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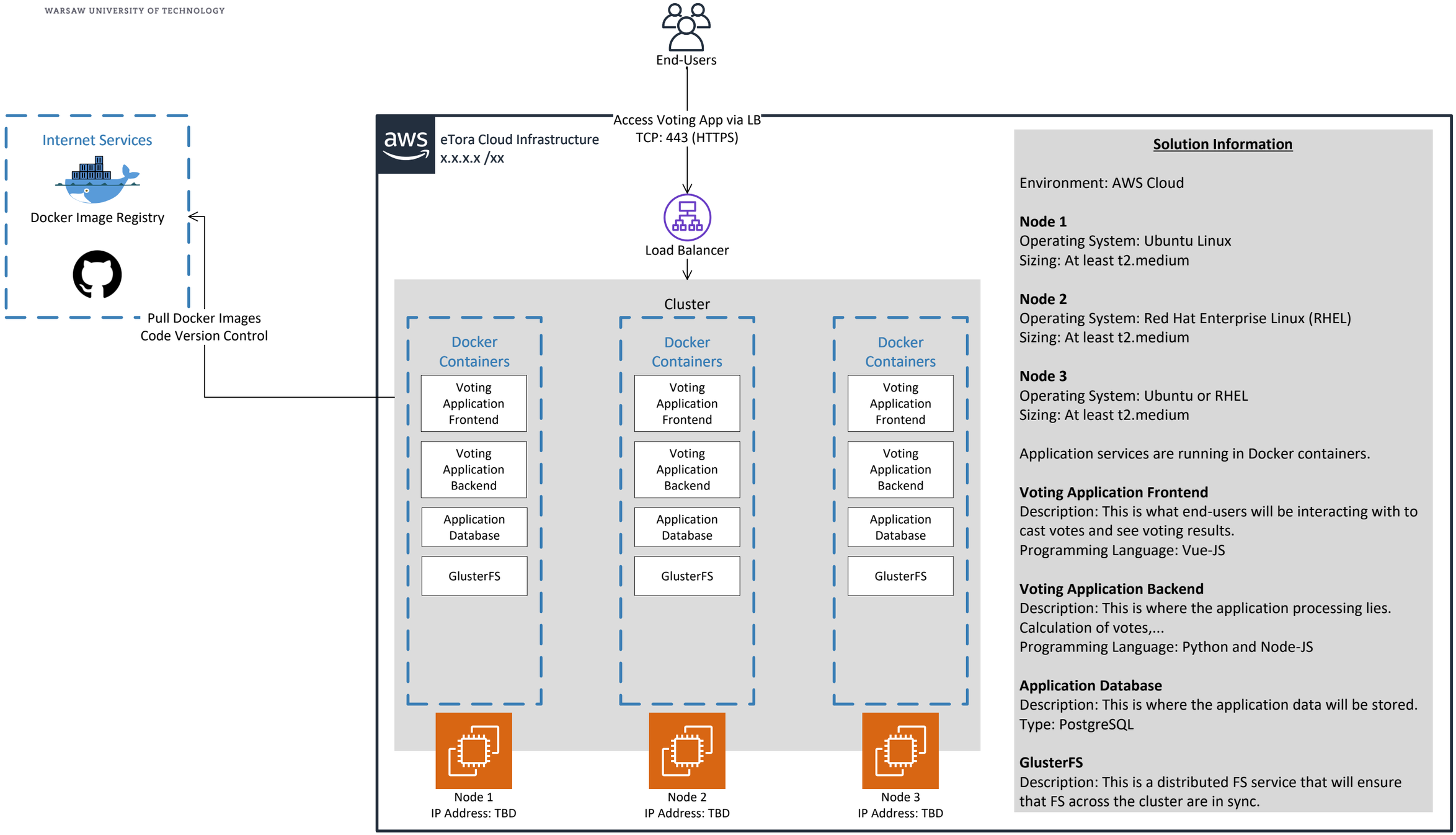

Solution Information

Environment: AWS Cloud

Node 1
Operating System: Ubuntu Linux
Sizing: At least t2.medium

Node 2
Operating System: Red Hat Enterprise Linux (RHEL)
Sizing: At least t2.medium

Node 3
Operating System: Ubuntu or RHEL
Sizing: At least t2.medium

Application services are running in Docker containers.

