**Project Topic:** Life & Family Planning

**Project title:** Personal finance

**Introduction / problem statement** (What problem you want to solve?)

Difficulty in determine personal financial situation in Singapore, provide a form of guideline and structure for them to refer to, some of the problems we hope to reduce are as follows:

* Better financial sense to help improve Singapore’s Declining birth rate.
* Reduce divorce rate cause by poor financial decisions.
* Find out what is the best/optimal choices to make based on individual variables (This variables could be personal income, current savings, educational level, etc…)
* Easier parenting life through sound money saving plans.
* Optimise life choices according to changing costs of living (Take Singapore’s average cost of living for a X size household.)
* Explore inequalities in societal structures
* Make life & family planning easier/more accessible for everyone.
* Make better decisions

**Motivation** (Why should we care? Why is this problem interesting?)

* Singapore has been facing a declining population rate since the late 1980s
* Better family planning would mean long term benefits to Singapore (eg; workforce)
* Give insights to tackle Singapore’s issue on ageing population as well

**Literature review** (What has been done? What needs to be done?)

* Conventionally, life and family planning is done through consultations with professionals, which not everyone is able or willing to afford
* Identifying promising couples using ML <https://pdfs.semanticscholar.org/efeb/a27779bca466f55f37743d7301b6df34edc0.pdf>
* Relationship satisfaction (pdf unavailable) <https://www.forbes.com/sites/fernandezelizabeth/2020/08/04/machine-learning-reveals-what-makes-people-happy-in-a-relationship/#2afe8e6a7351>

**Datasets** ( Describe the data you plan to use, provide the website where

you download it)

* Fertility Rate by year <https://data.gov.sg/dataset/births-and-fertility-annual?view_id=f4fc6e27-6073-493a-a4fd-c6cf1598f5cd&resource_id=55f8c651-6c18-4017-b1f4-f4c4b65785e2>
* Age-specific Birth rate <https://data.gov.sg/dataset/births-and-fertility-annual?resource_id=9482aa71-a495-4770-8d10-d7ac80f9b898>
* Live Birth, death and natural increase by ethnic groups (for ageing population?) <https://data.gov.sg/dataset/live-births-deaths-natural-increase-by-ethnic-group>
* Live birth by education qualifications… <https://data.gov.sg/dataset/live-births-by-educational-qualification-ethnic-group-of-mother-and-birth-order>
* Household Income

<https://www.singstat.gov.sg/find-data/search-by-theme/households/household-income/latest-data>

* Price Range of HDB Flats Offered

<https://data.gov.sg/dataset/price-range-of-hdb-flats-offered>

* Singapore Consumer Price Index
* <https://www.singstat.gov.sg/whats-new/latest-news/cpi-highlights>

**Tools and resources used** ( What DM or ML technologies you use, provide

the website, the package name or references for the methods described in

literatures

**Preliminary results and evaluation** ( By week 7, you should have some

preliminary results and some ideas on how you will perform your project

**Project milestones / tentative schedule**

**Reference**

**TA’s Feedback:**

* 1. **What is the end result your team is trying to achieve?**
  2. **What type of data mining techniques will you be using for modelling? Will you be predicting, correlating your results?**
  3. **If you are doing the above, you would also need to source for actual data(similar to the literature review you have included) to perform your modelling.**