**Couple Matching Project**

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**Requirements:**

Please refer this link <https://github.com/intuit-recruiting/rit-challenge> for requirements.

**Description:**

The project tries to figure out the patterns in the transactions for each individual. After figuring out the patterns it calculates 6 factors which are CS(Credit Score), HM(Hobby Match), LM(Liking Match), Transport Match(TM), Marital Status Match(MSM), IM(Interest Match), Student Match(SM)

Out of the 7 factors mentioned only first one is individual factor rest all are mutual factor which need two individual for calculation.

The following points describe the 7 factors:-

1. **CS:** Higher the credit score better the financial condition of the person. Lower credit score reflects that individuals financial condition is not that good.
2. **HM**: Higher the number of common habits between two individuals, more the HM value and vice versa.
3. **LM**: Higher the number of common likings between two individuals, the greater the HM factor and vice versa.
4. **TM**: Based on the data provided. TM will be 100%(not the actual value, for understanding) if both individual used the same mode of transport for example both uses car.
5. **MSM**: There are four type possible marital statuses for individual based on the data provided.
6. Divorced
7. Having Baby
8. Having Baby and divorced
9. None of the above.

So, the based on above status the matching factor is determined.(Explained in screen-shots)

1. **IM**: Common interests lead to higher value of IM and vice versa.
2. **SM**: A student is only matched with a student. And non-student is matched with non-student. This factor is supreme factor in determining the match at first place.

If this factor is not satisfied, other factors are not calculated.

There is html page designed which displays the total accounts representing individuals. It has three buttons “HTML Report”, “PDF Report” and “Match Report”. HTML and PDF report gives a table showing their expenses on different category while Match report gives the detail whether individuals are matched or not.

**Assumptions:**

1. Considering every possible match between individuals which means that there is no consideration given to their gender as it was very hard and not possible to determine the gender of an individual due to lack of information related to this in the transactions.
2. The factor are not researched or generalized one. These factors and calculations are based on my analysis of the provided data of 100 individuals. Therefore, the project may not be able to respond correctly if the different data is used.

**Technology Used:**

1. Java Ebean ORM
2. Xampp-control
3. Jasper iReport Design
4. Oracle SQL Developer.
5. phpMyAdmin

**How to Install and Run:-**

1. Run mysql –u root –p
2. create schema my-project <”copy the sql dumps”>
3. sbt clean run
4. Load this page: <http://localhost:9000/accounts>