Providing Recommendations to Music Artists Using Cloud Web Application

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Abstract— **The music related web application is used for providing platform to the artists. This application is helpful for anticipating the chance and allow them to connect with alternative artists in Application. The registered users will share their ideas and concepts, produce comes and manage them to make nice content. This application provides recommendations to the artists regarding their specified interests to develop any album collaborate with alternative artists, then purchased through this website solely. This application is going to be deployed into public cloud, for providing opportunity to more artists' not related to one particular language.**

Keywords—**recommendations; public cloud; clustering; web application development**

I. INTRODUCTION

The music related project could be a web based application. This application provide platform for several musical artists from industry or outside industry people(fresher).It's helps us to connect and collaborate with each other. It's a platform for artists to gather and share their opinions. Based on their knowledge we provide recommendations to the artists. Now the problem what the artists are facing like, if they want any opportunity to prove their self they were going to meet the music directors for getting the appointment is difficult and we don't know whether they will be free or not. Sometimes they went for outdoor location and they don't have time to hire new one into their music band and give opportunity to new ones. For example, one artist good in one type of genre if any opportunity related to that genre every one recommend industry related person is suitable for this, normally these kind recommendations happened in film industry. The unknown people to the industry want to prove their self we develop this application. Now a day every one busy with their work, even if they are passionate in music but they work on different filed beyond their interest. No need to wait in front of their music companies and producer offices. So this application useful for these kinds of persons, any music industry announced projects, registered users get recommendations from the website and if anyone has idea to create any private album to post/share your own idea and gather does the project by yourself, this platform provide to purchased albums of users through this site. In this website is platform to gather music industries and artists. By using this application for similar taste of artists we can provide recommendations to work on this user's ideas/project. We know that no two artists are the same, and that every artist has different ideas to develop an album. If an independent artist/crew who wants to create great content, music application let them connect with other artists/crew on App.

II. RELATED WORK

1. Develop application

Providing recommendations to the music artists and companies we develop a single page web application. In a single page application, all code is reclaiming with a single or dynamically loaded page or resources, without constant reloading of the page or transferring of control to other pages. Almost everything is completed on the client side of the application. Music artists and companies' create their account in this website, then login and register the details of a particular user. Music artists need to fill the profile, and then we will provide recommendations to the artists based upon his profile information.

2. Cloud deployment

The web based application deploy into public cloud for providing platform to all kind of users. Web applications are an authoritative part of all active enterprise IT investments and Platform-as-a-Service (PaaS) products offer an irresistible way to easily deploy and manage these applications.

Azure offers many ways in which for deployment and conveyance of web related services and make use of machines with selection of Windows and UNIX configurations. As a result of Azure could be a platform independent atmosphere, Azure SDK platform provided bunch of tools used to develop required applications. Therefore, Azure provide applicable SDKs for many programming languages in addition as completely different reliable tools for developing platforms that offer shared resources that can be used in parts of application development lifecycle. At end, may present to final setting of software resultants within the service cloud. So, we deploy our web based application into Microsoft azure.

3. Recommendation system

A recommender system is a subclass of information filtering that seeks to predict the rating or preference for one particular interest or instrument in the user profile. Based on

three ways we provide recommendations to the user. 1 content based 2. Collaborative based

a. Content Based:

Content-based recommender systems work with user profiles. Profile information regarding the user interests and his performances that relies on however user rates to his friends and favorite singer. Generally, once making a user account, recommender systems observe, to induce initial data from a couple of users so as to avoid the new-user drawback. Within the recommendation method, the system compares the company requirement is matched to the user profile the recommendation will be send to the artist.

b. Collaborative Based:

In collaborative filtering, information gathered from both user and similar kind of other artist interest used to provide the recommendations. In collaborative filtering user ratings has been taken for one particular product or musical instruments. For example, we assume that if user A and B rate m things equally or have similar behavior, they're going to rate or act on different things equally. Instead of shrewd the similarity between things, a collection of nearest neighbor users for each user whose past ratings have the strongest correlation are found. Therefore, scores for the unseen things are expected supported a mix of the scores illustrious from the closest neighbors".

For providing recommendations to the artists we use content based decision tree classification algorithm in data mining.

