

Final Year Project

Mid Evaluation

Report

Rel-event

A Predictive Event Finder Application

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Chapter 1 - Introduction

1.1 Overview

The domain of event management and searching has combined well with the latest influx of Natural Language processing and machine learning algorithms to open doors for predictive analysis on event searches and popularity of an event. The huge amount of data that is being generated from the field of event management itself has led to a lot of research and development work on predicting the popularity of an upcoming event, narrowing and classifying the events into different categories, and patterns and feature extraction through user's history.

1.2 Motivation

In this age of information, it's problematic, time consuming, and frustrating to find information which is relevant to you and to your needs, especially in finding events that match your type around the city that you live in or visit.

And will that event be successful or not? For example: Debating events, Sports events, Corporate events etc.

Chapter 2 – Project Vision

2.1 Problem Statement

Till this date, Event categorization and popularity prediction of an upcoming event to specifically cater the users need has not been up to the mark. Machines are yet to beat human expertise in the relatively uncertain field of football analysis. The aim, therefore, is to use historical and real-time event related data to effectively feed and tune intelligent models to get predictive insight into future events. Given enough data to the latest machine and deep learning algorithms, the goal would be to effectively predict whether the event would be successful to a specific percentage, The research aims to explore various machine and deep learning algorithms that are applicable to the problem structure, fed by previous events history data, their positive or negative reviews, and the number of people associated with it.

2.2 Business Opportunity

This event finding app helps a large number of outgoing and social people, and not only them but those people as well who actually want to attend events that will have a smaller number of people and also matches their personality.

This app would also be a tremendous help to event organizers to actually have an insight into their upcoming event and what they can do to improve it.

2.3 Objectives

- Gathering data from multiple websites and datasets from social media
- Extraction of relevant information and its categorization.
- Sentiment Analysis for success/failure of event
- Developing an android app with proper UI/UX techniques to display events.
- Providing the functionality to the app to learn from the users choices.

2.4 Constraints

- Managing the large history of user activity
- Continuous model training on user interests with respect to history
- Optimizing the new event's suggestion through sentimental analysis.
- Integrating huge amount of training data continuously with our app.
- Predictability the popularity of upcoming events

Chapter 3 – Software Requirements Specification

3.1 List of Features

- We will implement a user-friendly interface.
- The system will be able to classify the events by extracting useful features from user database and past events and then classify them into their respective categories.
- Our system will work on the following criteria:
 - Optimization
 - Interaction
 - Predictability

3.2 Functional Requirements

- The user of the website will be admin of the website who will put/upload the images and the algorithm will do the rest of the job for him.
- User can also search for the product by writing its name in the search box to see if the product has been classified successfully.
- The system shall process the images and by analyzing the data provided, will produce efficient results for the user which he can use in his business techniques.
- The user will be able to view the product and the details of that product once the algorithm has finished classifying it successfully.

3.3 Non-Functional Requirements

- **Usability**

This section lists all of those requirements that relate to, or affect the usability of the system.

- **Design for ease of use**

The user interface for users shall be designed for ease of use and shall be appropriate for any community that owns a phone.

- **Reliability**

Maximum effort will be made to make sure the predictability rate is above a satisfaction rate.

- **Availability**

Our product is for all phone users; he can use it for his purpose as long as he is working on it. No constraint on number of hours.

