# AN AI BASED EVENT RECOMMENDATION & MANAGEMENT SYSTEM

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*Abstract :  - The amount of information on the Internet has increased exponentially in recent years. Evaluating and analyzing this data and/or data extraction is difficult due to the volume of data. In this case, a consent agreement will be used as a solution to this problem. Create a web application for "Approval Approval". The content-based collaboration agreement aims to provide students with diverse and easy-to-use opportunities for collaboration on different projects. This article describes the application and approval process. The overall performance of the system is discussed. Events will be recommended to students based on their priority among residents and the standards of other students attending various events at the University and surrounding areas.*

*Key Words*: Recommendation System, Content based filtering, collaborative filtering, hybrid filtering, log, count.

## 1. INTRODUCTION

Recommendations are used in many business applications and are data filters used to predict ratings and/or preferences given to users. The planning process will envisage activities, discussions and workshops for students. This web-based application will help students recommend events of interest and participating organizations create and access event databases better and more efficiently.

The website will provide all information about regular events, registration deadline, upcoming events and expired events. Participating organizations will have easy-to-use apps to promote and run events, an easy-to-use website for students looking to sign up for events, and recommendations to avoid searching too hard for events they like.

The system allows administrators to recognize students attending a particular event, making it easier to manage students with event times and appointments. Due to the large number of students, they are divided into different types and managed by special administrators. Additionally, approving this event allows the student and the event manager to check the payment work. The system also accepts event feedback and comments. The website makes it easy for students to learn about current events, past events, and upcoming events

## 2. LITERATURE SURVEY

[1]    Proposed a consensus using collaboration and content-based filtering. The integration process uses each user's suggestions, and the content-based process uses the user's context (such as the user's history or research search) to make recommendations. Hybrid filtration is the combination or combination of two or more methods.

[2]    Project-based collaborative filtering (IBCF) and user-based collaborative filtering (UBCF) are used in the recommendations. The project-based collaboration filter is used to estimate products because it calculates and recommends common features of products. User engagement filtering techniques are used to predict or predict the product-related interests and behavior of other users who interact with the customer.

[3]    An offering that generates real-time recommendations for new Internet users. This estimate is based on the user's previous rating of the product. It will help estimate user ratings for those who don't give ratings. Then, according to these estimated scores, suggestions will be produced according to the highest level given by the estimated scores.

[4]    E-commerce websites analyze registered users' usernames and suggest the user's top products and interests, as well as users' past online behavior such as product type. purchases, frequent website visits, and product and service reviews.

[5]      Two methods: In an online experiment, they tested an algorithm that required users to write their opinion about the quality of the forecast according to a particular method. In offline testing, you can extract some evidence from the test data and then try to guess the missing data, or you can take a small portion of the group and try to find another through guessing.

[6]New suggestion for university integration and grouping with students: The first usage model is created for each new user based on the user's password. Update customer models based on customer history (bad products and good products). Recommend some new products compatible with the user according to the user's model.

| Technologies/ Paper/Application | Web Socket | JWT | Database Schema | Event Management | Event Marketing | OTP | Booking Spaces |
|---|---|---|---|---|---|---|---|
| **Research of Web Real-Time Communication Based on Web Socket** | ✓ | | | | | | |
| **Insights of JSON Web Token** | | ✓ | | | | | |
| **A Methodology of a Database Schema Design Using The Subschemas** | | | ✓ | | | | |
| **An Overview of Web Sockets: The future of Real-Time Communication** | ✓ | | | | | | |
| **a Case Study Approach to Understanding Event Dimensions** | | | | ✓ | | | |
| **Special event management and event marketing: A case study of TKBL All Star2011 in Turkey** | | | | | ✓ | | |
| **A_Customisable_and_Responsive_ Design_Online_Booking_System** | | | | | | | ✓ |
| **A study on efficient OTP generation using stream cipher with random digit** | | | | | | ✓ | |
| **Evento** | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

## 3. METHODOLOGY

### 1.1 Algorithm For Recommendation
Step1: Start.
Step2: Check whether the user has registered or not.
Step3: If not registered then first register and then login.
Step 4: If the user is new then the user should register for minimum 1 Event.
Step 5: The System will suggest the Event with highest domain count.
Step 6: System will also suggest most viewed events from the domain.
Step 7: Register for Event.
Step 8: Increment domain count of that Event Domain.
Step 9: Notification of the payment. Step 10: End.

