



Spoof Detector

Team Members

- Leah Casey
- Sam Gross
- Logan Parker
- Ashley Vanaman
- Michaela Walker

Client Information

- Pierce Aerospace
 - Chris
 - Michael
 - Gary

Mentor Feedback

- Mid-Iteration
 - Was excited we had actual code to present to him.
 - Our mentor attempted creating simulated data on SquidRID as well; he did not get far either in figuring out the code and getting it to run.
- 1st Iteration
 - Liked our code progress and that we were able to get data returned this early.
 - Stated Docker and JFX are hard to implement in code.

Client Feedback



- Feedback:
 - Liked that our code is currently set up to distinguish for data completeness. Client believed this was a good beginning stepping-stone.
 - Liked our current progress on the project.
- Results of software use
 - Liked the data being returned and that it separates clean from null/incomplete data.
 - Recommended possibly redoing overall architecture to be more detailed on what classes do and what we hope for them to do.



Iteration 1 Features

Import JSON

We are not currently able to display the information provided to us by our client. We will update this if that changes.

Process JSON

We cannot currently show the proprietary code here. This will be updated if permission is given to show it.

Text- Based Output

```
(UID: 1581F5FJD22BB00BS02N, CoT Test Message, 1581F5YHC22B50021TSB, d024a45b1a74, d4a1a4ac21e3b566c5, fc08ade8bafe, e3e0744fee48, 5a85b46c633b629a25]

UID with missing or empty latitude or longitude: 1581F5FJD22BB00BS02N
UID with missing or empty latitude or longitude: CoT Test Message
UID with missing or empty latitude or longitude: 1581F67QD233J0140348
UID with missing or empty latitude or longitude: d4a1a4ac21e3b566c5
UID with missing or empty latitude or longitude: e36393f297a5
UID with missing or empty latitude or longitude: e3e0744fee48
UID with missing or empty latitude or longitude: d024a45b1a74

UID Count: 11
Total Json Item Count: 28836
Clean Count: 27930

Unique IDs: [1581F67QD233J0140348, ecbb464826e9, e36393f297a5, d024a45b1a74, 1581F5FJD22BB00BS02N, CoT Test Message, 1581F5YHC22B50021TSB, d4a1a4ac21e3b566c5, fc08ade8bafe, e3e0744fee48, 5a85b46c633b629a25]

UID: 1581F67QD233J0140348
Number of unique sets of coordinates: 3

UID: ecbb464826e9
Number of unique sets of coordinates: 2

UID: d024a45b1a74
Number of unique sets of coordinates: 4

UID: 1581F5FJD22BB00BS02N
Number of unique sets of coordinates: 2

UID: 1581F5YHC22B50021TSB
Number of unique sets of coordinates: 22

UID: d4a1a4ac21e3b566c5
Number of unique sets of coordinates: 559

UID: fc08ade8bafe
Number of unique sets of coordinates: 2

UID: e3e0744fee48
Number of unique sets of coordinates: 2

UID: 5a85b46c633b629a25
Number of unique sets of coordinates: 81

Total number of unique sets of coordinates: 677
```

Iteration 2 Features

- As an airspace controller, I don't want to see spoofed drone data so that I can tell which drones are real.
 - Determine which data is 'clean' and add related flags to data points
- As a drone enthusiast, I want to see a specific drone's flight data portrayed on a map based on its longitude and latitude so that I can see any possible drone flight patterns.
 - Go from a text-based user interface to a GUI
- As a user, I want to access the application on a website so that seeing drone data is accessible.
 - Create a webpage with a user sign in system to display the application

Retrospection

- **What does each team member think about this iteration? (Lessons learnt)**

- Leah – Everything takes much longer that you expect it to – even just researching a functionality you've never tried before. I have run into a few "dead ends" after lots of time and effort. I agree with my teammates that more working time in person would be helpful.
- Sam – I learned that we need to have a lot of intentionality right at the start in developing the vision and getting a schedule in place to keep work flowing. I found that even the little things take a lot of time, and in an environment where what needs coded next is not always clear, programmers should do what they do know right away.
- Logan - AGILE development is flexible and allows for shifts in priority. Need to have dedicated times to meet in-person with teammates to contribute more. Meetings are tedious but important to get everyone on the same page and get guidance from higher-ups (Clients).
- Ashley - Communication is important, we can get confused if we aren't being clear with each other. Tackling issues as a group help to make more leeway than doing it alone. Not everything is going to go our way and that's okay.
- Michaela – We are getting better at working together as a team, but communication is something that can be improved in my opinion. I liked us meeting up and tackling assignments in person as small groups and as a team, I do believe we accomplished more, and all got on a similar page of tasks. It is also nice getting guidance and assistance from the clients.

Retrospection Cont.

- **What kind of properties of quality software did you sacrifice for the sake of functional software?**
 - Clean Code
 - Tests
 - Modularity
- **How do you plan to approach Iteration 2?**
 - Refactor I1 code to be more modular, follow CC principles
 - Start implementing tests to ensure code is functional
 - Work on I2 features, such as switching from text-based UI to a GUI

Software Demonstration

Documentation

[SpoofDetector/Documentation at main · dapark3/SpoofDetector \(github.com\)](#)



Interesting slide