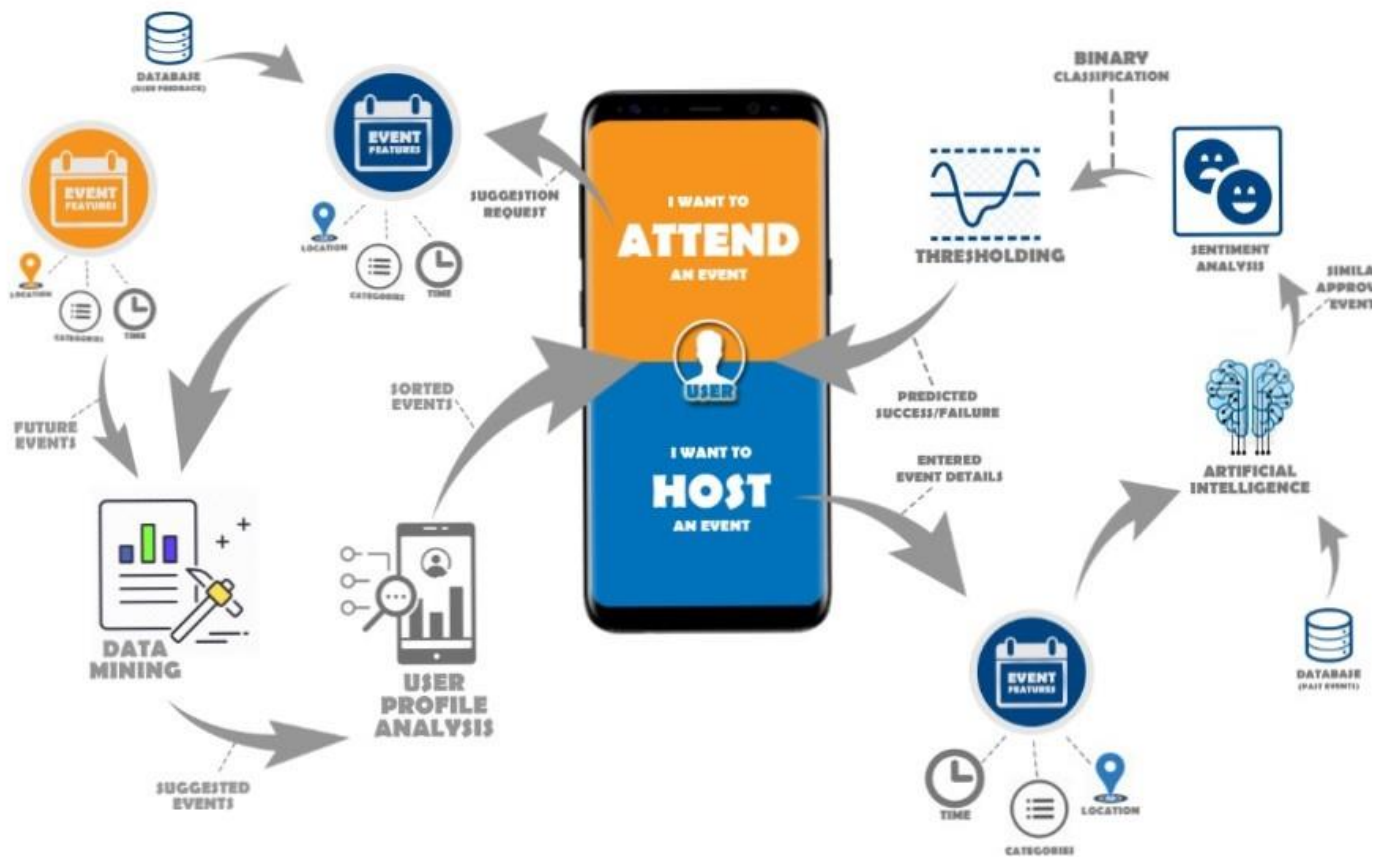
- **Performance**

In order for the user experience to be as smooth as possible, the majority of the classification and application page loading should happen in less than 5 seconds. However, some flexibility is acceptable for parts of the pages that require to automate the main process however it should be reduced to minimum. Our goal is to provide the user with ultimate system performance for most of the time.

