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CMPS 109 - Final Project Phase 1 Documentation

class Operator:

Load(string sriFile) - The load method will require a SRI file as a parameter. It will then parse the SRI file line by line adding rules or facts into their respective databases.

Dump(string sriFile) - The dump method will require a SRI file as a parameter. It will access the current facts and rules defined in the runtime KB and RB and then save them to the SRI file given.

Fact(string fact) - This will invoke a KB method, will describe below.

Rule(string rule) - This will invoke a RB method, will describe below.

Inference(string query) - This will print the results of the given query to the terminal. Inference will have an option to declare the results of the query under a fact with a given variable name.

Drop() - This will invoke a KB/RB method depending on what is being dropped.

class KB : public Operator

Vector<T> - A vector to hold all of the initialized facts.

defineFact(string fact) - This will add fact to our vector.

dropFact(string fact) - This delete fact from our vector.

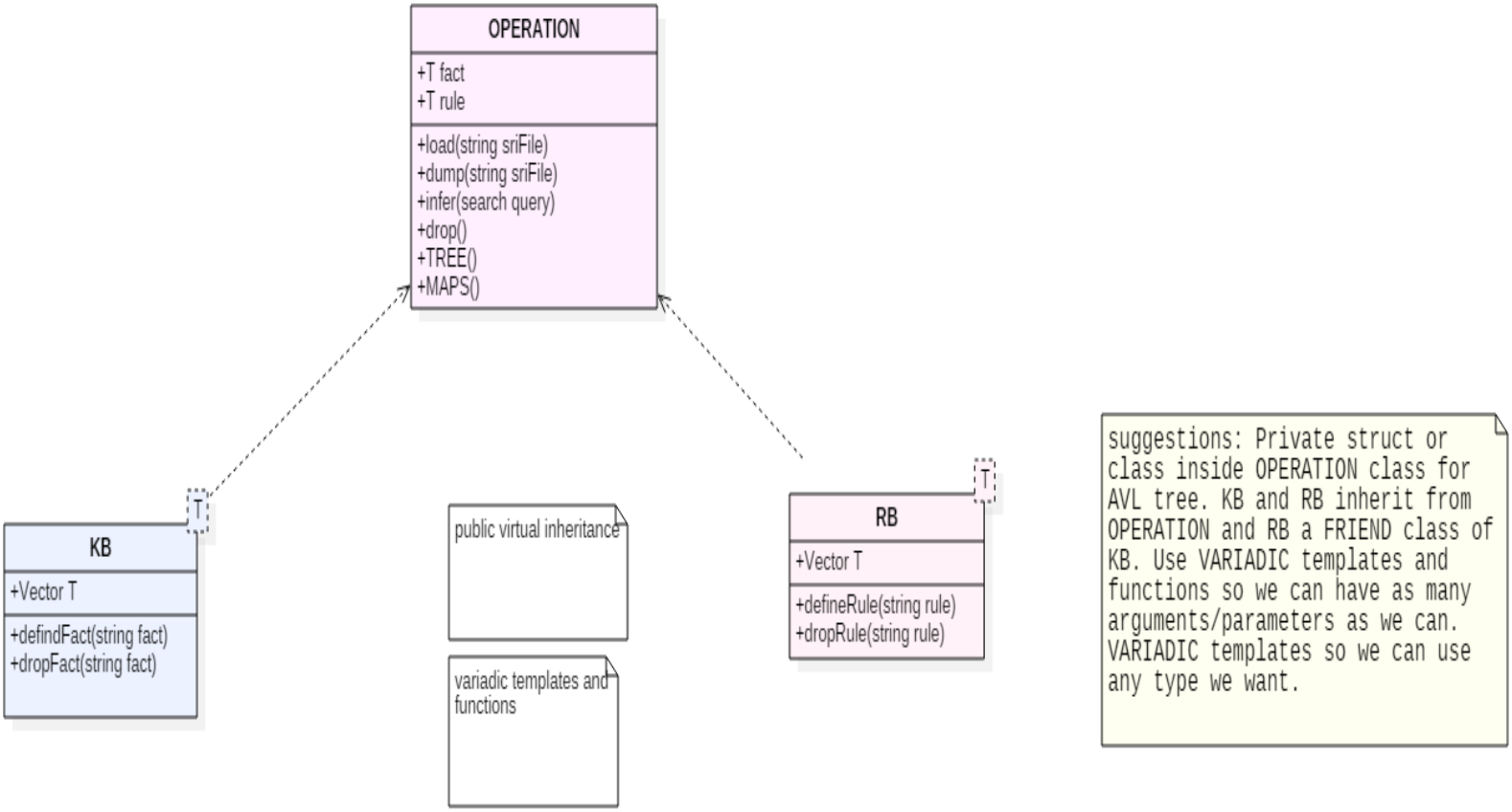
class RB : public Operator

Vector<T> - A vector to hold all of the initialized facts.

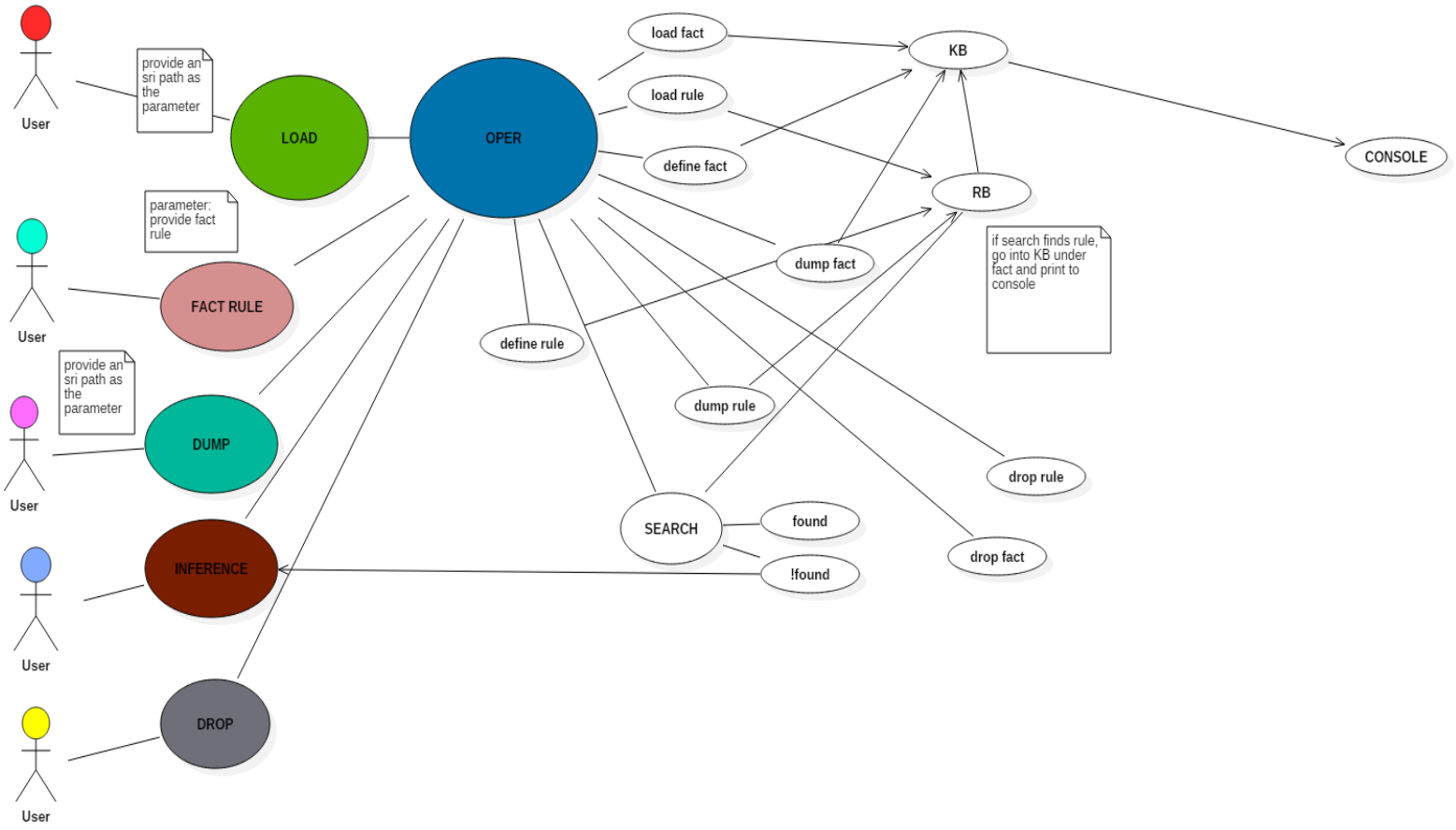
defineRule(string rule) - This will add rule to our vector.

