Movies reviews Analysis using Machine Learning

A Project Work at ATSS's

Institute of Industrial & Computer Management & Research, Nigdi

Presented by

- **Rwittick Sadhu**
- **Chetan K. Chaudhari**

Presentation Outline

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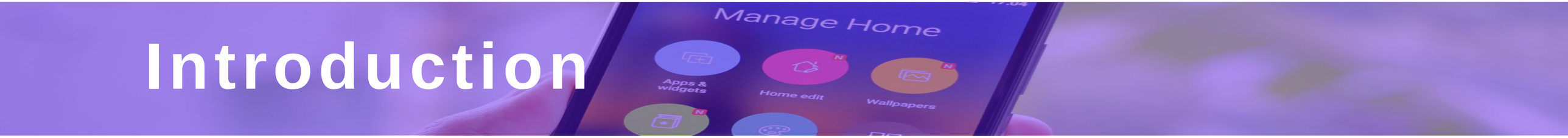
Introduction



The count of internet users is increasing day by day and with this, social media influences a lot to the people for their internet addiction. Due to this, people are shifted from print media to digital media.

Most of the users trusted a lot on online reviews of any product or services or even if any IMDb movie. So, the sentiments and emotions of users are hidden inside their reviews and they are expressing their thoughts through their reviews. New users or customer usually read previous customers reviews before buying or adapting products and services. They have also taken their decisions like to watch any movie or not from IMDb movie reviews.

The sentiment analysis of IMDb movie review process extracted hidden emotions inside customer's comments and reviews by using the keywords which are used inside it.

About Existing System

Survivor usually enter manually all the details.

The Drawbacks of Existing system

- Survivor usually provide a feedback form &enter manually all the details. and analyze one by one.
- That is time consuming, hectic.
- Not user-friendly environment.

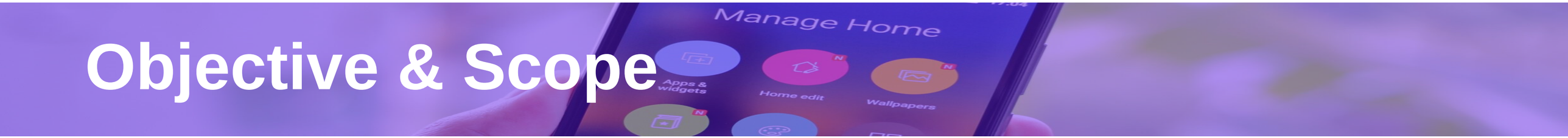
Need of Proposed System

- New users or customer usually read previous customers reviews before buying or adapting products and services. They have also taken their decisions like to watch any movie or not from IMDb movie reviews. there is much more need of sentimental analysis of IMDb movie reviews Through sentimental analysis, we can extract information like popularity of movie, audience positive and negative emotions analysis about movies

•The aim of this project is to build an analysis model for Movies reviews which will allow us to categorize words based on their sentiments, that is whether they are positive, negative and also the magnitude of it.

•This project could show a path to reduce customer churn.

Objective & Scope



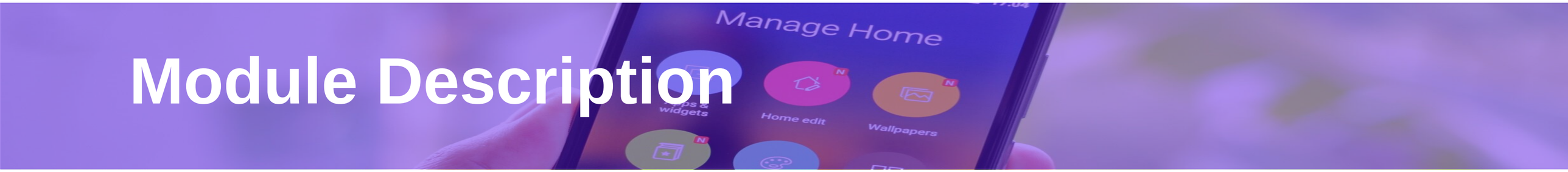
•The sentiment analysis of IMDb movie review process extracted hidden emotions inside customer's comments and reviews by using the keywords which are used inside it.

•Movies reviews Analysis is a process of extracting opinions that have different polarities. By polarities, we mean positive, negative or neutral. It is also known as opinion mining and polarity detection.

