
PROJECT TOPIC – DIVORCE PREDICTION

GROUP NUMBER – 14

PROJECT GROUP NUMBERS:

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PROJECT SUPERVISORS:

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ABOUT THE PROJECT

INTRODUCTION :

Marriage is one of the strong predictors of staying alive. The interaction of couples in a marriage is everyday occurrence. This quality colours one's wellbeing. Divorces in the family have an adverse effect on the family climate. Separation leads to strong negative consequences on the physical as well as psychological health .

In Divorces, distress and depression often move in tandem and this association is bidirectional: Disturbed marriages are symbols of depression. Depression constantly elevates inflammation that is often experienced in troubled relations. Prone set of major life events such as failed marriages lead to other problems such as gloominess, fatigue, suicides and withdrawals in social gatherings.

Other problems include increased risk for psychopathology; automobile accidents with fatalities; and escalated incidence of physical illness, suicide, violence and homicide. mobility limitations-to raise children as single parent, negotiate parenting with an ex-spouse, experiencing social stigma and minimal incomes.

PROBLEM STATEMENT :

In this project we are going to analyse the major factors that lead to failed marriages, and how one factor is more dominant than other. Our aim is to create a Divorce Predictor Scale that will

predict the likeliness of separation using various machine learning algorithms. There are various factors that will serve as attributes for the project like:

- If one apologizes when discussion deteriorates, the discussion ends.
- They don't have time at home as partners.
- My spouse and I have similar values in terms of personal freedom.
- Most of the goals for their children are the same.
- My spouse and I have similar values in trust.
- I know my spouse's basic anxieties.
- I know my spouse's friends and their social relationships.
- I can be humiliating when we discussions.
- Sometimes I think it's good for me to leave home for a while.

and many more ...

SCOPE AND MOTIVATION :

Divorces in India are on the rise in the past decade; though the overall percentage is less compared to other countries, but we have a large number of cases. Due to high number of arrange marriages and social stigma couples usually don't get separated but lead a distressed life. We aim to identify distress in couples through the learning outcome of our study so they can see a counsellor or psychiatrist. We can also extend our study to matrimonial websites as a compatibility test for the about to be weds and also to young adults and teen for their healthy relationship in early dating years.

TECHNOLOGY USED:

- Machine Learning algorithms
- Programming Language (R or Python) – For Extracting data from datasets and performing operations on them.

ALGORITHM USED:

- Random Forest
- Logistics Regression
- Neural network using TensorFlow
- Naïve Bayes
- Support Vector Machines
- Confusion Matrices for above algos for comparison

Dataset: UC Irvine Machine Learning Repository by University of California.

WORKING STRATEGY – GANTT CHART :

