**C768, Task 1**

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## **Organization Description**

## A1. Products or Services Produced

DoubleGo is a service provider of pre-screening and document assistance to impoverished citizens, assisting them to gain access to local, state, and federal benefits that will help in egressing out of their state of poverty. We provide a screener tool that calculates their expected benefits and assists in navigating the bureaucracy and needed paperwork, so that the user knows what to expect, and eases in the application for said benefits.

## A2. Organization Size and Number of Locations

We are a small startup that is attached to a larger parent company. We have approximately 10 employees, 6 of which are senior developers with over 10 years of experience each. We have many locations that we provide our services to, and our team is also a distributed team across the United States. Our main screening application is accessible through mobile and desktop browsers and is configurable in over 20 languages.

## A3. Organization’s Industry

Local, State, and Federal benefits programs are spread out though various departments through multiple departments. As we are unique in this space, we determined that if we knew all of the perimeters of all of the programs, we would be able to automate calculation of likely benefits, and assist users with their application to ease that burden. This pre-screener would allow faster access to sorely needed programs, as it can normally take an extended amount of time to research all of the programs, and understand what ones a used and their families could qualify for.

# Emerging Tech, Practice, or Process Chosen

## B1. Summary and Importance

“Serverless Architectures with AWS Lambda” is a white paper authored by various members of the AWS Lambda team at Amazon Web Services. The report provides a broad overview of Lambdas features and recommendations on how to build with a serverless mindset. Our company desires to take a cloud-native approach to handle software and infrastructure requirements. AWS Lambda markets itself as a “Function as a Service” service, where code can be broken down into micro-services and are not dependent on the cloud application. The paper then discusses serverless best practices, how to develop in the cloud, and configuration practices.

“Lambda Architecture for Batch and Stream Processing” is another white paper coauthored by the AWS Lambda team members. This paper describes best practices and approaches on how to handle streaming data and batch processing. Data ingestion, transformation, and export are critical parts of our application requirements. This paper discusses the pros and cons of the service while also outlining methods used to achieve desired results. Double Go will be ingesting a lot of service providers and user data that will need to be calculated in near time, and streaming this data through AWS Lambda provides the required compute power at a low cost. Development time is also reduced as there is no infrastructure to maintain.

“Security Overview of AWS Lambda” is again written and updated by the team at AWS. This paper on security provides a deep dive into security best practices and is aimed toward new adaptors of the service. The article describes having no servers to manage, the shared responsibility model, a staple in the AWS ecosystem, and how lambda has many different AWS services that it can utilize in its use and function both up and downstream. When Double Go designs systems, we take our security posture very seriously as we handle users’ sensitive data, and need to ensure that best practiced and followed. Great security starts with security focused design.

# White Paper

See attached file.

# Explanation of Diction

The tone I chose here was to speak to a group of senior level developers who have had experience building in developing restful APIs and have some sort of background managing system resources. I try to explain any of the acronyms that were provided and if they weren’t obvious to the reader, I explained them before I abbreviated it. I believe the level of formality used was speaking to like-minded peers which will then act as a stepping off point to open up for questions and discovery on implementing the subject matter.

# Sources

It is attached in my whitepaper.