

WoodWing Coding and AWS Test

Assignment: “Distance calculator in AWS”

Deadline: See the covering email for details. Once the test is completed, send it back to us, as also outlined in the covering email, and we’ll then review your effort.

Goal: Make a web service that accepts two distances (numbers) and returns the total distance (sum of both) deployable at AWS. Define the infrastructure your solution requires as code using an AWS technology.

Technical goal: Implement a web service using AWS in a language of your choice with (or without) any framework of your choice. You’re free to choose any AWS regions or services you like.

Specifications: For each of the two distances, the requester must specify a unit. Also for the returned total distance, the requester must specify a unit as well. For now only one unit (meters) as integers should be supported but it’s expected to support multiple units in the future.

For example, the request could be 3 Meters + 5 Meters = ... Meters, and the response would be 8 Meters.

Make sure this is deployable at AWS, taking into consideration that this needs to scale to many concurrent requests. Response time needs to be within a few seconds. Set this up in a reliable way - make sure the web service can be restored within 30 minutes in case of a regional AWS failure. Other people in your team will also need to maintain this service - make sure they are able to deploy and support it.

Before you begin: Summarise how you want to approach this assignment and include it in the GitHub repo you’re using for this assignment.

Code: Commit each step during your development in a Github repo so we can study your reasoning and progress.

Make sure it is ready to take into production and that it fulfils your coding standards.

Time: Spend a maximum of 4 hours on this test. We're not looking for a perfectly complete solution (although that would impress us a lot in 4 hours :-)), but are more interested in your thought processes, the choices you make and coding quality.

When done or time runs out: write down what you like to improve in the future and share that in the repo.

Please take the following into account:

- Readability and comprehensibility of the code (Clean code)
- Testing your solution (e.g Unit or integration testing or canaries)
- Conscious design/technical decisions
- Simplicity of the solution
- Consistent and proper use of programming paradigms such as object oriented programming, functional programming
- Reliability
- AWS Costs
- Maintainability