (ppt)
* Says yes, implement heatmap for now. He’d like to at least be able to show police an example of the kinds of things we can do.
  + And was more specific. He wants heatmap to just display location of all users.
* Assignment: Dr. Bulut wants to see a demo by the end of the semester. He’ll base our grade off that.

*No meeting 11/30. Jordan not in class.*