



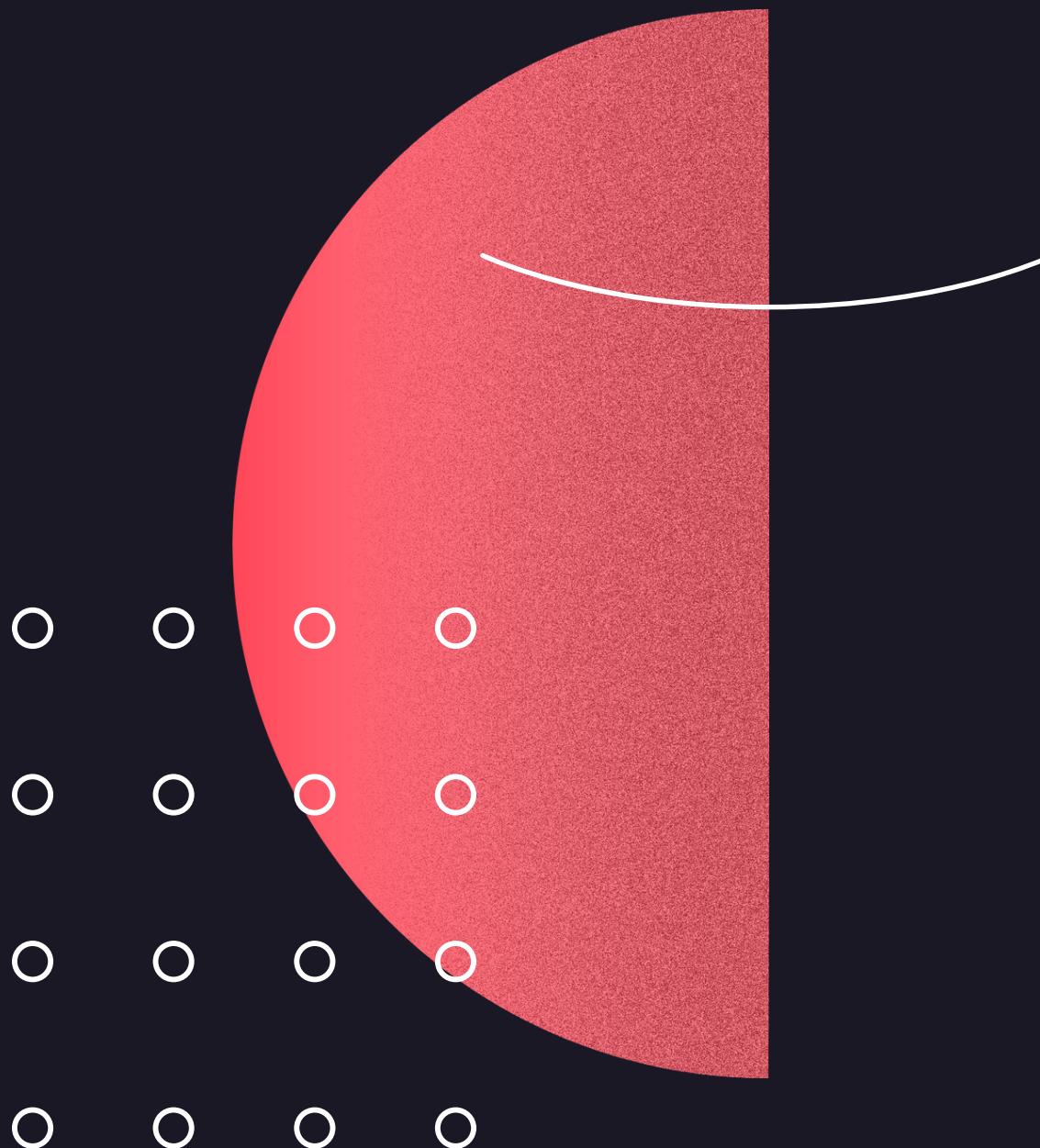
SORA

Specific operational risk assessment (SORA) for Remotely piloted
aircraft systems (RPAS)