Voting Application Frontend
Description: This is what end-users will be interacting with to cast votes and see voting results.
Programming Language: Vue-JS

Voting Application Backend
Description: This is where the application processing lies. Calculation of votes,...
Programming Language: Python and Node-JS

Application Database
Description: This is where the application data will be stored.
Type: PostgreSQL

GlusterFS
Description: This is a distributed FS service that will ensure that FS across the cluster are in sync.

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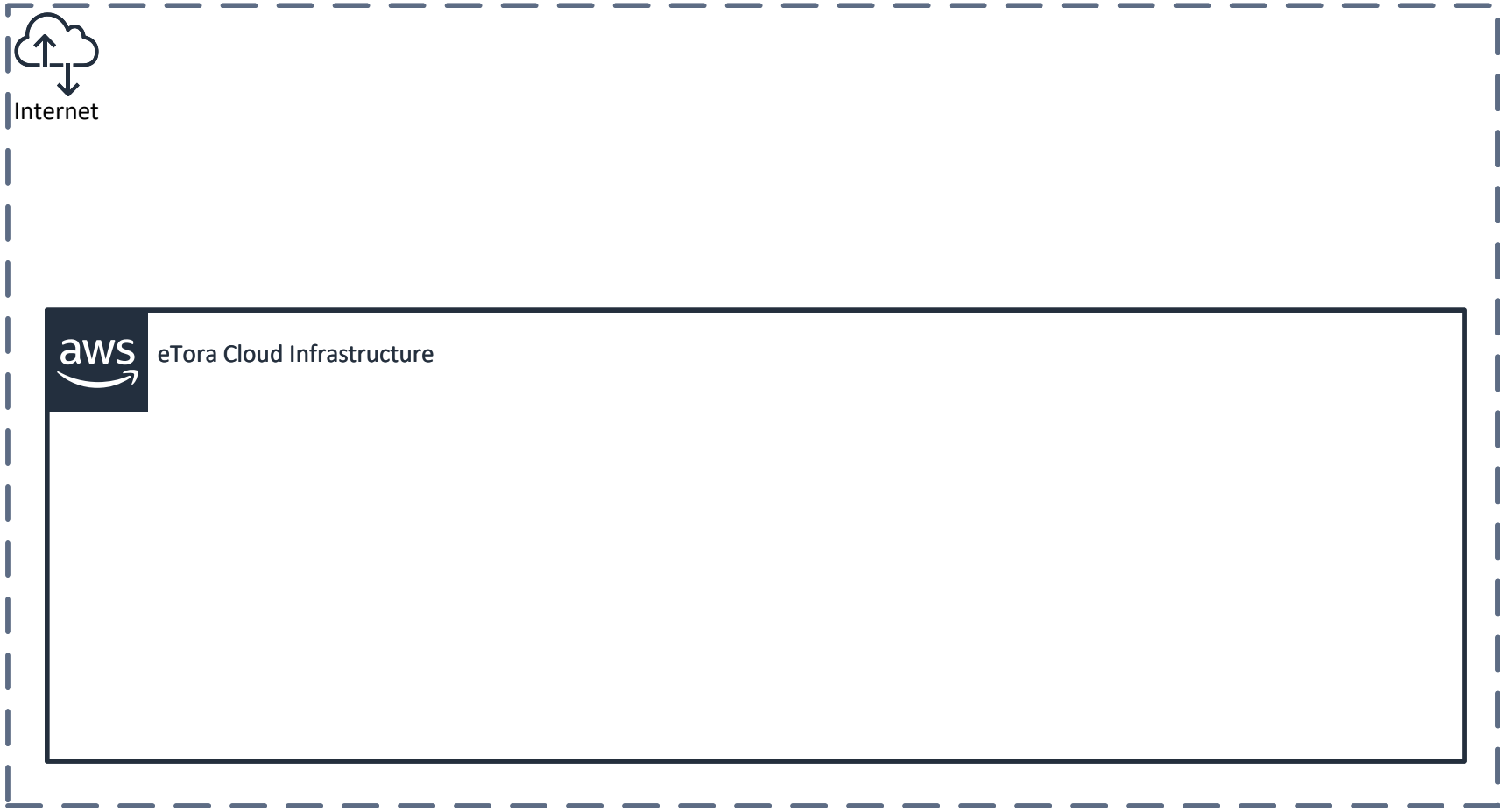