dropRule(string rule) - This delete rule from our vector.

CLASS DIAGRAM

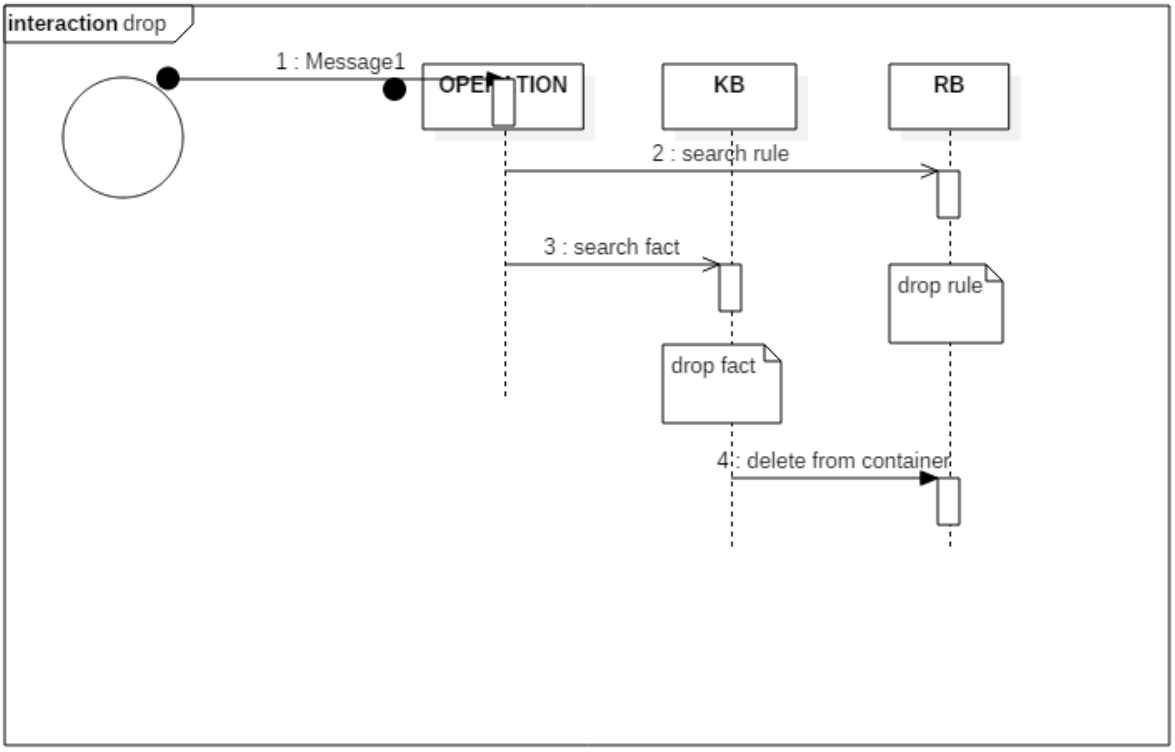


