Introduction of Contact Tree

Import Dataset

- **.csv** file
- Every tree is one ego as in **egoid** column
- The stick is map as **alterid** column
- Use **dataset** column to combine multiple data
- No missing data is allowed (-1)
- Data must be categorized into less than 20 group or this will be the id column
- Automatically check before upload
- Store into a database and get all the attribute info

Attributes Information

- In **dataset_collection** database
  - **dataset**: table name
  - **attr**: column name
  - **min**: minimum of this attribute
  - **max**: maximum of this attribute
  - **attr_range**: range between min and max
  - **alter**: attribute that is related to alter
    unique value for each alter (only check one ego)
- In import database
  - Add **ctree_trunk**, **ctree_branch** ……

Database Tables

egoid	alterid	...	dataset	ctree_ trunk	ctree_ branch	ctree_ bside	ctree_ lsize	...	ctree_l color	ctree_ fsize

dataset	attr	min	max	attr_range	alter

Default Mapping

- **SELECT * FROM dataset_collection WHERE dataset = [];**
- **Contact information: alter is NULL AND attr_range > 3**
  - **leaf_color**: sorted_reault[0]
  - **leaf_size**: sorted_reault[1]
  - **root**: sorted_reault[2]
  - **leaf_highlight**: sorted_reault[-1] (id)
- **Alter information: alter = 1 AND attr_range < 20**
  - **trunk**: sorted_reault[0]
  - **bside**: sorted_reault[1]
  - **fruit_size**: sorted_reault[2]
  - **branch**: sorted_reault[-1]

Mapping

- **stick: alterid**
- **leaf_color**:
  - the different category of each contact
  - set different groups
- **leaf_size**:
  - the quantity of each contact
  - set different scale of the distinguish
- **root**:
  - the quantity of each different category
  - summary of this tree with the selected attribute
- **leaf_highlight**:
  - this is mapped as leaf_id
  - can map with every attribute

Mapping

- **trunk**:
  - separate into two categories
  - random place the stick
- **bside**:
  - separate into two categories
  - same ego place in the same position of the branch
- **fruit_size**:
  - the quantity of the alter
  - must related with alter
- **branch**:
  - place an alter as a stick into different layer (ordinal)
  - determines the height of the tree

DBLP

- **2013-09-29**
- **Author**'s information:
  - **Area**
  - Total paper
  - Number of paper in tier1, tier2, tier3
  - First cooperation time
- **Paper**'s information:
  - Title
  - Publish year
  - Area
  - Author count
  - Tier
  - Conference's name

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