•With the help of sentiment analysis, you can find out the nature of opinion that is reflected in documents, websites, social media feed, etc.

•Movies reviews Analysis is a type of classification where the data is classified into different classes. These classes can be binary in nature (positive or negative) or, they can have multip classes (happy, sad, angry, etc.).

Module Description



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•**Defining the model**

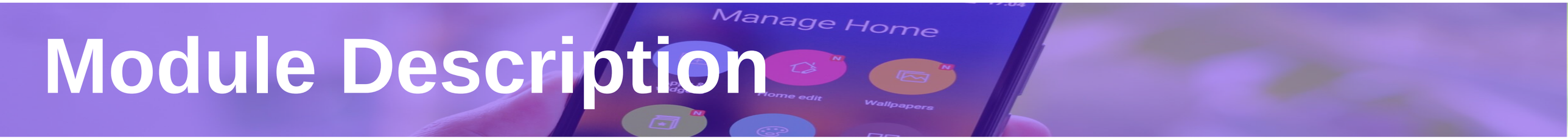
We have used one of the Naive Bayes (NB) classifier for defining the model. Specifically, we will use MultinomialNB classifier.

•**Compiling the model**

we are using sklearn’s modules and classes we just need to import the precompiled classes.

```
from sklearn.naive_bayes import MultinomialNB
```

Module Description



- **Fitting the model**

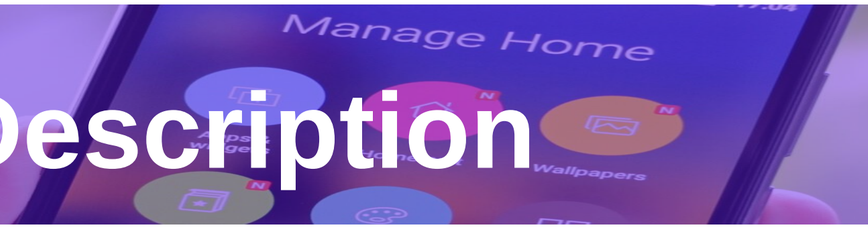
In this step, we generate our model-fitting our dataset in the MultinomialNB. In order to look for the arguments which can be passed while fitting the model, it's advised to check the sklearn webpage of the module underuse

- **Evaluating the model**

Here we quantify the quality of our model. We have used metrics module from the sklearn library to evaluate the predictions