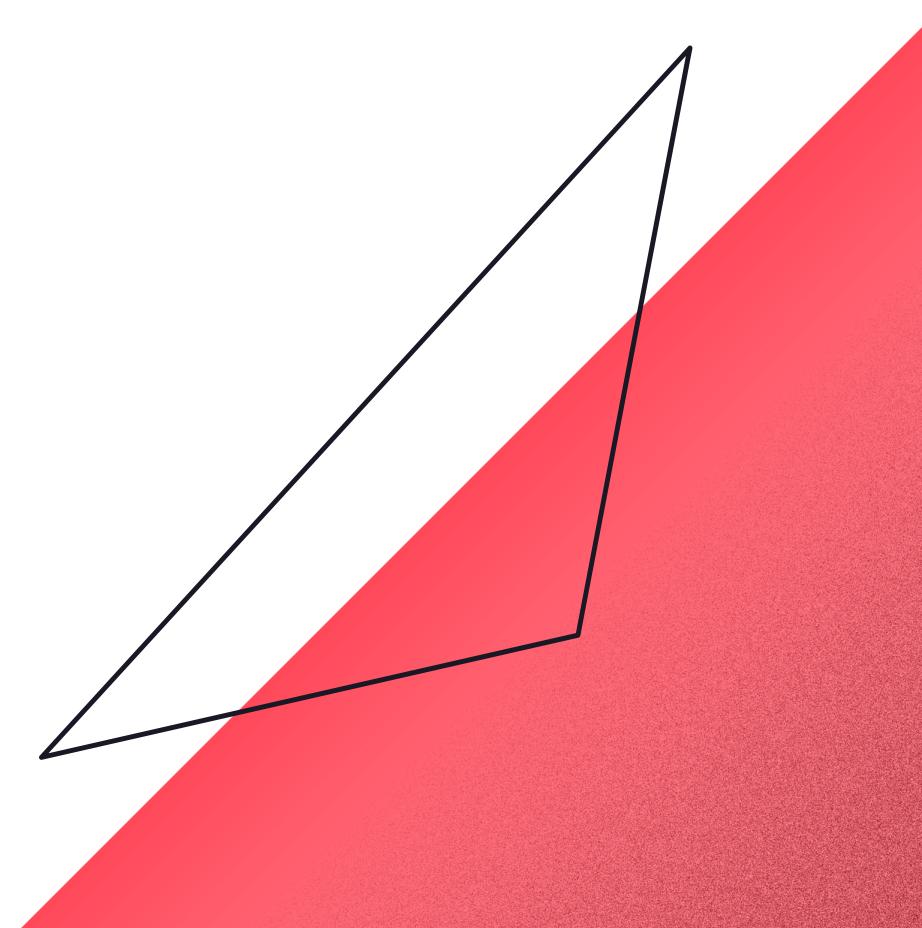


Nathan Byerley, Alexandra Mullen, Olivia Hobbs, Daniel Nelson

Client Info



- Point of contact Brendan Ooi
- Research team at Transport Canada
- Project is in development phase
- KML/Google Earth

