Petri Nets

Requirements and Specification Document 2023-09-28, v1.0

**Document Revision History**

Rev. 1.0 <2023-09-28>: initial version – Add frontend and database demonstration

**Project Architecture**

A diagram of a software company

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**Database Structure (Cassandra)**

**Keyspace: test\_699**

**Table1: customer\_events**

**Partition key column:** customer\_id

**Static column:** customer\_name

**Cluster column:** event\_time, current\_node\_label

**Primary key: (customer\_id, event\_time, current\_node\_label)**

**Database Structure (Arango)**

**Database: \_System**

**Graph**: petri\_net\_graph

- Vertex Collections:

- places: the places in the Petri net.

- transitions: the transitions in the Petri net.

- Edge Collection:

- flows: Represents the flow relationships between places and transitions in the Petri net.

**Week 1 Demo**

**Frontend: before insert customer’s name**

Green node represent free state

**A diagram of a company

Description automatically generated with medium confidence**

**Frontend: After insert customer’s name, press start running**

red node represent free state

**A diagram of a company

Description automatically generated**

**Database: cassandra demonstration**

**A screenshot of a computer

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**Database: Arango demonstration**

**A screenshot of a computer

Description automatically generated**