USE CASE DIAGRAM

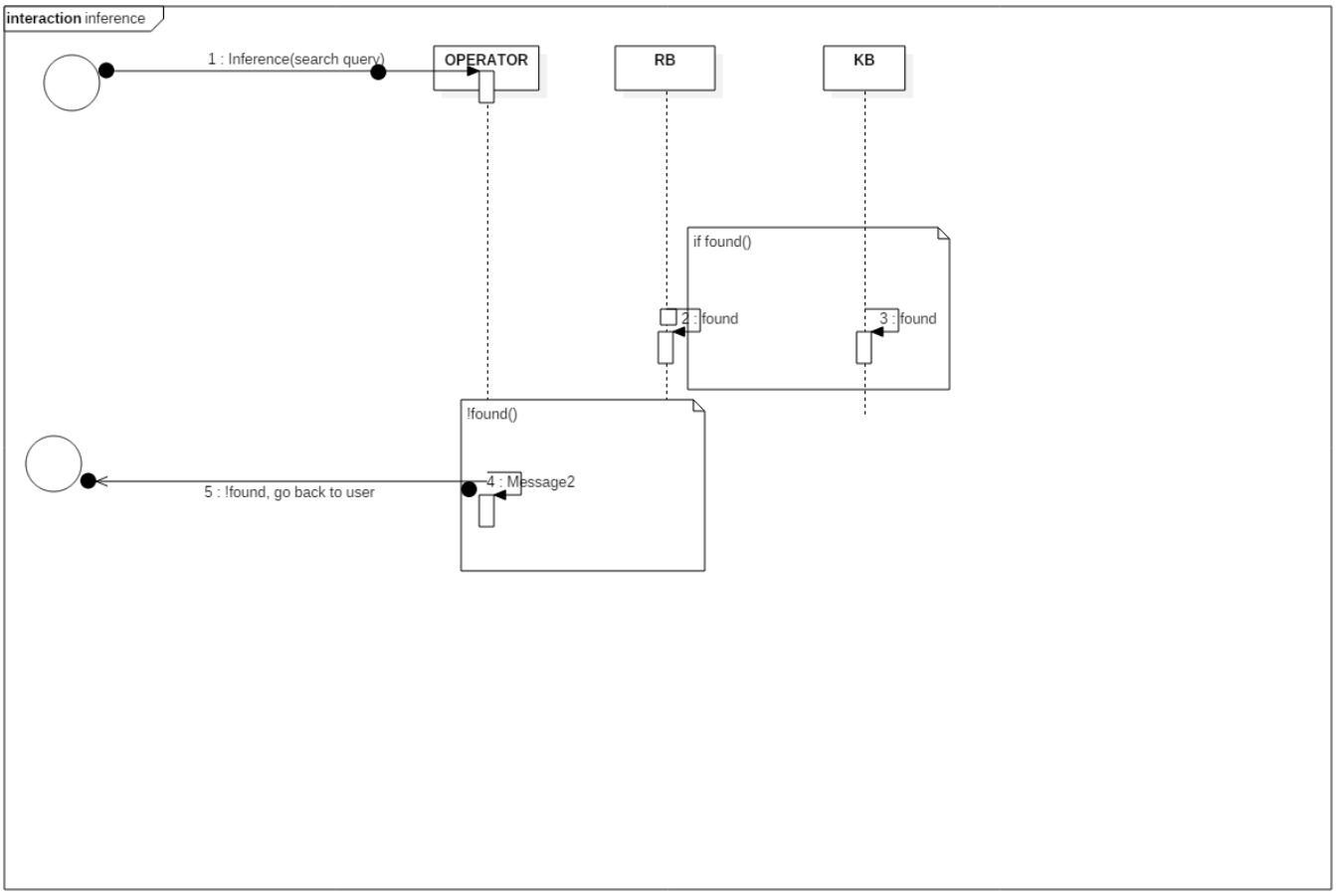


SEQUENCE DIAGRAM

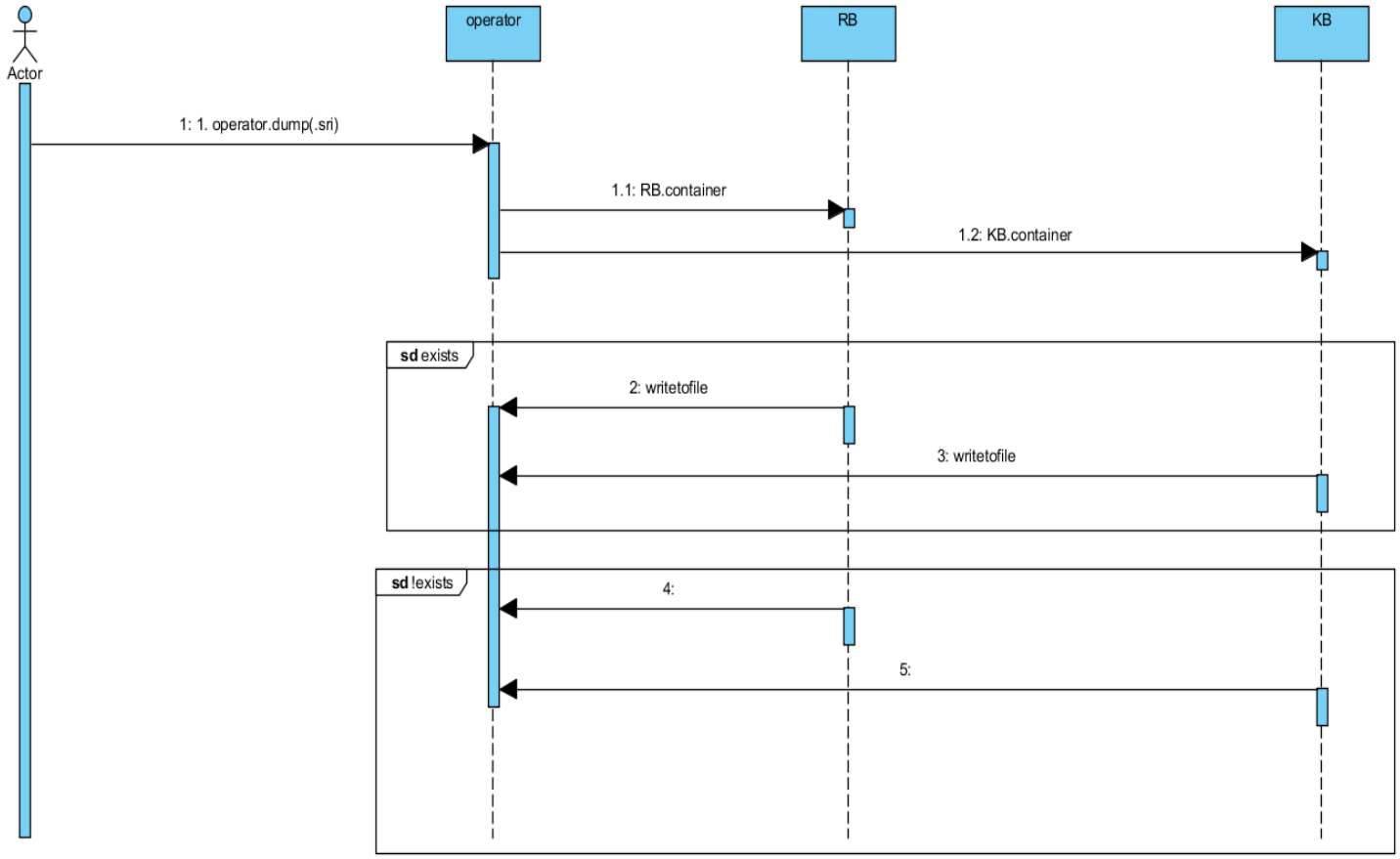