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End-Users
8
Internet
10
eTora Cloud Infrastructure
eu-central-1 (Europe, Frankfurt)
vpc-eu-central-1-hsg-etora-prod (10.0.0.0/16)
Internet Gateway
11
Application Load Balancer
16
Availability Zone 1
Public Ingress Subnet
Availability Zone 2
Public Ingress Subnet
12
12
NAT Gateway
15
NACL
Private App Subnet
Private App Subnet
Auto-Scaling
EC2 Node 1
EC2 Node 2
EC2 Node 3
Docker Hub
6
NACL
Private Database Subnet
Private Database Subnet
14
14
Security Group
GCS SQL Database
Grafana SQL Database

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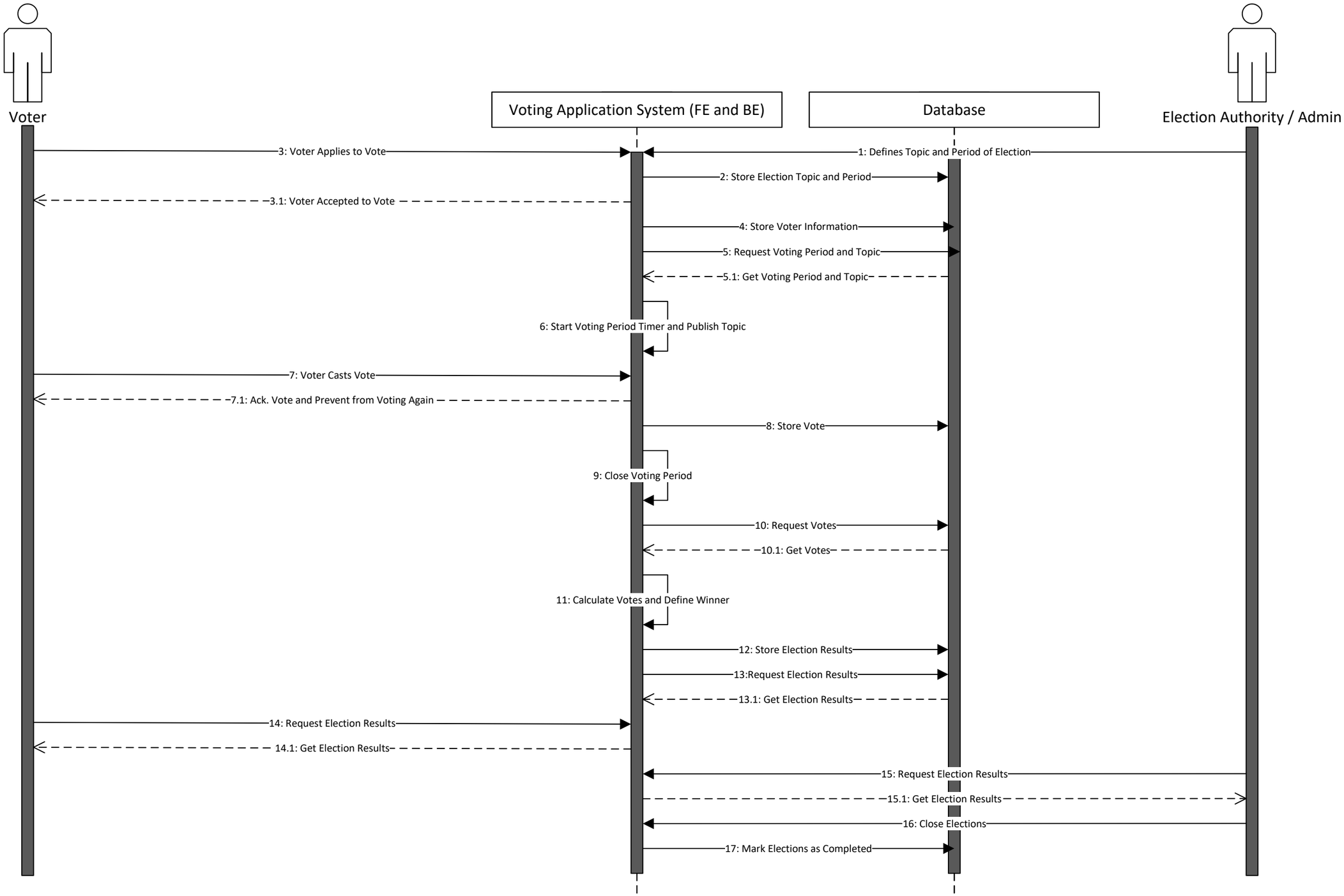

TITLE: Sequence Diagram ARCHITECT(S): Bruno A. Kamere & Salome Senkoro Justin CREATED ON: Thursday, 20 April 2023