13. 8. 29. IPython Notebook

```
In [3]: cd Desktop
         [Errno 2] No such file or directory: 'Desktop'
         /Users/jeongmingi/Desktop
In [8]: from sklearn.externals import joblib
         filename = "age my model 70.pkl"
         clf = joblib.load(filename)
In [32]:
        cd data
         /Users/jeonqmingi/Desktop/data
In [33]:
        import pickle
         uapp = pickle.load(file('user app.df'))
         import numpy as np
In [34]:
In [38]:
         cd DataMining/pickles
         /Users/jeongmingi/Desktop/DataMining/pickles
In [41]: EF table = pickle.load(file('entityid featureid.pkl'))
In [42]:
         def what ages(i):
             user = uapp .ix[(uapp ['user id'] == i)]
             #user_ = uapp_[uapp_.apply(lambda x: x['user_id'] == i, axis=1)]
             ######## pickle 'entityid featureid' uesed for translating ... ####
             X test = (0 , list(user .entity id))
             temp = []
             for ii in X test[1]:
               c i = str(ii)
               if(EF table.has key(c i) == True):
                   temp.append(EF table[c i])
               else:
                    pass
                   #print(i ,False)
             ######## vectorization... It will have 52,600 features and not ha
             ######## weight... ㅎㅎㅎ 그러나 0~1의 가중치를 줄 수 있지 안을까jQuery171
             n features = 49683 ##!!!!!!
             temp2 = np.zeros(n features, dtype = np.float64)
             for ii in range(n features):
                if((ii+1) in temp):
                    temp2[ii] = temp2[ii] + 1
                else:
                    temp2[ii] = 0
             X test = np.array([temp2])
             ages = clf.predict(X test)
             #print int(gender)
             #X_test = np.array([0, temp])
```

```
return i, int(ages)
```

```
In [44]: user = []
    ages = []
    user_id_ = user_id_[:1000]
    for i in user_id_:
        temp1, temp2 = what_ages(i)
        user.append(temp1)
        ages.append(temp2)
```

```
In [47]: uapp["ages"] = 0
```

```
In [48]: for i, uid in enumerate(user_id__):
    #print(i, uid)
    uapp.ix[ (uapp['user_id'] == uid), 'ages' ] = ages[i]
```

```
In [49]: t = uapp[25:35].copy()
t.pop('usage')
t
```

Out[49]:

| | create_date | update_date | user_id | entity_id | is_deleted | ages |
|----|----------------|----------------|---------|-----------|------------|------|
| 25 | 20130317015228 | 20130730090416 | 3023116 | 1599923 | True | 4 |
| 26 | 20130222103311 | 20130728184307 | 3246192 | 1693135 | True | 1 |
| 27 | 20130310141222 | 20130729230224 | 1758743 | 1793010 | True | 2 |
| 28 | 20130317015228 | 20130730090416 | 3023116 | 1541687 | True | 4 |
| 29 | 20130412063020 | 20130730090416 | 3023116 | 1777213 | True | 4 |
| 30 | 20130607151638 | 20130728193812 | 2115990 | 1854907 | True | 1 |
| 31 | 20130331040556 | 20130731075255 | 4305863 | 1612457 | True | 1 |
| 32 | 20130625120908 | 20130729230224 | 1758743 | 1864689 | True | 2 |
| 33 | 20130604154438 | 20130730054858 | 3611801 | 1841672 | True | 1 |
| 34 | 20130317015228 | 20130730090416 | 3023116 | 1779808 | True | 4 |

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```
In [41]:
         ls
         558691 589646044379538 942129678 n-1.jpg
         DataMining/
         DataMining2/
         NPKI/
         Untitled0.ipynb
         Untitled1.ipynb
         Untitled2.ipynb
         Untitled3.ipynb
         adme analysis temp.ipynb
         age_my_model_70.pkl
         document classification.ipynb
         entityid_featureid.pkl
         my_model.pkl
         my model10000.pkl
         new clustering.ipynb
         predicted user apps.ipynb
         profiled_user_gender.pkl
         user_app_predicted.df
         user_gender 2.txt
         user gender 3.txt
         user gender 4.txt
         user gender 5.txt
         user gender.txt
         user_gender7_pred
In [51]:
         import pickle
         users= pickle.load(file('profiled user gender.pkl'))
In [52]:
         users["ages"] = 0
In [50]:
In [ ]:
         ##### SUMMARY OF DATAFRAME #####
In [ ]:
In [67]:
        for i, uid in enumerate(users['user']):
            #print(i, uid)
            temp, age = what ages(uid)
            users.ix[ (users['user'] == uid), 'ages' ] = age
         [2115990, 2485217, 3023116, 4305863, 3611801]
Out[67]:
In [ ]:
```

13. 8. 29. IPython Notebook

```
In [73]: users[10:20]
```

Out[73]:

| | gender | user | ages |
|----|--------|---------|------|
| 10 | 1 | 2115990 | 1 |
| 11 | 2 | 2485217 | 1 |
| 12 | 1 | 3023116 | 4 |
| 13 | 2 | 4305863 | 1 |
| 14 | 1 | 3611801 | 1 |
| 15 | 1 | 4828587 | 1 |
| 16 | 2 | 2086263 | 3 |
| 17 | 2 | 4851916 | 1 |
| 18 | 2 | 5100778 | 1 |
| 19 | 2 | 2686098 | 1 |

```
In [74]: import pickle
    filename="profiled_user_gender_ages.pkl"
    fout = file(filename, "w")
    pickle.dump(users, fout)
```

```
In [ ]:
```