DROP



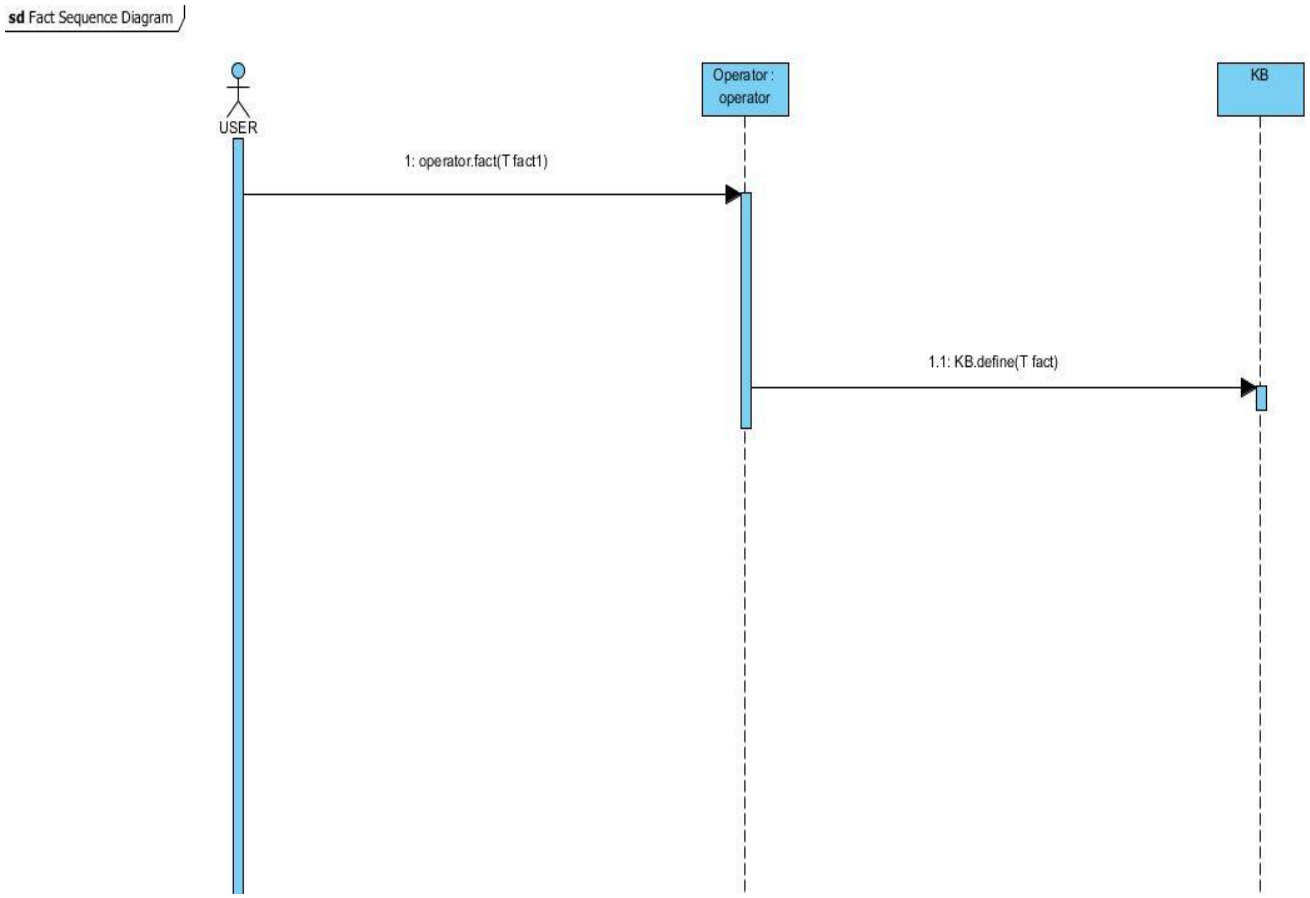
INFERENCE


interaction inference
1 : Inference(search query)
OPERATOR
RB
KB
if found()
2 : found
3 : found
!found()
4 : Message2
5 : !found, go back to user