### 1.2 Recommendation Methods • Content-Based Suggestions
Student history is used in content-based suggestions. Based on this, the maximum number will show the top five events for users with that name. Use lists and calculations.

### • Collaborative agreement
In the cooperative agreement, all popular activities for students are agreed upon. To do this, the average score for each activity is calculated and the top five activities with the highest scores are displayed to students using the listing.
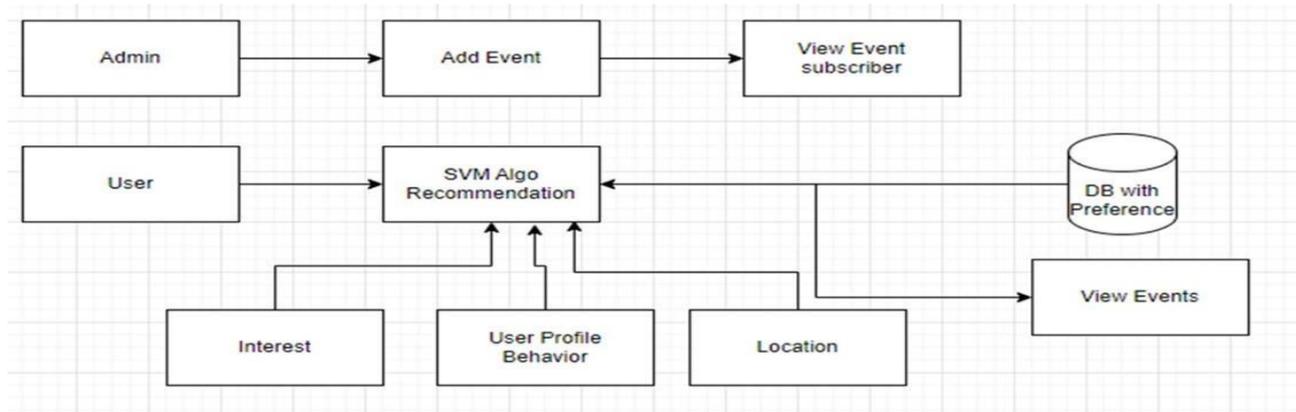
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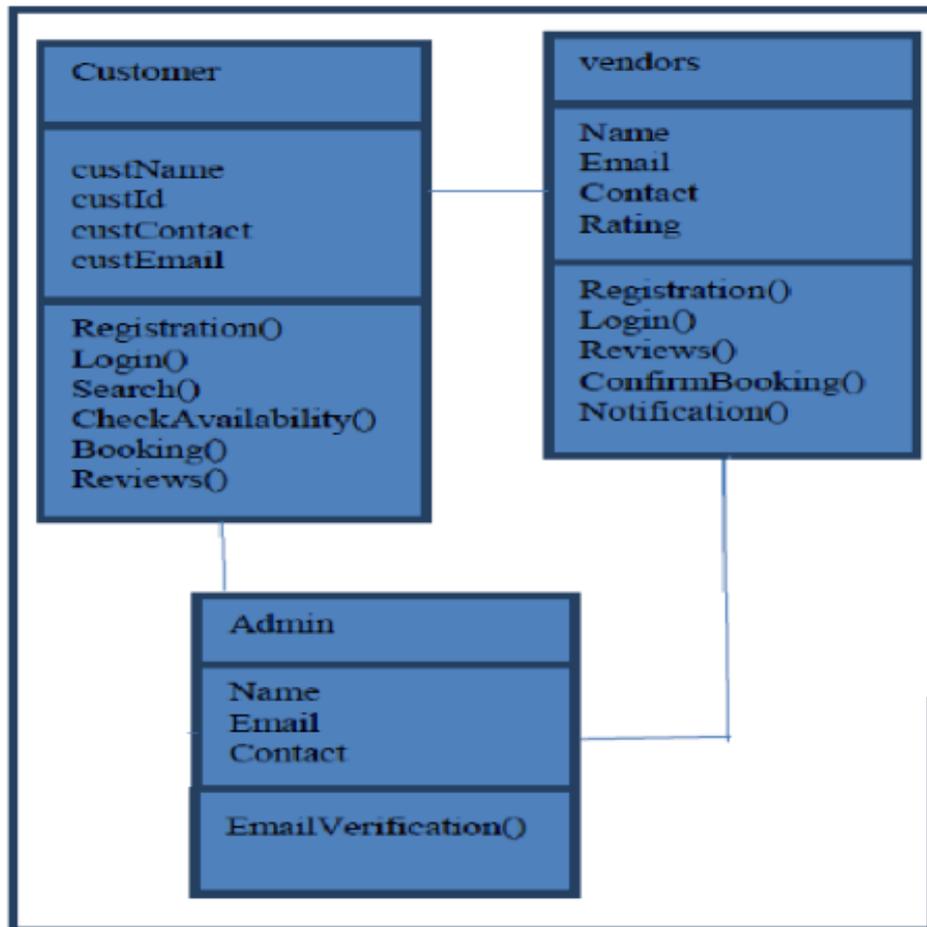