Based on key Token occurrences, individual user profiles are created for each artist by employing a version of the well-established TF. The general idea of TF.IDF is to consider terms more important which occur often within the document (here, the web pages of an artist), but rarely in other documents (other artists' web pages). Technically speaking, terms that have a high term frequency (TF) and a low document frequency (DF) or, correspondingly, a high inverse document frequency (IDF) are assigned most important key Tokens where the term frequency tf (t, Ai) is defined as the percentage of retrieved pages for artist Ai containing term t, and the document frequency df (t) as the percentage of artists (in the whole collection) who have at least one web page mentioning term t.

$$w_{simple}(t, A_i) = \frac{tf(t, A_i)}{df(t)}.$$

Here we considered df = company key list, tf = one particular user keyword.

II. PROPOSED SYSTEM

It's useful for the people, before that there is no application for musical artists. If they want any opportunity

related music every time they have to go to industry related persons like to meet music directors and producers. Sometimes they are available to the artists they went for outdoor locations and busy with their works. So, proposed this application to the users and industry persons and music provided companies. All the artists register into the application and share their views to other users. If any opportunities there based on user qualification they will select and give chance to the artists using the application. This application will be providing a platform for the people wants to become a singer and entered into industry through musical instruments. All type of people gathered and share their views and ideas to collaborate and work to gather. App provides to sale their albums into market.

III. IMPLEMENTATION

Music related recommendation system, after developing application real users registered and entered into website based on their qualification. Music companies also registered into the website with their company details. If company wants to give chance to new people for create any albums, stage shows and films. They posted their requirement through this application so the registered users of this application may get more chances through this application. Here we used to provide recommendation system the companies' requirement using analytical decision tree we matched to the registered user interest and his previous performances based on provide recommendations to the registered users.
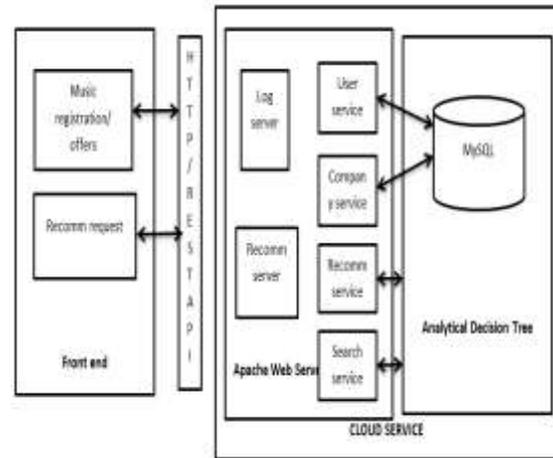

Fig 1: SYSTEM ARCHITECTURE

IV. RECOMMENDATION ALGORITHM

We used decision tree based data mining algorithm for providing recommendations to the users related to their user interest and performances.

1. rs= data getting from company offers page
2. While (rs.next) [..do 3 to 9 steps]
3. KeyStrings = rs.get(KeyWords)
4. KeyTokens = rs.get(split)

5. If(keyTokens.length > 0) {
6. For (i=0; i< KeyTokens.length; i++) {
7. if(KeyToken[i] == inst_interest)
8.   Display();
9. If(KeyTokens[i] == performance)
10.   Display(); } }

In this if the company keyword is matched to the user interest or his previous performances then the recommendation will be sent to the user profile. Then user interested to that company offer user will apply for that company. Then company will take the auditions for the selected users then artist and company work together for that particular project. Based on that we will opportunities to new artists getting chances to prove their self's in their interested filed using this application.
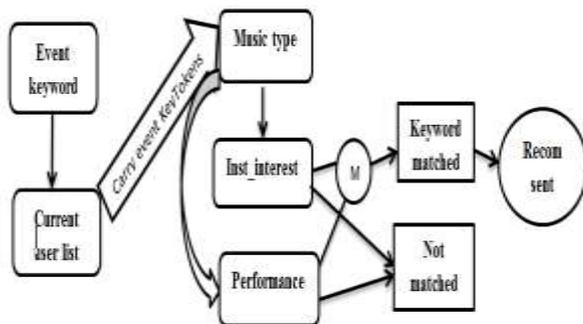

Fig2: Recommendation system working

V. CONCLUSION

Artists get chances based on their old performances and what type of songs they sang previously based on that they are getting chances. To develop this application for music artists and useful for all kind people wants to become a singer and entered into industry through musical instruments. As far as design is concerned no design is complete ever and there is a chance of advancement at each moment. However performing all the necessary testing, we will conclude that our model will perform properly that it absolutely was made.

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