

# Project Proposal

Project Title: **Mood Detection and Managenent using Facial Expressions**

Team# 4

Team Members

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## Project Goal and Objectives

The core idea of this project is to classify a person's mood using his facial expression and provide certain features according to the mood. The features include suggesting a song as per the mood, suggesting movies, near-by get away places and management tips for the particular mood. A web application can be designed that takes the input in the form of an image. This image can be fed to our model that detects the emotion and classifies the image either into happy class, sad class, anger class or surprise class. Based on this class , particular features will be appeared to the user. The moods of the person can be tracked everyday and an analysis chart could be given at the end of particular month.

- **Motivation**

Data Analytics has become very popular, analysis of data refers in examining data and deriving fruitful conclusion out of that data. In today's life, every single person dealing with lots of emotions that come out as a result of lots of responsibilities in diverse fields, managing issues in real life, relationships, deadlines, aims & dreams. There is surely a need to narrow down the impact of those, on one's individual life, so firstly we need to study the 'net' time of the person experiencing a particular emotion: that can be sadness, happiness, or any kind of the emotions. If we are able to track the feelings that the person is experiencing in reality, there is a possibility of finding a solution to enhance his'/her current condition. So, this application we are creating will be able to find out the net time of a person's overall feelings; that he experiences over a period of time.

- **Uniqueness**

The way: our output or the conclusion is interpreted at the end of particular amount of time: is the Unique feature of the application. It is all with: what we do with the collected information every time once a user uses the application.

The data collected is represented as a histogram.

- **Objectives**

**1.) Analyse the mood of the person with the facial expression.**

The model can detect like four to five different moods of the person. The classes can be divided based on the emotion like happiness, sadness, excitement and anger. Based on the facial expression the model predicts the emotion that would be useful further in the application.

**2.) Give some suggestions based on the current emotion like playing songs , suggesting get aways**

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On the user's profile in the website, he/she can have access to a lot of information that is sorted in detail. They include:

- Suggesting movies based on the current emotion of the user.
- Redirecting to music and play songs or suggest songs based on that particular mood.
- Suggesting him certain places that can change his/her mood .
- Emotion Management tips.

**3.) Provide a monthly analysis of the emotions to the user using charts and Graphs.**

## **System Features**

- **Image as an Input**

We can upload the image as the input to the application. On analyzing the image, the emotions are predicted and the conclusion is omitted out.

- **Most precise conclusion**

Very deep analysis of data and the high definition data taken as the input will make this possible.

- **Pie Chart Analysis**

Emotions are tracked month wise, and a detailed pie chart is made which clearly shows different emotions experienced.

## **Related Work**

We did a lot of ground work, there is no project of this kind so far. We want to make this completely functional and achieve all the objectives and make this one-of-a-kind.

## **Prioritized Features**

- 1.) Create a model that identifies face for particular face.
- 2.) Analytics using charts and graphs

## **Technologies**

- Spark
- HTML5
- Angular
- CSS
- Bootstrap
- REST API
- Scala
- Azure(Planning to Use)

Increment Plan

✚ 5 Open ✓ 0 Closed		Sort ▾
<h3>Project Proposal</h3> <div><div></div><div>Due by February 2, 2018</div><div>Last updated 1 minute ago</div></div> <p>Motivation and introducing problem Statement Brain-Storming Objectives and System Features Project Planning and Assigning tasks</p>		<div>100% complete 0 open 2 closed</div> <div>Edit Close Delete</div>
<h3>Final Report</h3> <div><div></div><div>Due by April 30, 2018</div><div>Last updated 7 minutes ago</div></div> <p>Create Final demo and Video</p>		<div>0% complete 0 open 0 closed</div> <div>Edit Close Delete</div>
<h3>Increment 3</h3> <div><div></div><div>Due by April 23, 2018</div><div>Last updated 9 minutes ago</div></div> <p>Integrating system features and add additional features if possible</p>		<div>0% complete 0 open 0 closed</div> <div>Edit Close Delete</div>
<h3>Increment 2</h3> <div><div></div><div>Due by March 19, 2018</div><div>Last updated 10 minutes ago</div></div> <p>Complete Facial recognition and emotional detection Understand analytics using charts and reports</p>		<div>0% complete 0 open 0 closed</div> <div>Edit Close Delete</div>
<h3>Increment 1</h3> <div><div></div><div>Due by February 23, 2018</div><div>Last updated 12 minutes ago</div></div> <p>Basic features</p>		<div>0% complete 0 open 0 closed</div> <div>Edit Close Delete</div>

