

# GIFT RECOMMENDATION SYSTEM

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**Abstract-** Nowadays, many people are moving on the online shopping. One of the main viewpoint of shopping is give the gift to the someone on the special occasion. People always take decision on every day which gift is suitable and what should I gift to a someone like Father, Mother, Friend on their birthday, anniversary. When people are search the gift online there are many choices and many gift, if a person search the gift for wedding Anniversary then many gift are shown that's why people are confused. So our project is based on building a system that will generate gift recommendations for a user on his specific events, relation. Suppose, user search the gift for father on his birthday, only father's birthday related gift are shown.

**Key Words-** Gift Recommendation, Recommendation System, Viewpoint

## 1. INTRODUCTION

Our project is about "Gift Recommendation System". This is intended to resolve the problem existing in the manual system. The project is divided into various section, which present a clear picture of the system. Simplicity is given more importance whole designing.

All the possible aspects of the system are taken into consideration. Recommendation system helps to people make a decision in complex situation. The recommendation system are denote to assist in the suggestion of items, products, services and contents, partially or fully automatically, according to the users interests and needs. This system can helps the user in decision making of which item to choose for example, books, teddy, ring on their relation and event wise. A recommender system, or a recommendation system(sometimes replacing 'system' with a synonym such as platform of engine), is a subclass of information filtering system that provide suggestion for items that are most pertinent to a particular user. Recommender system are used in a variety of areas, with commonly recognized example taking from of playlist generators for video and music services. Product recommenders for online stores or content recommends for social media platforms and open web content recommenders.

## Feasibility Study

Once the scope of the project has been defined, it is reasonable to ask, can we build the software to meet this scope? Is the project feasible? Not everything planned for a system is feasible one has to view from and every aspect such that development of new software does yield proper result without putting in extra efforts

and resources. Software feasibility is based on three solid dimension, which are follows

- ❖ Technology
- ❖ Economical
- ❖ Operational

### Technical Feasibility

The Application is developed using latest technologies i.e., Android Application as front end and ROM as data tool and user that is employ working bat a phase in organization or developer or a tester can perform hus work as per requirements.

### Economical Feasibility

As the development work for the system went on smoothly as was planned during the project planning phase and the company had licensed copies of the software required for the development of project. And hence need not to pay any additional cost for the same and there was not any hidden cost in the development and hence the system is economically feasible.

### Operational Feasibility

The system is very easy to work with and there is no need for any special training to anybody to working with the system. To work with the system, the user need not be a computer professional, on the whole the company will benefit from the system and hence the system is operational feasible.

To Overcome drawback existing system is proposing to following work structure.

- ❖ Gift Recommendation offers a large variety of personalized gift. You will see personalized

gifts for tools, home, office. If you have a sense of what someone is interested in, you will bring a smile to their face with such a gift.

- ❖ Day wise or Event wise the admin can be upload the new gift items. All the maintained manually.

## 2. LITERATURE SURVEY

### 2.1 Recommendation System: History and Concepts

In the last 16 years, more than 200 research paper are published about the recommence system. Several research field are related to user modeling and recommence system. Recommence system apply data mining techniques and prediction algorithms to predict user interest on information, products and service among the tremendous amount of available items. The vast growth of information on the internet as well as number of visitors to website add some key challenges to recommender system. These are producing accurate recommendation efficiently and coping with the vast growth of number of participants in the system. Therefore, new recommender system technologies are needed that can quickly produce high quality recommendation even for huge data set. System aims to recommend personalized gift after analyzing the social media preferences of the target person and his friends. The idea being that the public profiles followed by a person give an insight about what product they may like being gifted with. Use a hybrid of contest-based and collaborative filtering methods. [1,2]. The e-commerce in recent year has seen an intense growth in sale in Brazil, festive dates of the year like Mother's Day, Valentine's Day, Children's Day, etc. [3]. Another research on gift recommendation system using the social media platform. The based on building system that will generate gift recommendation for a specific user based

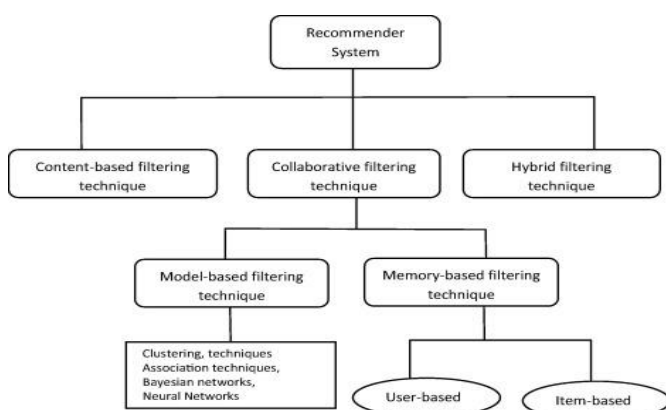
on his activities on social networking website. Among social networking website, chosen the Facebook because Facebook of its large user database easy to use API and colossus of information petting to an individual [4].