- **Supportability**

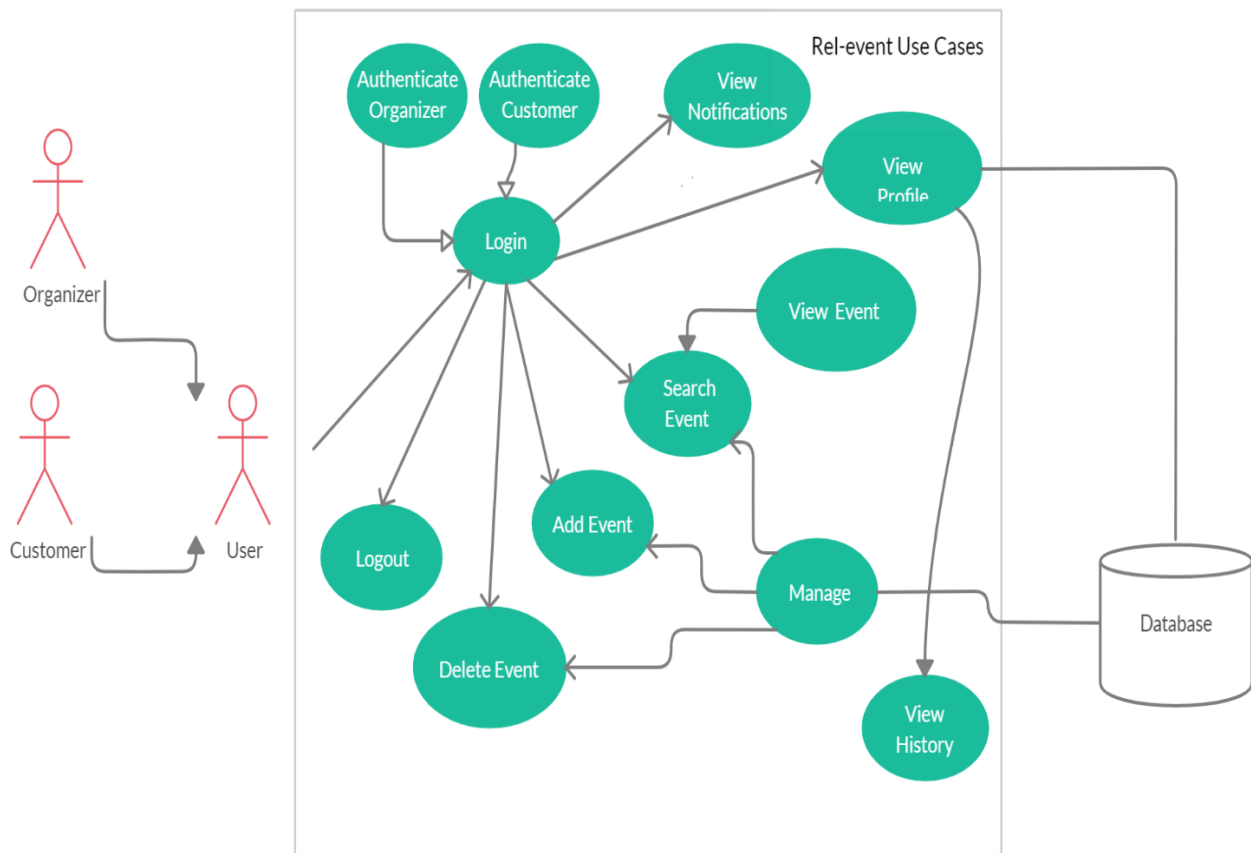
Efficient tools and coding methods will provide the best possible support to make sure the system work in the best possible way.

3.4 Project Process Flow Diagram



Chapter 4 – Use Cases

4.1 Use Case Diagram



4.2 High Level Use Cases

Name:	Login to application
Actor:	Customer and Organizer
Type:	Primary
Description:	User enters required information and selects desired functionality to enter into application.

Name:	Add Event
Actor:	Organizer
Type:	Primary
Description:	User selects option and is asked to fill in mandatory event details.

Name:	Delete Event
Actor:	Organizer
Type:	Primary
Description:	User selects event which he desires to remove.

Name:	View Event
Actor:	Customer / Organizer
Type:	Primary
Description:	User selects from a list of recommended events he wishes to know more details about.

