**C768, Task 1**

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## **Organization Description**

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## 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 egress 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.

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## A2. Organization Size and Number of Locations

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

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## A3. Organization’s Industry

Local, State, and Federal benefits programs are spread out through various departments through multiple departments. It can typically take an extended amount of time to research the programs and understand what ones a used and their families could qualify. 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 the calculation of potential benefits and assist users with their application to ease that burden. This pre-screener would allow faster access to sorely needed programs.

# 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 the 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 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 ensure that best practiced and followed. Excellent security starts with a 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 background in managing system resources. I tried to explain any of the acronyms provided, and if they weren't apparent to the reader, I presented them before I abbreviated them. I believe the level of formality used was speaking to like-minded peers, which will act as a stepping-off point to open up for questions and discovery on implementing the subject matter.

# Sources

It is attached to my whitepaper.