Python Development at TerraVerde

The Challenge:

Using Python, write code that takes a set of x, y coordinates in 2-dimensional space as an input, and that returns a set of lines that intersect 3 or more unique points from the input set. This code may be part of a larger library or application that includes classes, functions, etc.

Example Input: {(1, 1), (2, 2), (3, 3)}
Example Output: A set containing a line passing through all three points.

Please return your project in a zipped folder that contains your code, your test cases, and a README.

Success Criteria:

We will be assessing your project's architecture, performance, and coding style. We are looking for an extensible, well-organized, and well-documented project. Please take time to code to your highest professional standard. There is no time limit for returning your submission.

If you have any questions, please ask. This assignment is meant to mimic a real-world problem to be solved.

Constraints:

Please refrain from using solutions found online that you are not able to defend and minimize the use of external libraries to develop your algorithm.

We would like to see how well you are able to develop and implement your own solution.