Class Diagram

**ADVANTAGES:**

An AI-based event recommendation system can offer several advantages, enhancing the user experience and providing more personalized and relevant suggestions. Here are some key advantages:

**Personalization**

AI can analyze user preferences, behavior, and historical data to provide highly personalized event recommendations. This ensures that users receive suggestions tailored to their interests and preferences, leading to a more engaging experience.

**Improved User Engagement:**

By offering relevant event recommendations, the system can increase user engagement and interaction. Users are more likely to explore and attend events that align with their interests, leading to a positive experience.

**Time Efficiency:**

AI can process large amounts of data quickly and efficiently, saving users time by presenting them with a curated list of events that are most likely to interest them. This helps users discover events without having to sift through irrelevant options.

**Enhanced Discovery:**

AI algorithms can identify patterns and trends in user behavior, helping users discover events they may not have considered. This can introduce users to new interests and experiences, expanding their event horizon.

**Dynamic Adaptability:**

AI systems can adapt to changing user preferences over time. As users engage with the system and attend events, the AI can continuously learn and adjust recommendations to reflect evolving interests and preferences.

**Increased User Satisfaction:**

Providing users with personalized and relevant recommendations contributes to overall satisfaction. Users are more likely to appreciate and trust the platform, leading to a positive perception and increased loyalty.

**Optimized Event Marketing:**

Event organizers can benefit from AI-based systems by reaching their target audience more effectively. The system can analyze user demographics and behavior to help organizers tailor their marketing strategies and promote events to the right audience.

**Data-Driven Insights:**

The system generates valuable data on user preferences and behavior, providing insights that can be used for business intelligence and decision-making. This data can be leveraged for marketing, content curation, and improving the overall platform.

**4. CONCLUSION**

AI-based event recommendation systems are a significant advancement in event planning and attendance. They use machine learning algorithms, user preferences, and real-time data analysis to provide a personalized experience for users. This system fosters a sense of connection between users and events, increasing attendance and satisfaction. It also streamlines decision-making, considering contextual factors like location and social connections. However, challenges like privacy concerns and algorithmic biases need to be addressed for ethical implementation. Despite these challenges, AI-based event recommendation systems hold great promise for a seamless and enriching experience for users worldwide.

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