- **Making predictions with the model**

Technology Description

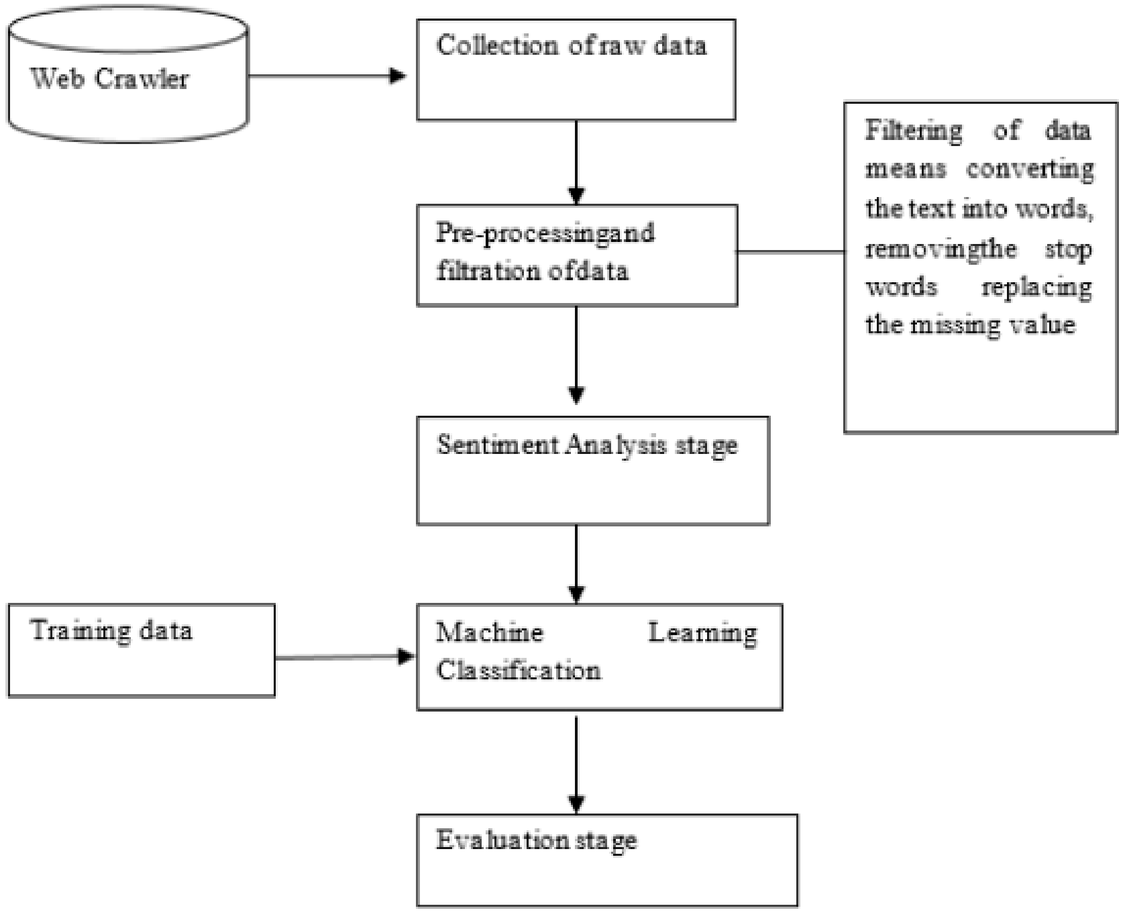


Front End Language	HTML, AJAX, JQUERY, JAVASCRIPT, CSS
Back End Language	Python Machine Learning
Library	Pickle, numpy, pandas, sklearn, flasgger
Tools	Jupiter, Visual Studio Code.
Framework	Flask