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			<div><div>Big-Data-Analytics-Pr... #2</div><div>Pre Proposal Documentation</div><div>Project Proposal</div><div>good first issue</div></div> <div><div>Big-Data-Analytics-Pro... #1</div><div>Project Proposal ideas</div><div>Project Proposal</div><div>question</div></div> <div>Load more issues...</div>		

## Pre-proposal Increment

### Project Proposal

📅 Due by February 2, 2018 100% complete

Motivation and introducing problem Statement Brain-Storming Objectives and System Features Project Planning and Assigning tasks

III [See this milestone on the board](#)

☐ 0 Open ✓ 2 Closed

☐ **Pre Proposal Documentation** good first issue 2

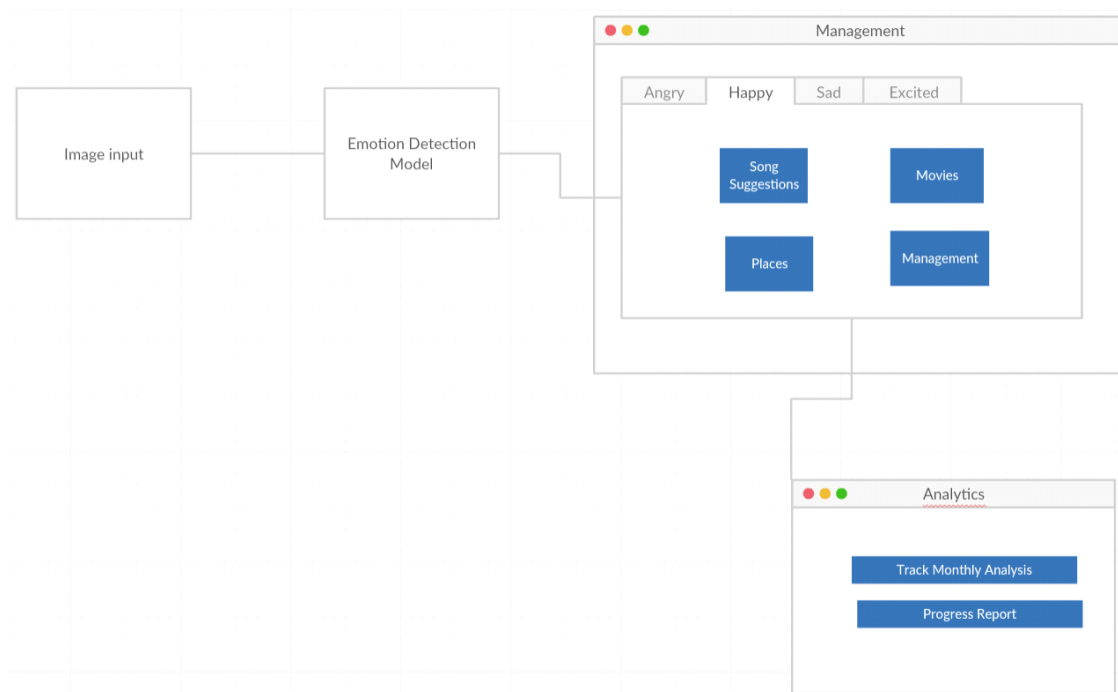
#2 by manirajmohareer was closed 2 minutes ago

☐ **Project Proposal ideas** question 1

#1 by manirajmohareer was closed 3 minutes ago



## System and Implementation Design



Burndown Chart

Project Proposal

Motivation and introducing problem Statement Brain-Storming Objectives and System Features Project Planning and Assigning tasks  
Start: Jan 30, 2018 Change Due: Feb 2, 2018 Change

