**Our Plan For Cloud**

**What type of Cloud?**

Our plan to deploy our application to the cloud is to deploy it using a hybrid cloud approach of one private cloud and one public cloud. As a bank, we handle sensitive data of our customers and must comply with laws regarding the regulations of data. A hybrid cloud would allow us better control over our user’s private data by giving us access to the private cloud where we would host the sensitive data and a public cloud which would be utilised for more user oriented tasks. Having our customer’s data accessible by a public cloud could lead to identity theft, data breaches and malware injections. Instead, we utilise a public cloud to allow greater scalability as we can adapt the resources used by our application by the user demand for it. This cuts down on the costs of private infrastructure to host our private cloud whilst still giving us the benefits of a public cloud’s scalability and private clouds security. Because we are using a private cloud we will need to build the infrastructure to support this. To do so, we will look for somewhere that has mild weather and temperature that wouldn't affect our server infrastructure meaningfully. This will help with the ease of maintaining our infrastructure by making sure there is no possibility of tropical storms or extremely hot temperatures that could damage the servers that host important data.

# **Migration Method**

We will use a partial migration method to migrate our application to the cloud. Because we did not originally design our application with the cloud in mind, we will have to change a few processes to allow for our application to take advantage of the cloud’s features. Instead of each instance of our application making a log, we would utilise a cloud logger to store our application’s logs so that they are easily accessible and allow for easier monitoring.

**How To Fix Our Lack Of Knowledge**

As none of us are experienced with moving an application onto the cloud, we expect to have issues moving onto the cloud because of our lack of knowledge. Our plan to overcome this is by researching more in-depth into the cloud and looking at various cloud platforms to see which best suits our needs and budgets. We will look into communicating with those more experienced with cloud computing in regards to preventing future security risks and data leaks. As well as reading up on laws regarding data security and making sure we comply with them. We also don’t want to risk going over our budget by underestimating the prices of paying for both public and private clouds. To avoid this, we will research the most optimal public cloud in terms of cost and what we wish to use it for. As well as make sure our private infrastructure is within our expected budget.