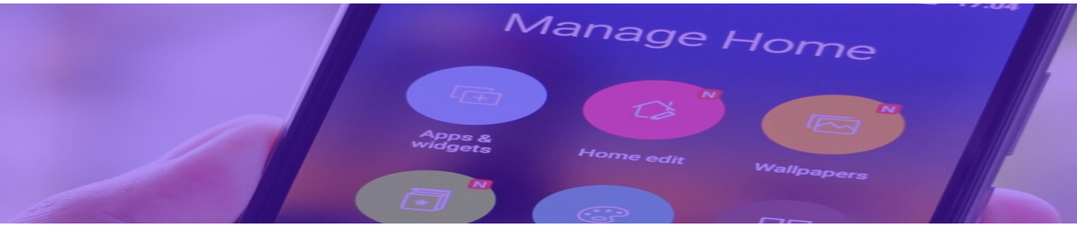
Software-Hardware Requirements

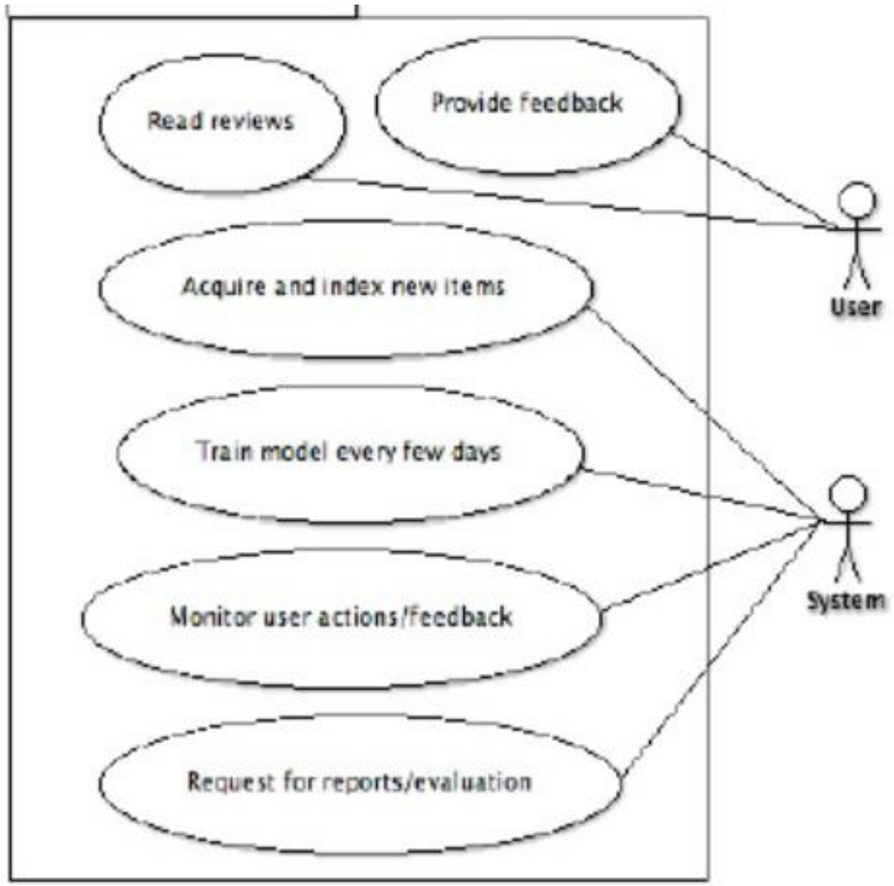
Hardware Requirement		
Processor	**RAM**	**Free Space**
Intel(R) Pentium(R) CPU N3700 @ 1.60 GHz	4 GB or Above	500MB or Above
Software Requirements		
Operating System	**Application/Software**	
64-bit Operating System, x64 based processor	Web Browser: Mozilla, Google Chrome,IE8, etc.	
Server-Side Requirements		
Operating System	**Processor**	**Storage Space**
Win-7, Win-10, Linux or any other higher version	Intel core i3 or i5	Ram 4GB or more and 5GB or More Free Space

