

BYNDER

A PROJECT REPORT

Submitted by

Swarnankita Saha (21BAI10436)

Pranav Wagh (21BAI10390)

Aryan Dwivedi (21BAI10429)

Vaibhav Agarwal (21BAI10433)

Uday Singh (21BAI10465)

in partial fulfillment for the award of the degree

of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING



SCHOOL OF COMPUTING SCIENCE AND ENGINEERING

VIT BHOPAL UNIVERSITY

KOTHRIKALAN, SEHORE

MADHYA PRADESH – 466114

JAN 2023

VIT BHOPAL UNIVERSITY, KOTHRIKALAN, SEHORE

MADHYA PRADESH – 466114

BONAFIDE CERTIFICATE

Certified that this project report titled “ BYNDER ” is the bonafide work of “ Swarnankita Saha (21BAI10436) Pranav Wagh (21BAI10390), Aryan Dwivedi (21BAI10429), Vaibhav Agarwal (21BAI10433), Uday Singh (21BAI10465),” who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported at this time does not form part of any other project/research work based on which a degree or award was conferred on an earlier occasion on this or any other candidate.

PROGRAM CHAIR

DR. SUTHIR SRIRAM

School of Computer Science and
Engineering

VIT BHOPAL UNIVERSITY

PROJECT GUIDE

DR. SARAVANAN S

School of Computer Science and
Engineering

VIT BHOPAL UNIVERSITY

The Project Exhibition I Examination is held on FEBRUARY 1 , 2022

ACKNOWLEDGEMENT

First and foremost I would like to thank the Lord Almighty for His presence and immense blessings throughout the project work.

I wish to express my heartfelt gratitude to Dr. Suthir Sriram, Head of the Department, School of Computer Science and engineering for much of his valuable support encouragement in carrying out this work.

I would like to thank my internal guide Dr. Saravanan s, for continually guiding and actively participating in my project, giving valuable suggestions to complete the project work.

I would like to thank all the technical and teaching staff of the School of Computer Science and Engineering who extended directly or indirectly all support.

Last, but not least, I am deeply indebted to my parents who have been the greatest support while I worked day and night for the project to make it a success.

\

CHAPTER NO.	TITLE	PAGE NO.
1	CHAPTER-1: PROJECT DESCRIPTION AND OUTLINE <ul style="list-style-type: none"> 1.1 Introduction 1.2 Motivation for the work 1.3 [About Introduction to the project including techniques] 1.5 Problem Statement 1.6 Objective of the work 1.7 Organization of the project 1.8 Summary 	1 . .
2	CHAPTER-2: RELATED WORK INVESTIGATION <ul style="list-style-type: none"> 2.1 Introduction 2.2 <Core area of the project> 2.3 Existing Approaches/Methods <ul style="list-style-type: none"> 2.3.1 Approaches/Methods -1 2.3.2 Approaches/Methods -2 2.3.3 Approaches/Methods -3 2.4 <Pros and cons of the stated Approaches/Methods > 2.5 Issues/observations from investigation 2.6 Summary 	
3	CHAPTER-3: REQUIREMENT ARTIFACTS <ul style="list-style-type: none"> 3.1 Introduction 3.2 Hardware and Software requirements 	

	3.3 Specific Project requirements 3.3.1 Data requirement 3.3.2 Functions requirement 3.3.3 Performance and security requirement 3.3.4 Look and Feel Requirements 3.3.5 3.4 Summary	
4	CHAPTER-4: DESIGN METHODOLOGY AND ITS NOVELTY 4.1 Methodology and goal 4.2 Functional modules design and analysis 4.3 Software Architectural designs 4.4 Subsystem services 4.5 User Interface designs 4.5 4.6 Summary	
5	CHAPTER-5: TECHNICAL IMPLEMENTATION & ANALYSIS 5.1 Outline 5.2 Technical coding and code solutions 5.3 Working Layout of Forms 5.4 Prototype submission 5.5 Test and validation 5.6 Performance Analysis (Graphs/Charts) 5.7 Summary	
6	CHAPTER-6:	