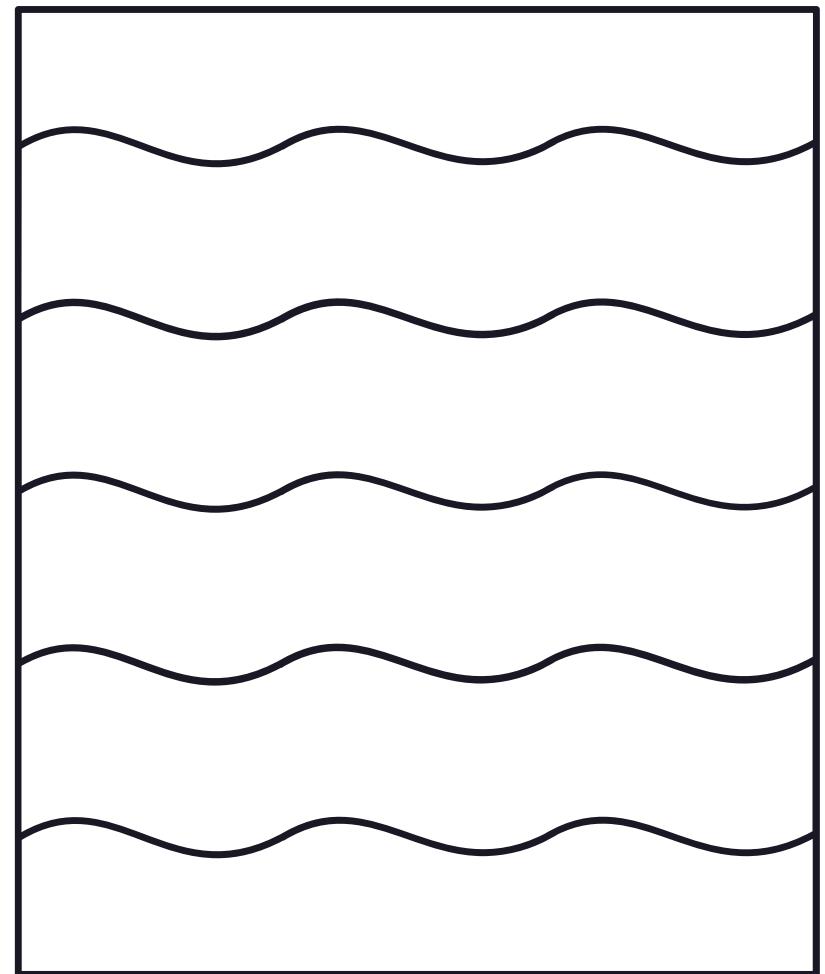


PROJECT PURPOSE AND SCOPE

- Assess risk of RPAS flights in populated areas
- Create toolset using Python
- Air-air risk
- Air-ground risk

Documentation

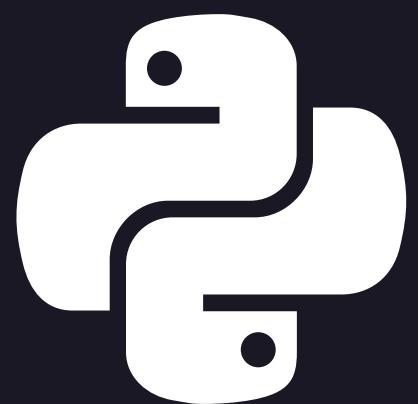
- Windows, Linux or Mac OS
- Conda package manager required for Windows
- Geopandas, datetime, fiona libraries
- Python 3.x



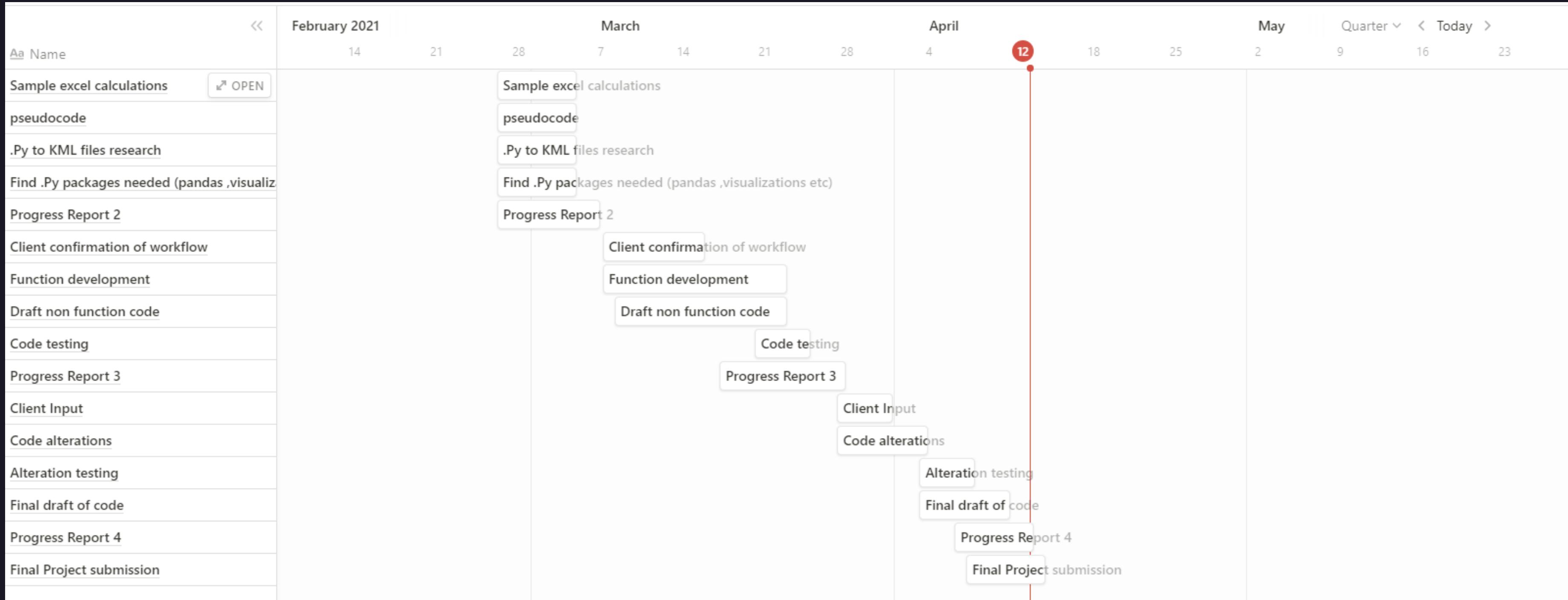
A graphic element on the left side of the slide features a white square containing a red textured rectangle. A white arrow points from the top-left corner of this red rectangle towards the word "PY".

