

PROJECT SYNOPSIS
ON
TITLE OF THE PROJECT

Submitted in partial fulfillment of the requirements
for the award of the degree of
Of
Bachelor of Technology
In
Electronics and Communication Engineering

UNIVERSITY
LOGO

UNIVERSITY NAME
CITY

Submitted By:-

Submitted to :

CERTIFICATE

This is to certify that this is a bonafied record of the project work done satisfactorily at Enrollment no. in partial fulfillment of B.Tech.

This report or a similar report on the topic has not been submitted for any other examination and does not form part of any other course undergone by the candidate.

Place:

Date:

Signature of the candidate:

Signature of Project Guide:

Name:

Designation:

Address:

ACKNOWLEDGEMENT

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ABSTRACT

Recommender systems use algorithms to provide users with product or service recommendations. Recently, these systems have been using machine learning algorithms from the field of artificial intelligence. However, choosing a suitable machine learning algorithm for a recommender system is difficult because of the number of algorithms described in the literature. Researchers and practitioners developing recommender systems are left with little information about the current approaches in algorithm usage.

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CHAPTER 1: INTRODUCTION

- 1.1 Introduction about the Company**
- 1.2 Problem Statement**
- 1.3 Proposed Solution**

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1.1 INTRODUCTION ABOUT COMPANY

Broadvision Technologies is a leading edge of Comprehensive IT/ITES Industry that provides customized services & solution to different industry verticals. The company has initiated its operation in Janakpuri in 2004 by a very Dynamic Team of Software Consultants, who are having rich experience of IT-Industry.

Since inception Broadvision Technologies is focusing to achieve the business goals of their customers & partners through quality & timely delivered services & solutions our employee pool is empowered by process skilled, domain, experienced, professionals, who all are immensely Competitive in their domain area.

Broadvision Technologies provides best possible well-knitted services & process-based solutions that can help the business operation of our clients as competently and economical so that they can get upper hand in today's cut throat Competition.

Its business philosophy is to "Create Value through Competitive Business Solution". The Company endeavors to provide innovative business solution to different industry verticals at very competitive rates through a rich Combination of processes, technology & Skilled Manpower.

CHAPTER 2

PROJECT DESCRIPTION

- 2.2 System Specifications**
 - 2.2.1 H/W Requirement**
 - 2.2.2 S/W Requirement**
- 2.3 Methodology and Tools used**
- 2.4 System development life cycle**
 - 2.4.1 Requirement Phase**
 - 2.4.2 Design Phase**
 - 2.4.3 Development Phase**
 - 2.4.4 Implementation Phase**
 - 2.4.5 Testing Phase**
 - 2.4.6 Post Implementation Maintenance**
- 2.5 Constraints**
- 2.6 Assumptions & Dependencies**
- 2.7 User Characteristics**

2.1 SYSTEM SPECIFICATIONS

2.1.1 H/W REQUIREMENT

HARDWARE:

Processor	:	Pentium 2.4 GHz or above
Memory	:	2 GB RAM or above
Cache Memory	:	128 KB or above
Printer	:	Laser Printer
Pen Drive	:	5 GB

SOFTWARE:

Operating System	:	Windows 8 (Professional), WAMP Server.
Font-End Too l	:	Python 3.6
Back-End	:	Pycharm

2.1.2 SOFTWARE REQUIREMENTS

Python

Python is an interpreted high-level programming language for general-purpose programming. Created by Guido van Rossum and first released in 1991, Python has a design philosophy that emphasizes code readability, notably using significant whitespace. It provides constructs that enable clear programming on both small and large scales. In July 2018, Van Rossum stepped down as the leader in the language community after 30 years.

Python features a dynamic type system and automatic memory management. It supports multiple programming paradigms, including object-oriented, imperative, functional and procedural, and has a large and comprehensive standard library.

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CHAPTER 3 : FUNCTIONALITY

3.1 Logical Database Design

3.1.1 ERD

3.1.2 Table Structures

3.1.3 Data Flow Diagram

3.1.4 Validation Checks

3.2 Use case Description (1....n)

3.2.1 Purpose

3.2.2 Actors

3.2.3 Preconditions

3.2.4 Post Conditions

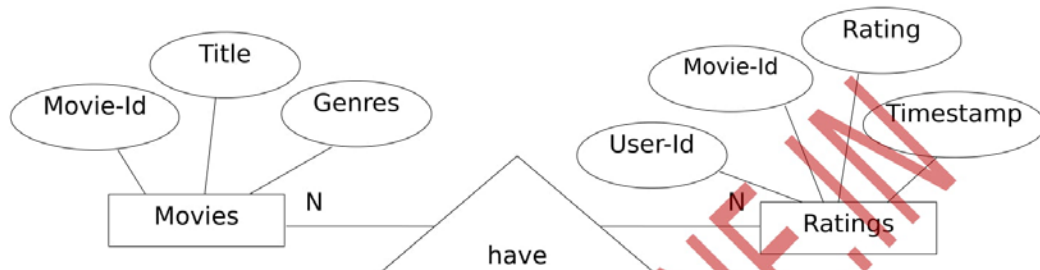
3.2.5 Basic flow

3.2.6 Alternate flows

3.3 Coding

3.1 LOGICAL DATABASE DESIGN

3.1.1 ERD



3.1.2 TABLE STRUCTURES

Data Modeling

The movie-lens dataset used in this project at <https://grouplens.org/datasets/movielens/100k/>.

