



Amnesia

Status and next steps



Why Anonymize?

Anonymized data are outside the scope of GDPR

Anonymization provides a statistical guaranty about the risk of information leakage

It is the most suitable way to give information to third parties, without revealing personal data

Why Amnesia



User friendly



Works locally, no data transfer risk



Allows user to customize the solution



The only tool to offer anonymization for set-valued data



The only tool to support k^m -anonymity

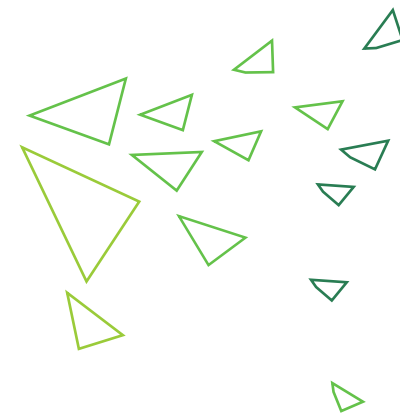


Easy to incorporate to third party information systems



Statistics

- 32k visitors
- 105k page views
- 2k unique downloads



Status



K-anonymity

Km-anonymity

Object relational datasets

API



ReST and command line API exist to help programmers

Bugs have diminished



Queries in helpdesk are less about bugs these days

k-anonymity

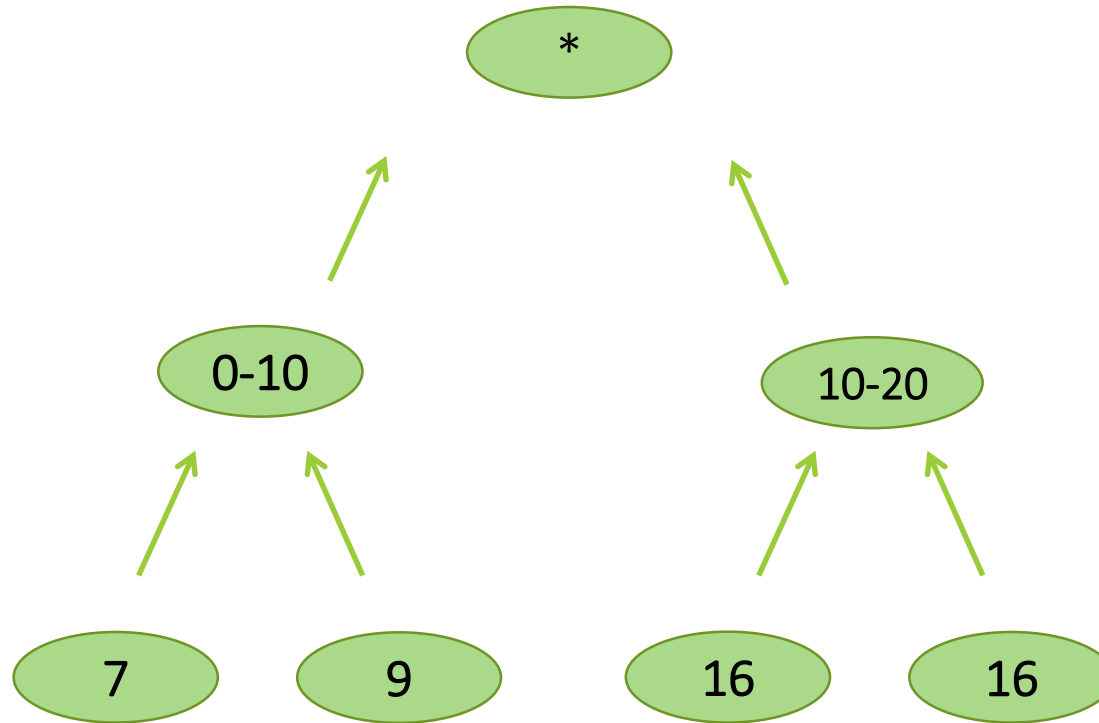


- Each entry becomes indistinguishable from other $k-1$ entries

id	Zipcode	Age	National.	Disease
1	13053	28	Russian	Heart Disease
2	13068	29	American	Heart Disease
3	13068	21	Japanese	Viral Infection
4	13053	23	American	Viral Infection
5	14853	50	Indian	Cancer
6	14853	55	Russian	Heart Disease
7	14850	47	American	Viral Infection
8	14850	49	American	Viral Infection
9	13053	31	American	Cancer
10	13053	37	Indian	Cancer
11	13068	36	Japanese	Cancer
12	13068	35	American	Cancer

id	Zipcode	Age	National.	Disease
1	130**	<30	*	Heart Disease
2	130**	<30	*	Heart Disease
3	130**	<30	*	Viral Infection
4	130**	<30	*	Viral Infection
5	1485*	≥40	*	Cancer
6	1485*	≥40	*	Heart Disease
7	1485*	≥40	*	Viral Infection
8	1485*	≥40	*	Viral Infection
9	130**	3*	*	Cancer
10	130**	3*	*	Cancer
11	130**	3*	*	Cancer
12	130**	3*	*	Cancer

Generalization Hierarchy



Amnesia Limitations


- Users are not familiar with anonymization techniques
- The process is difficult to understand and requires effort from the user's part
- Amnesia cannot decide on privacy parameters
- K-anonymity does not protect from every type of attack




Thank You



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