PY

DEMONSTRATION



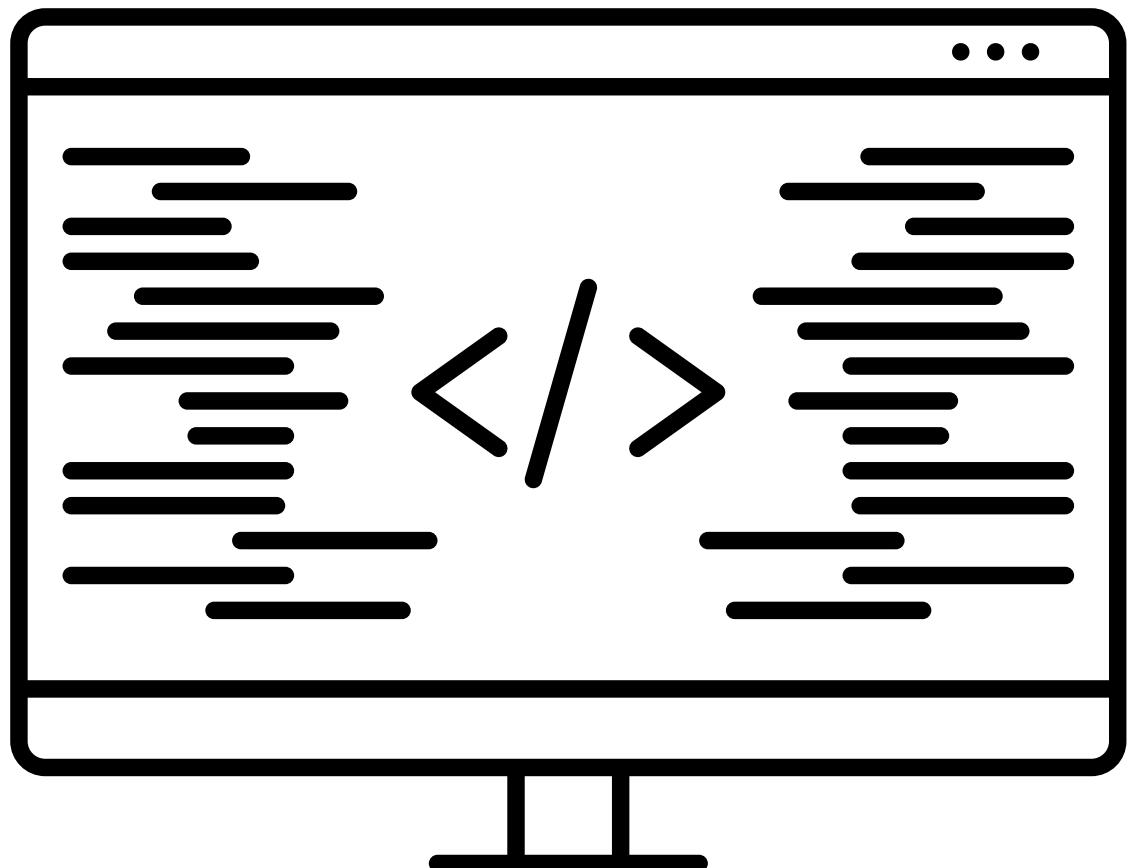
WORKFLOW



CHALLENGES

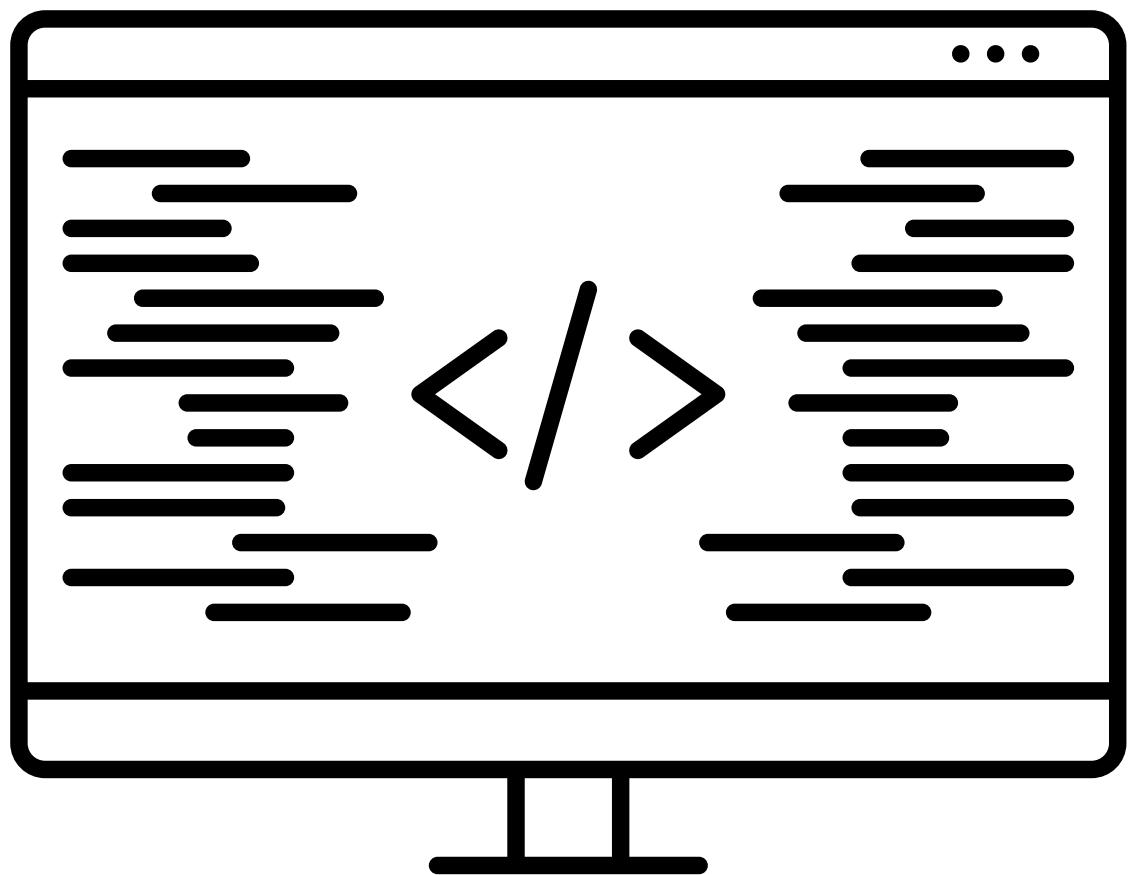
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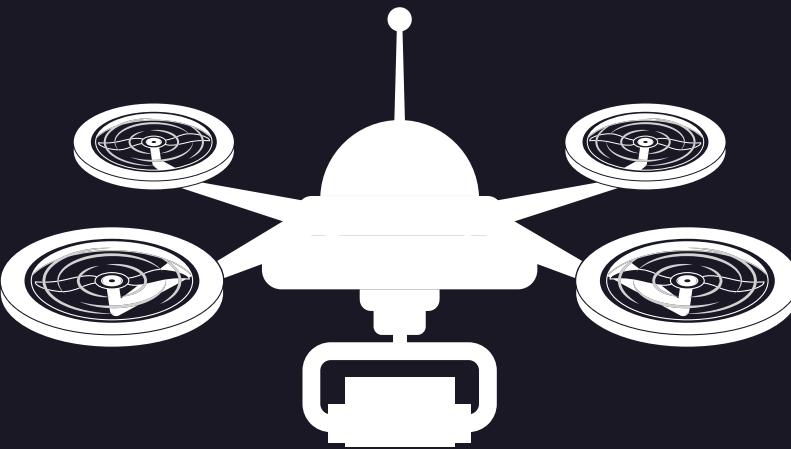
- Re-writing GroundRisk function
- Functions working together
- GroundRisk output



FUTURE WORK

- User-friendly experience
- GUI





CONCLUSION

- Four functions
- Commandline input
- Text file output

ACKNOWLEDGEMENTS

- Brendan Ooi and research team
- Professor Derek Mueller
- Geopandas, Pandas
- StackExchange for KML issues

Thank you!

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