MovieLens data sets were collected by the GroupLens Research Project at the University of Minnesota.

CHAPTER 4: TESTING

- 4.1 Test Activities (with details)**
- 4.2 Unit Testing**
 - 4.2.1 Methodology used**
 - 4.2.2 Tools used**
 - 4.2.3 Test Cases**
- 4.3 Integration Testing**
 - 4.3.1 Methodology Used**
 - 4.3.2 Tools Used**
 - 4.3.3 Test Cases**
- 4.4 System Testing**
 - 4.4.1 Functional Testing**
 - 4.4.1.1 Methodology used**
 - 4.4.1.2 Tools Used**
 - 4.4.1.3 Test Cases**
 - 4.4.2 Non-Functional Testing**
 - 4.4.2.1 Methodology used**
 - 4.4.2.2 Tools Used**
 - 4.4.2.3 Test Cases**
- 4.5 Acceptance Testing**
 - 4.5.1 Methodology used**
 - 4.5.2 Tools Used**
 - 4.5.3 Test Cases**
- 4.6 Test Reports and Debugging**

4.1 TEST ACTIVITIES

ACTIVITY NETWORK FOR SYSTEM TESTING

The test plan entails the following activities:

1. Prepare test plan.
2. Specify conditions for user acceptance testing.
3. Prepare test data for program testing.
4. Prepare test data for transaction path testing.
5. Plan user training.
6. Compile/assemble programs.
7. Prepare job performance aids.
8. Prepare operational documents.

PREPARE TEST: A workable test plan must be prepared in accordance with established design specifications. It includes the following items:

- Outputs expected from the system.
- Criteria for evaluating outputs.
- A volume of test data.
- Procedure for using test data.
- Personnel and training requirements.

SPECIFY CONDITIONS FOR USER ACCEPTANCE TESTING

Planning for user acceptance testing it calls for the analyst and the user to agree on conditions for the test.

PREPARE TEST DATA FOR PROGRAM TESTING

As each program is coded, test data are prepared and documented to ensure that all aspects of the program are properly tested.

CHAPER 5: CONCLUSION AND REFERENCES

5.1 Conclusion

5.2 Limitation of the System

5.3 Future Scope for Modification

5.4 References/Bibliography (as per format)

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5.1 CONCLUSION

- We have built a movie Recommender system using Movie lens dataset.
- We are provided with users rating to some of the available movies Movies information .
Demographic information about the users.
- Using the above information and applying collaborative filtering and matrix factorization techniques, top 20 movie have been recommended to the users.

5.2 LIMITATIONS OF THE SYSTEM

Limitations of the Study

This proposed work is using recommendation systems only for movies, but on multiple other products and services like Amazon (Books, Items), Pandora/Spotify (Music), Google (News, Search), YouTube (Videos) etc.

No Review Feature

Majority of users want movie recommendation system on their mobiles.

5.3 FUTURE SCOPE

Currently the industry is trying to integrate various advanced recommender systems which work on group recommendations or POI (point of interest) or meta data analysis. The current undertakings in our opinion would be applying recommender systems to an even broader range of applications. These extensions include, among others, improvement of understanding of users and movies, incorporation of the contextual information into the recommendation process, support for multi-criteria ratings, and provision of more flexible and less intrusive types of recommendations

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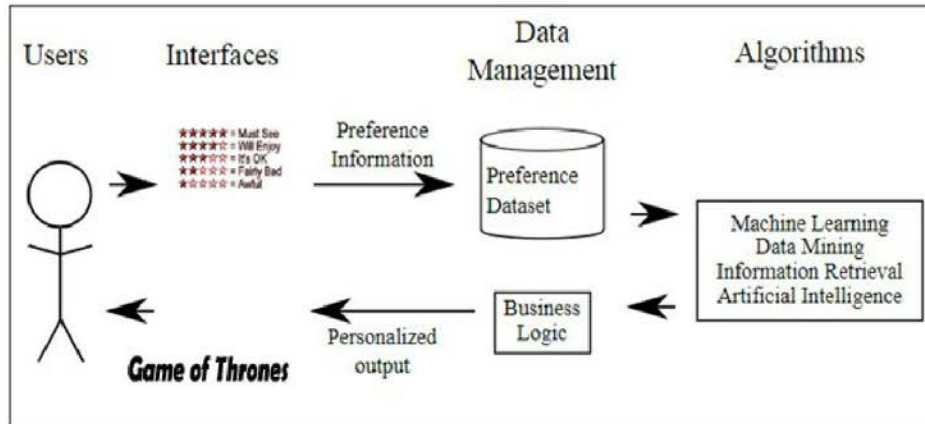
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CHAPTER 6: ANNEXURES

- A-1 Flow Diagram**
- A-2 Use Case Diagram**
- A-3 Structure Chart**
- A-4 Input and Output Design Layout**

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A-1 FLOW DIAGRAMS



A-2 USE CASE DIAGRAM



A3 SCHEDULING CHART

Gantt Chart

A **Gantt chart** is a graphical representation of the duration of tasks against the progression of time. A Gantt chart is a useful tool for planning and scheduling projects

A Gantt chart is a type of [bar chart](#) that illustrates a [project schedule](#). Gantt charts illustrate the start and finish dates of the [terminal elements](#) and summary elements of a [project](#). Terminal elements and summary elements comprise the [work breakdown structure](#) of the project. Some Gantt charts also show the [dependency](#).