**T. Tarun koundinya**

**Reg No: 18325760020**

**Predict Happiness Source**

1. **Problem Statement**

Smile is a corpus more than 100,000 happy moments crowd-sourced via Amazon's Mechanical Turk.

Each worker is given the following task: What made you happy today? Reflect on the past 24 hours, and recall three

actual events that happened to you that made you happy. Write down your happy moment in a complete sentence

(Write three such moments.)

The goal of the corpus is to advance the understanding of the causes of happiness through text-based reflection.

Based on the happy moment statement you have to predict the category of happiness, i.e. the source of happiness

which is typically either of the following 'bonding achievement affection, leisure, enjoy the moment, 'nature'

'exercise

Programing environment: Laptop / Python (Sklearn,Keras)/google colab

1. **Data Description**

The training set contains more than 60,000 samples, while your trained model will be tested on more than 40,000

**samples**

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Column Description** | **Column Datatype** |
| Hmid | id of the person | Int64 |
| Reflection Period | The time of happiness | Object |
| Cleaned Hm | Happiness Statement Made | Object |
| Number sentence | No. of sentences present in the person's  statement | Int64 |
| Predicted Category | Source of happiness | object |

1. **Source of Dataset:**

Hacker earth Internship challenge :

[**https://www.hackerearth.com/challenges/test/ml-internship/**](https://www.hackerearth.com/challenges/test/ml-internship/)

1. **Scope of the project :**

Predicting the source of happiness from the given text and classifying accordingly.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Key Tasks** | **1-Nov-19** | **7-Nov -19** | **14-Nov -19** | **21-Nov -19** | **28-Nov -19** | **5-Dec-19** | **12-Dec-19** | **20-Dec-19** |
| Activity 1 | Selecting  Data set  and  Defining  the  Problem  statement |  |  |  |  |  |  |  |
| Activity 2 |  | Synopsis  Prepara-  -tion |  |  |  |  |  |  |
| Activity 3 |  | Synopsis  LMS  Submission | Understan-  -ding  data set |  |  |  |  |  |
| Activity 4 |  |  | Data pre-  processing | Drawing  Insights  (EDA) |  |  |  |  |
| Activity 5 |  |  |  | EDA |  |  |  |  |
| Activity 6 |  |  |  | DV |  |  |  |  |
| Activity 7 |  |  |  | Getting  Clear  Insights  And better  Understan-  -ding |  |  |  |  |
| Activity 8 |  |  |  |  | Model  Building |  |  |  |
| Activity 9 |  |  |  |  | Identifying  Best model |  |  |  |
| Activity 10 |  |  |  |  | Model  Evaluation | Model  optimization |  |  |
| Activity 11 |  |  |  |  |  | Identifying  Key  elements  For report  Making | Report  preparation |  |
| Activity 12 |  |  |  |  |  |  |  | Project  Submiss-  -ion |