FUNCTIONAL DECOMPOSITION DIAGRAM

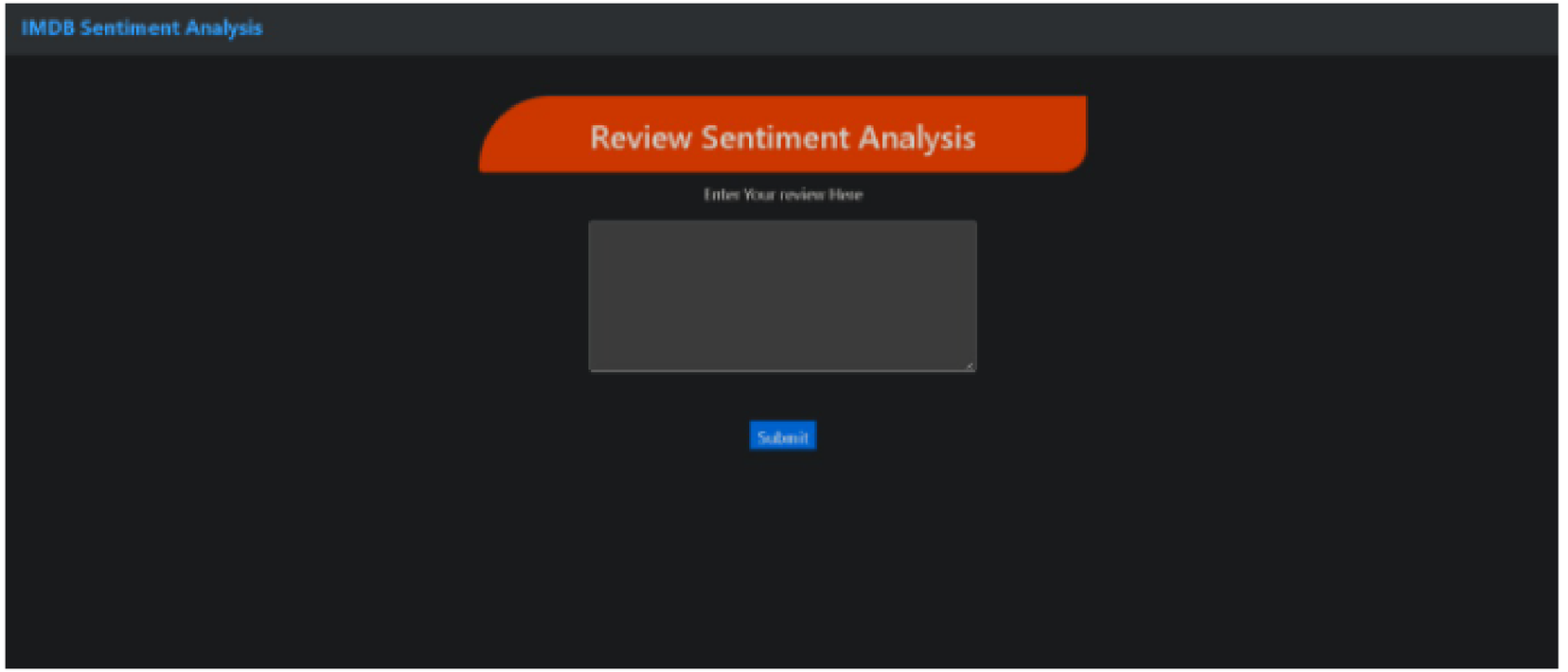


Use case

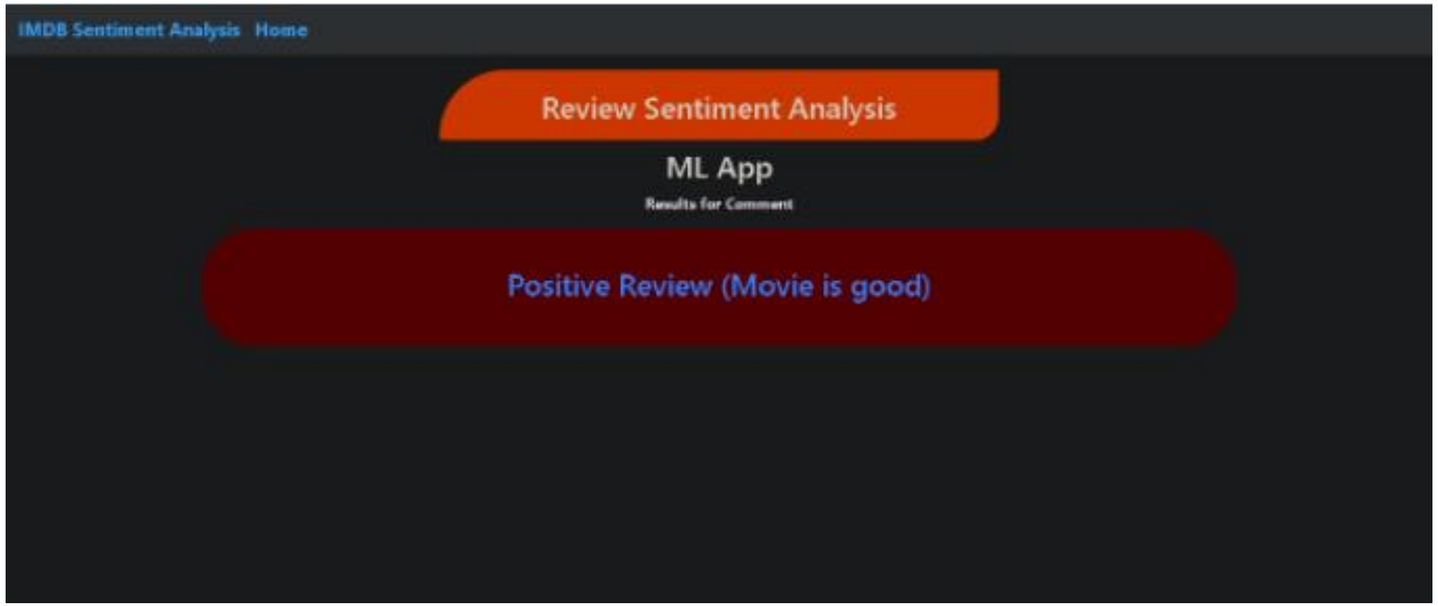

Manage Home
Apps & widgets
Home edit
Wallpapers


Read reviews
Provide feedback
Acquire and index new items
Train model every few days
Monitor user actions/feedback
Request for reports/evaluation
User
System

GUI Screens


IMDB Sentiment Analysis
Review Sentiment Analysis
Enter Your review Here
Submit

GUI Screens


IMDB Sentiment Analysis Home
Review Sentiment Analysis
ML App
Results for Comment
Positive Review (Movie is good)

Thank you!