Name:	Search Events
Actor:	Customer / Organizer
Type:	Primary
Description:	User types in event name or chooses event category to find desired events.

Name:	View Notifications
Actor:	Customer / Organizer
Type:	Primary
Description:	User checks designated tab for updates on chosen events.

Name:	View Profile
Actor:	Customer / Organizer
Type:	Primary
Description:	User is taken to his own customized page with all his account details.

Name:	View History
Actor:	Customer / Organizer
Type:	Primary
Description:	User is shown all his feedback on selected events.

Chapter 5 – Iteration Plan

5.1 Timeline

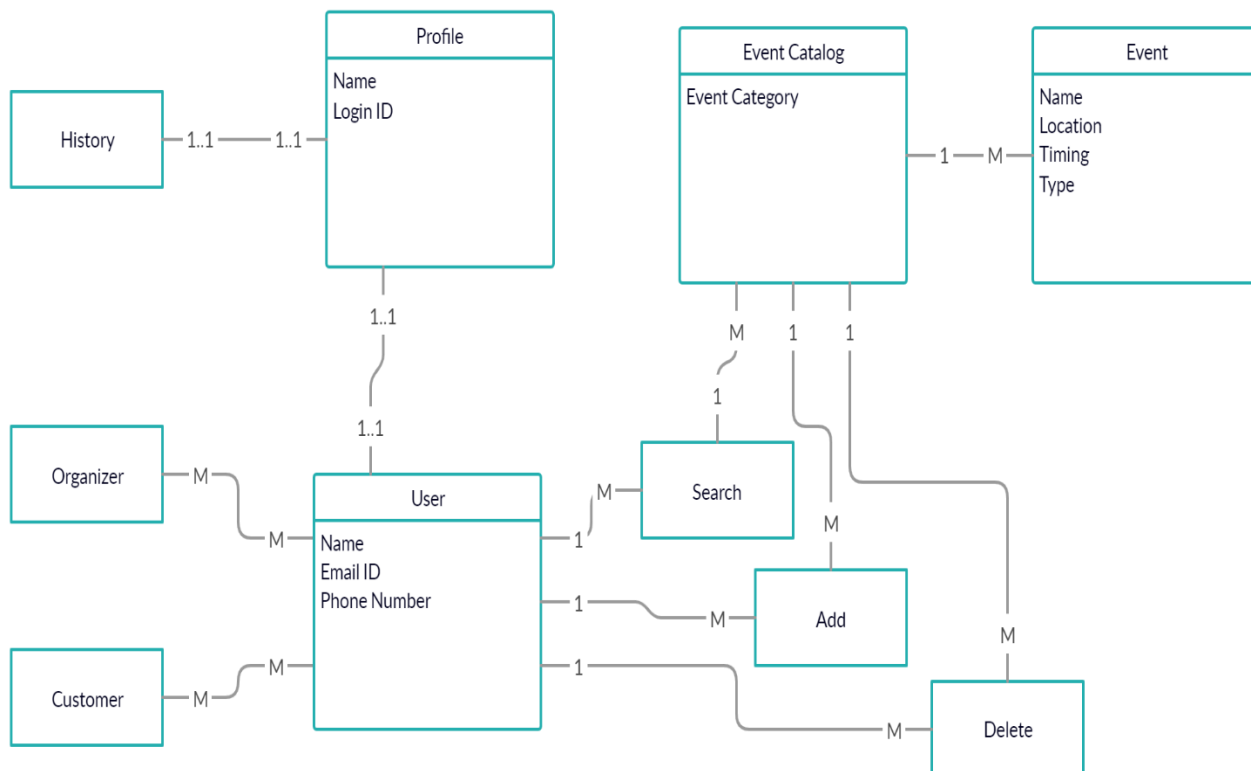


5.2 Extended Use Cases

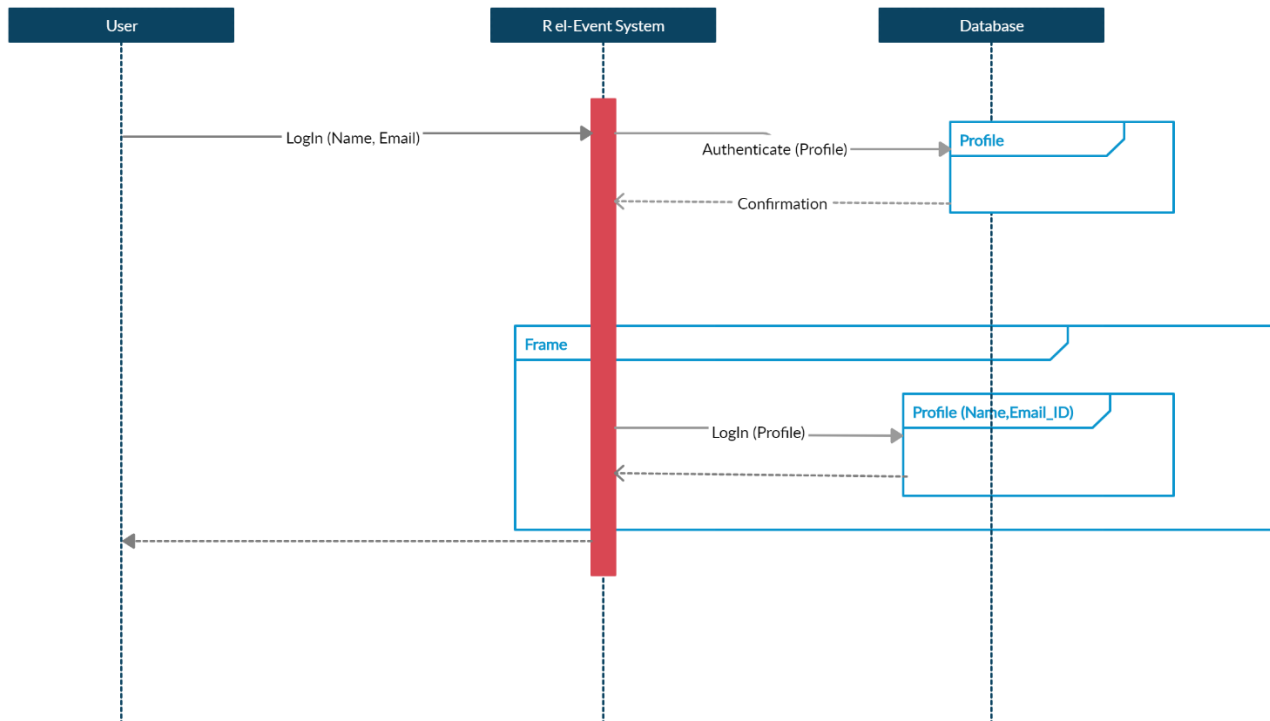
Name of Use Case:	Login into application		
Created By:	Aneeb Hassan	Last Updated By:	Aneeb Hassan
Date Created:	30/09/2019	Last Revision Date:	01/09/2019
Description:	User opens the application on phone and is shown starting screen asking to choose fill in required information		
Actors:	Customer, Organizer		
Preconditions:	1. User has application installed on phone 2. Phone location services are activated		
Postconditions:	1. User has successfully open home page of application		
Flow:	1. User enters his information such as Name, Age etc. 2. Application will ask for user request between recommendation or creation 3. User chooses to select recommendation 4. System accepts user input		

Alternative Flows:	<p>5. In step 3 of the normal flow, chooses creation:</p> <p>1. System accepts user input</p>
Exceptions:	<p>In step 3 of the normal flow, if user did not enter the correct event details:</p> <p>1. He will be asked to re-enter details</p>
Requirements:	<p>The following requirements must be met before execution of the use case</p> <p>1. Active internet connection</p> <p>2. Active phone location services (GPRS)</p>

5.3 Domain Model



5.4 System Sequence Diagram



5.5 Class Diagram