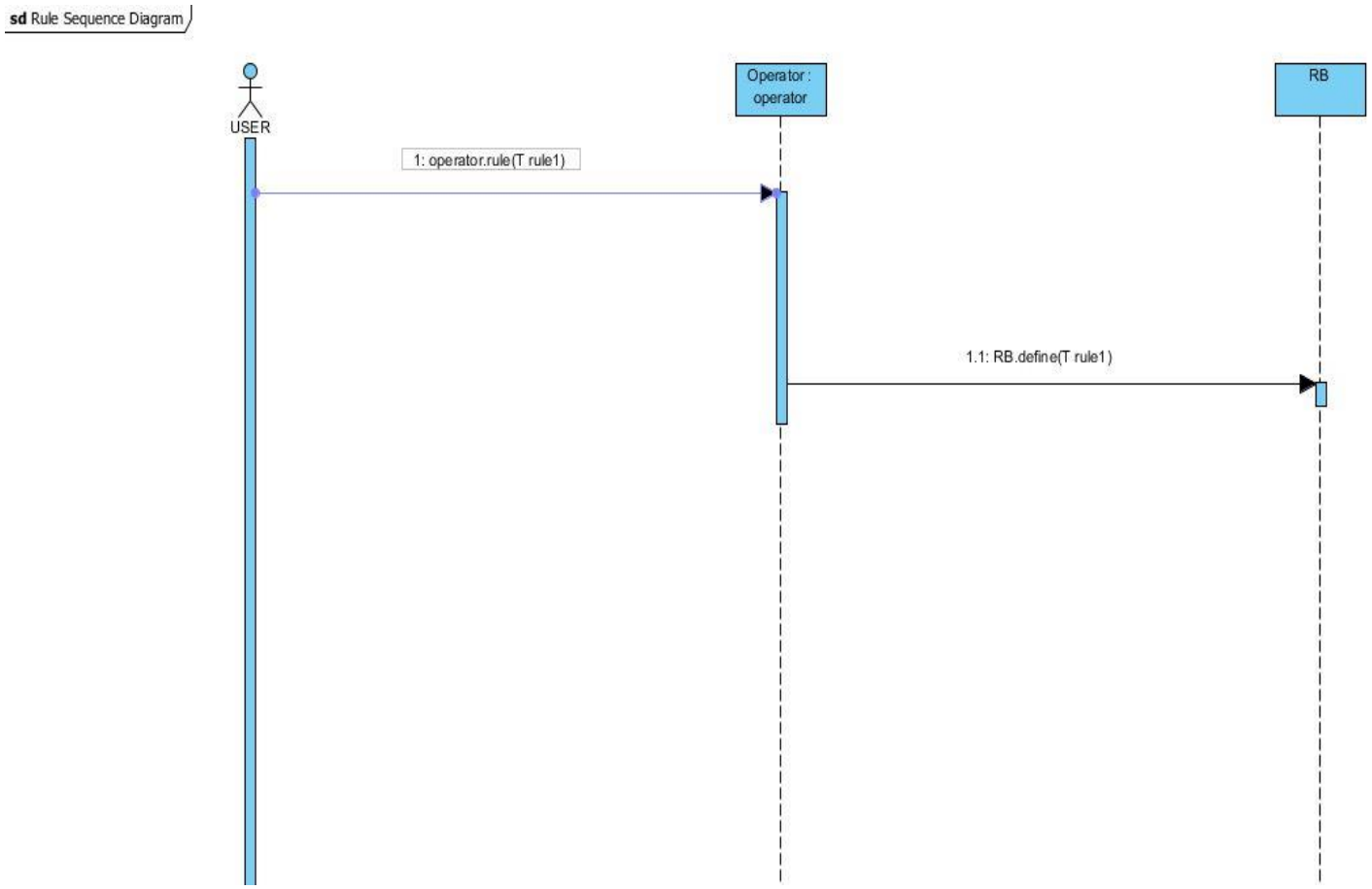
DUMP


Actor
operator
RB
KB
1: 1. operator.dump(.sri)
1.1: RB.container
1.2: KB.container
sd exists
2: writetofile
3: writetofile
sd !exists
4:
5:

DEFINE FACT


sd Fact Sequence Diagram
USER
Operator : operator
KB
1: operator.fact(T fact1)
1.1: KB.define(T fact)

DEFINE RULE


sd Rule Sequence Diagram
USER
Operator : operator
RB
1: operator.rule(T rule1)
1.1: RB.define(T rule1)

LOAD RULE/FACT