## 2.2 What Is a Recommendation Engine

Nowdays, people used to buy products online more than from stores. Previously, people used to buy products based on the reviews given by relatives or friends but now as the options increased and we buy anything digitally we need to assure people that the product is good and they will like it. To give confidence in buying the products, recommender system were built. Recommendation engines filter out the products that a particular customer would be interested in or would buy based on his or her previous buying history. The more

data available about a customer the more accurate the recommendations. But if the customer is new this method will fail as we have no previous data for that customer. So, to tackle this issue different methods are used; often the most popular products are recommended. These recommendations would not be must accurate as they are not customer dependent and are the same for all new customers their interests so that they can recommend more precisely.

**Figure 1: Recommendations Techniques**



## 3. METHDOLOGY

**Approaches to build Recommender System:** There are two main type of recommendation engines; namely collaborative filtering and content-based filtering.

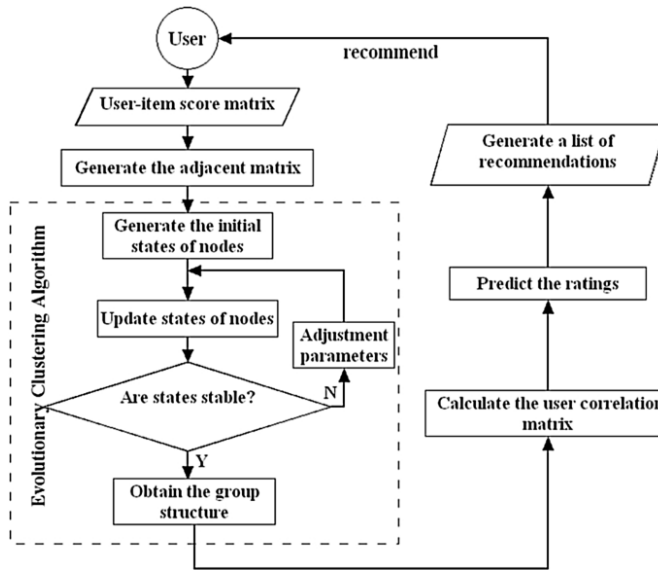
**The Collaborative filtering** method for recommender system is a method that is based on the past interaction that have been recorded between user and item, in order to produce new recommendations. Collaborative tends to find what similar user would like and the recommendation to be provided and in order to classify the user into cluster of similar types and recommended each user according to the preference of its cluster. Collaborative filtering is a technique that can filter out items that a user might like on the basis of reaction by similar users. It works by searching a large group of people and finding smaller set of users with tastes similar to a particular user. Collaborative filtering (CF) and its modification is one of the most commonly used recommendation algorithms. When we recommend something to user, the most logical thing to do is to find the people with similar interests, analyze their behavior and recommend our user to same item. Or we can look at the items similar to ones which the user bought earlier, and recommend product which are like them. These are two basic approaches in CF: user-based-collaborative filtering and item-based collaborative filtering.

In bothe cases this recommendation engine has two steps:

- Find out how users/items in the database are similar to the given user/item.
- Assess other users/items to predict what grade you would give the user of this product, given the total weight of the users/items that are more similar to

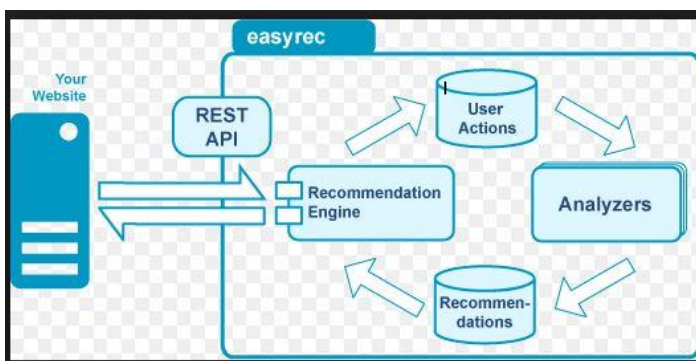
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**Figure 2: Collaborative Filtering Recommendation Algorithm**

**The Content Based Filtering** this technique consist of recommending similar item to user to those that the user choose in past that is according to the history of the items that he has rated as favourite or according to the past. Here the system uses your features and likes in order to recommend your with things that you might like.



**Figure 3: Content Based Recommender**

**The Hybrid Approach** this method combine to two or more data recommendation technique. The main

objective to use this method is what concern some limitation that may exist in individual use of other types pf technique. As an example the main approach that can occur with the combination of content based recommendation system.

## 4. RESULT

Recommendation system widely use in many application to suggest the service and information to potential consumer. Like Amazon.com. The recommendation algorithm that were found are content based, collaborative recommendation, hybrid approach, user based algorithm, item based algorithm. Using recommendation algorithm saves the time for user.

## 5. CONCLUSION

The “Gift Recommendation System”, has completed its first phase of the development section successfully within the given time span and has fulfilled all the requirements specified by the user during the evaluation in first phase.The system thoroughly tested by the professional testers under live conditions and hence concludes that the system is working in accordance with the requirements of the user and it totally error free.

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