CS 307 Sprint 1 Retrospective

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- Implemented and Working
  - (Web) Account Creation
    - This process went rather smoothly. The login was a simple javascript process which we added to a template used in the server. We were able to get the username and email from the google login very easily and were able to store the information in an Account object stored in our database.
    - We can improve this portion by adding a logout button to the current website which will log the user out, and change some of the views (Map and Tak) that our available to see viewed.
  - (Web) Creating a Map
    - This process went smoothly as well. A logged in user is able to view mapitapps.appspot.com/maps and see a list of all their current maps as well as a button to add a new map. The button brings up a model which allows a user to enter in the name of the map. Once the user enters the name and clicks the add map button, the map is added to the list of current lists shown to the users and it the a new map object is also added to the database.
    - We can improve this in a few ways. First the initial map loads all of the users map data before showing it to them, which can make loading a large set of maps very slow. We can fix this by only loading a few of the users map at a time, and load them on demand as the user scrolls down the list.
  - (Web) Create a tak
    - This went very well. A user can click on a point of a map and it creates a marker. If they click somewhere else it will move the marker. With each click it updates a form adjacent to the map with the coordinate information for creating a new tak. It also has validation built in with user feedback to help the user submit useful information.
    - This can be improved by creating a search box to go with the map to help find a specific location. Also the server can further validate the submission and return feedback on success or failure.
  - (Android) Map Data Object
    - This went really well in creation and it works. This object holds all the data you need to know about a map, such as title, id, managers, and all the information about Taks that are attached to this map.
    - This can be improved by syncing the information with our server so multiple managers/users can access this data. Other than that, it is important that this object remain relatively unchanged to insure consistency across the project.

- (Android) Tak Data Object
  - It works well. This object holds all data related to a tak, such as label, latitude, and longitude.
  - This object meets our expectations for sprint 1, however in sprint 2 we plan on adding a pointer that points to the map it belongs in.
- (Android) Tak List
  - This was fairly simple in creation. Currently displays all Taks that belong to the opened map.
  - This could be improved by adding more information such as Tak administrator and Tak "Delete". More improvements include clicking on a Tak to pull up more information such as GPS coordinates and having the option to move to this tak on the map. Also, adding metadata to Taks could be an improvement.
- (Android) Backend Database Cache
  - The backend cache is fully functional. Maps and taks can be added to it as desired, and it persists between instances of the application.
  - The database does not synchronize with the server in any way, which will be improved during sprint 2.
  - The database is also not multithreaded, which can hang the UI significantly. This will be improved during sprint 2.

➢ Implemented but did not work well

- (Backend) Routing Handlers
  - We implemented basic routing handlers for items like creating a map and a Tak. But we did not fully get working the sending of JSON as a response to the request. We did however get most of the POST requests for the routing handlers working.
  - To improve this we can work on creating the routing handlers GET requests responses, making sure they send serialized json.
- (Android) Creating a Map
  - A user is able to create a map without problems. They are prompted to enter a map name and must hit the "Create" button.
  - The UI for map creation needs significant refinement, as well as graceful scaling to other screen sizes. This will be done during sprints 2 and 3.
- (Android) Adding a Tak
  - Taks can be created once a map is selected, and the Tak is associated with the currently selected map. The Tak is created at the user's last known location.
  - It can be improved by adding the functionality of adding a Tak wherever the user clicks.
  - The UI for creating Taks needs refinement. This will be completed during sprint 2.
  - This will be improved in sprint 2 by syncing the information with the server.

➢ Not Implemented

- (Website) Adding a Tak to a map
  - We implemented creating a map and creating a Tak, however we did not get the system working together. Getting them to work together should not take too much work and is a simple job.
  - We need give each Tak an associated id of the map it is connected to and add these to the Tak object. Then when a map clicked on, instead of a list of all the Taks in the database being loaded, only only the Taks associated to the clicked on map would be loading. This is very similar to how only the users map are loaded when going into the map view.