

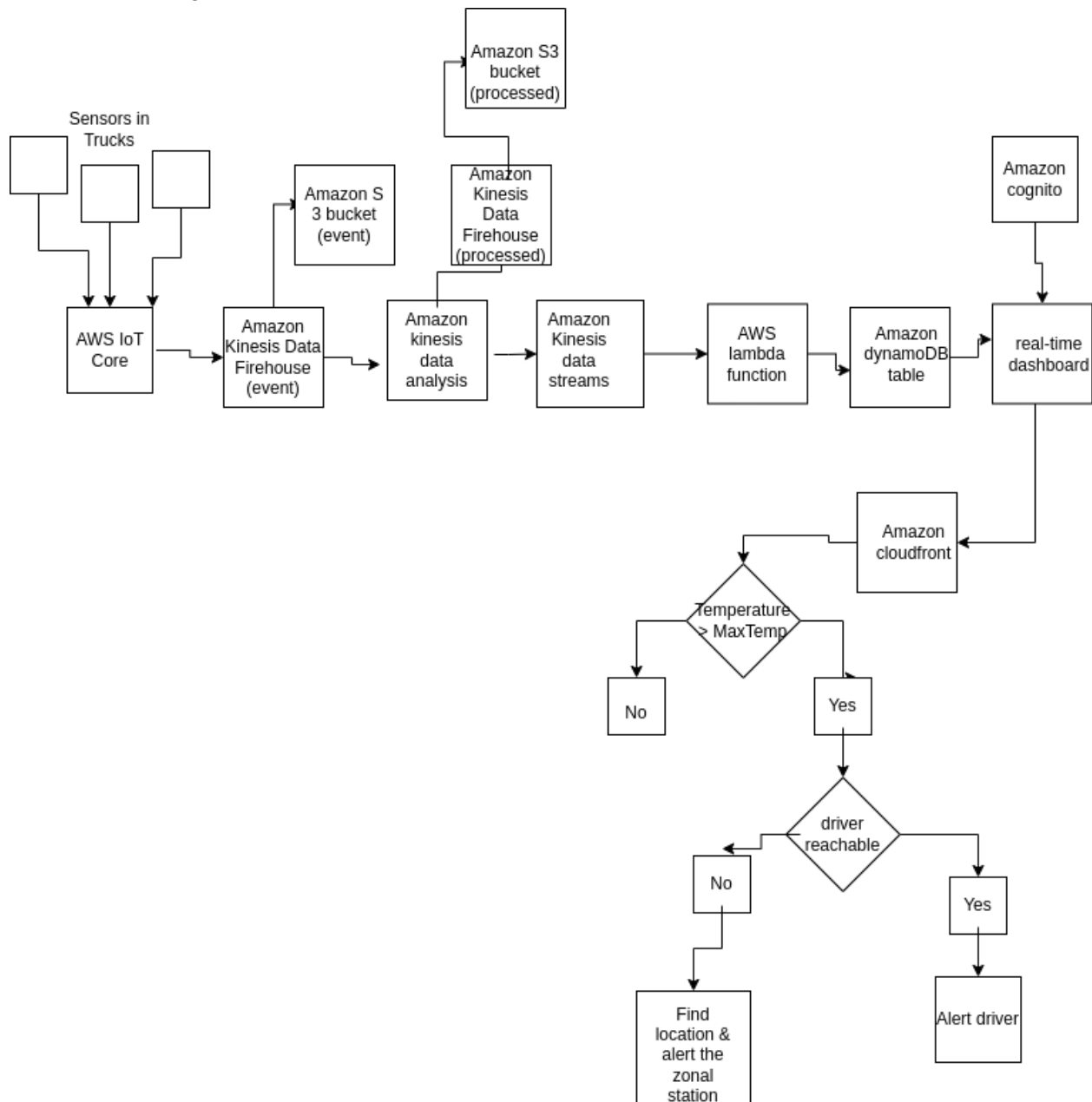
Database Technology:

SRN: PES1UG19CS090

Name: Arvind Krishna

Sem - 6, Sec - B

Architectural diagram:



#### Explanation:

The sensors in the trucks continuously feed the temperature data to the cloud, which will be firstly injected via the AWS IoT core. This will be fed into the Amazon Kinesis data firehouse in the streaming form itself. This may be saved for persistent storage in an Amazon S3 bucket (although suggested to be avoided, since the raw data is neither very useful, nor storage efficient). It is mainly passed to the data analyzer wing of Amazon Kinesis, where it is processed in the Kinesis' personal Data firehouse. The digested data might be stored in the S3 bucket if required for later usage (but usually avoided). The streams generated in the Kinesis streaming data are passed to a lambda or some stateless function to find the maximum temperature every 5 minutes. This could be stored in some efficient storage system such as DynamoDB etc. This is further broadcasted to the respective listener via the Cloudfront. If the temperature is greater than the max allowed temperature, an attempt will be made to contact the driver. If the contact attempt fails and driver is unreachable, we will find the last known location of the driver and the vehicle and the nearest (or the next to be reached) zonal station will be warned about the vehicle and its info.