

# Release 1 Document OKB R

**Branch:** okbrtemp

**Folder:** rankProv

**SQLfile:** OKBR.sql

## REST API OKB-R

Package rankingProvenance.API

Code File : scr/main/java/restApi.java

- 1) Only one post method is implemented "notification"
- 2) URL: host/notification or <http://localhost:4567/notification> from localhost
- 3) Accepts any JSON string and passes it to parser App.java which process it expecting the string is in decided JSON format.
- 4) Stores this processed data into relational database(mysql) in normalized way.
- 5) The source and facts are separated in a different table to be used by TruthFinder

Note: id's for claims and statements are random integers at the moment need to decide on this

## Design evaluation framework

### Calculating the ground Truth

1. All the ground truth is divided into categories and opinions.
2. Then we calculate what dataset belongs to which categories and they can be bucketed into opinion category by posting question to the user using following techniques.
3. Include the random user source which do not exist to remove false positive.
4. Shuffle the answers so that users are not biased by order of the options.
5. Collect and aggregate the answers using the probabilistic confidence.
6. Calculate the degree of belongingness of source to a category and opinion using the average confidence of people.
7. Final buckets containing top k items in the list and opinion is the ground truth.

## TruthFinder Algo (storage and running)

Package rankingProvenance.truthFinder

Code File : scr/main/java/truthFinder.java

Matrix are stored in file “amatrix” and “bmatrix”

Trust vector is also stored in file “trustVectorObject”

### **Design/Flow of evaluation**

Please refer to draw.io link below (also shared in google drive)

<https://www.draw.io/?state=%7B%22ids%22:%5B%220BwBYRRdap-kBYWUtOVU4Y3VyS1k%22%5D,%22action%22:%22open%22,%22userId%22:%22105580455093267259078%22%7D#G0BwBYRRdap-kBYWUtOVU4Y3VyS1k>

<https://www.draw.io/?state=%7B%22ids%22:%5B%220BwBYRRdap-kBMXISMmpSaXRadW8%22%5D,%22action%22:%22open%22,%22userId%22:%22105580455093267259078%22%7D#G0BwBYRRdap-kBMXISMmpSaXRadW8>