CITS3200 Team 4
Minutes of Meeting 9, held 25th September 2024 (Audited)

Present: Fred, Jack, Susheel, Bob, Lilee
Absent: N/A
Location: Online

Agenda Items:

    I.   Progress Reports
    II.   Tracking of Jira goals
    III.   Allocation of Tasks for this week
    IV.   Thoughts on stretch goals
    V.   Project demo

Progress Reports:
Susheel -
Working on integrating Jacks gpx code into routes.py
Modified the way we translate into gpx format
Function expects JSON data, reads from dict, reads in files
Working on saving files in current directory
Running into erro → how data is passed in
Making into files for the purpose of downloading a file
Bob input → less files the better

Bob -
- Got auth working now so only authorized personnel have access to the database and the server.
- Most of our resources are now in Jim's tenant. This is easier for the handoff at the end. (except the database and the blob storage.)
- This may be the best way to proceed as the client may wish to set up. I we provide documentation then this should be good. We could clarify this with Jim?
- Reasonable assumption as the IP for this project dictates that the user would have their own implementation for the database anyway.
- Encountered a few permissions issues and these issues may be magnified if we are to make changes to the database or blob storage.
- After a user presses end search, the gpx file can be sent straight to the db.

Lilee -
- Built off Bob's Azure database so that now we can,

- Need to install a driver so that the database can be used for local testing. Noticed an error that occurs when database hasn't been updated in a while. (this is probably due to our server plan - bob. Might just be as simple as prematuraely pinging the db to avoid the error)
- Dropdown menu on web app only shows searches that exist on he db.
- Could also implement a button that draws the search on the map.
- Is historical data going to exist on index.html or should we have another page for this? - jack. This may affect the front end. Will make a rough mock up of how this would work - sush.

Fred -
- Worked on a lot of documentation for all sections of the project.
- This is a core requirement .
- Hardware and technical documentation for how the project and how to operate everything.
- Made a testing file which allows us to select variable numbers of base stations and seeing how they are rendered on the map.
- Will leave UI guide till the end as that has not yet been finalized.

Jack -
- Worked primarily on the front end and the user experience of the web app.
- Made branch called css_download_search which houses these changes.
- Katrina was in charge of the front end and so we are a little behind on the front end part. We are yet to agree on a final version of how this will look.
- Made start and end search button more central and overall just made the UI a bit more intuitive.
- Could incorporate SES colours so that it suits the client.

Tracking of Jira goals:
should agree on a UI design as soon as possible and send it to the client for approval.
We do need to make changes to how searches are conducted:
- We need to be able to select which base-stations are going to be used on a search.
- Currently when we click start search, it starts a search for all the active base-stations
- Need to agree on how best to do this **ASAP**.
- Could implement this very easily if we assume that each search is being coordinated on independent instance of the web-app. We would just need to check if this is okay with client.

NOTES:
- Documentation of the web-app - Bob. should be placed in the technical docs folder.
- UI improvements - Jack. Will work on mapping go automatically to the search area instead of a random location.
- UI mockup - need to agree on this by the end of this week. Will brainstorm ideas.

- Historical data - almost working but Susheel still needs to work on

Allocation of Tasks for this week:
Jack:
- UI Improvements
- Change mapping so that it begins centered around points

Lilee:
- Finish up working on the retrieving data from database
- Testing Susheels gpx.

Susheel - finalize Gpx downloading and translation from json the gpx.

Fred - Web app detecting loss of connection (>5 minutes without GPS ping after starting a search)

Bob
- Ensure Web App works with Database
- Multiple search support (simple, multiple tabs)

Thoughts on stretch goals:

(Stretch Goals):
- **Starting a search:**
    - Jim suggested an interaction between the web app and base station
    - We thought we could implement it by - having the search team tell the operator when they are starting a search, put a field in the web app to filter GPS pings from a base station to be from after a specific time (the start time of the search) - so we don't see GPS pings of them driving down to the search area - Fred.
- **Various UI improvements to web app**
- Calculating the **percentage of a search area covered** (Folium GeoJson polygons/multipolygons?).
- Jim suggested **buttons and LEDs on the base station** to restart the device, check comms to tracker, etc (we concluded we likely would not be implementing this).

Project demo:
- The field test is proposed to be after the deadline. Is this okay? **Will confirm with Client.**

Mentor Meeting:(??)
- Will we need to follow this up

- Will send him one more email to follow up on the mentor. Have not received a response in 13 days (a little unprofessional).

Final Notes
- Believe the client wants the ability to render historical data over a live search for analytics purposes.