	<p style="text-align: center;">PROJECT OUTCOME AND APPLICABILITY</p> <p>6.1 Outline</p> <p>6.2 key implementations outlines of the System</p> <p>6.3 Significant project outcomes</p> <p>6.4 Project applicability on Real-world applications</p> <p>6.4 Inference</p>	
7	<p style="text-align: center;">CHAPTER-7: CONCLUSIONS AND RECOMMENDATION</p> <p>7.1 Outline</p> <p>7.2 Limitation/Constraints of the System</p> <p>7.3 Future Enhancements</p> <p>7.4 Inference</p>	

INTRODUCTION

A platform to access all kinds of books. Our target will be the students and book lovers to focus on that percentage of public who likes to read books physically the project entitles online book rental portal" is a very effective feasible online portal which facilities the readers to read the books magazines journals on a very much reliable rent few reader wants to read book ne/she has to purchase the book where he/she has to give much money or he/she can go to Barry to lend a book where firstly he/she has to be a member and he/she has to follow the liberty tides and regulations like he has to return the book at specified date. So lot of time and money gets wasted in these but with our portal situation becomes very easy. The person which is having the book can give the book on rent for some days it a reasonable rent and can gain money and on the contrary those who want to rent a book can communicate with the book giver through our portal. In today's busy and digital world, there are lot more day-to-day real life solutions are upcoming in the society. So, we have come up to solve the problems of readers students who are more connected with the books. The person who is having some books and that book proves to be useless after he had read that book. So he might don't use that book or some time he will throw that book and on the other side the book users who want that book has to purchase that book from the retailer and has to give the high price for that.

FUTURE OF TRANSLATOR IN ARTIFICIAL INTELLIGENCE

An artificial intelligence recommendation system (or recommendation engine) is a class of machine learning algorithms used by developers to predict the users' choices and offer relevant suggestions to users. With the usage of data science and the users' data, recommendation systems in AI filter and recommend the most suitable items to a specific user. It is said that the content recommendation system resembles an experienced shop assistant who knows the needs and preferences, and requirements of the user and can recommend more appealing products is capable, alongside increasing the conversion rate.

KEY BENEFITS: -

1. narrow searches to specific items reduce the time it takes to find products and services;
2. aid in the selection process for the undecided customer;
3. improve the relevance of search results;
4. significantly increase the likelihood of other potentially appealing objects getting into the user's field of vision;
5. contribute to a higher purchase rate, user loyalty, and satisfaction with web services increases;
6. encourage users to interact with more products, and this leads to increased consumption and increased profits;
7. newsletters, personalized advertisements, and push notifications to encourage users to come back, increase the frequency of visits

by repeat users, and reduce customer churn;

8. increase CTR meaning that you've targeted the right people, you had an offer that was appealing enough that a large percentage of ad viewers are clicking;

9. show your users newly-released content based on each user's preference;

10. boost order value and profit margin.

RELATED WORK INVESTIGATION

Collaborative filtering algorithms recommend items (this is the filtering part) based on preference information from many users (this is the collaborative part). This approach uses similarity of user preference behavior, given previous interactions between users and items, recommender algorithms learn to predict future interaction. These recommender systems build a model from a user's past behaviour, such as items purchased previously or ratings given to those items and similar decisions by other users. The idea is that if some people have made similar decisions and purchases in the past, like a movie choice, then there is a high probability they will agree on additional future selections. Content filtering, by contrast, uses the attributes or features of an item (this is the content part) to recommend other items similar to the user's preferences. This approach is based on similarity of item and user features, given information about a user and items they have interacted with (e.g., a user's age, the category of a restaurant's cuisine, the average review for a movie), model the likelihood of a new interaction. For example, if a content filtering recommender sees you liked the movies *You've Got Mail* and *Sleepless in Seattle*, it might recommend another movie to you with the same genres and/or cast such as *Joe Versus the Volcano*. Context filtering includes users' contextual information in the recommendation process. Netflix spoke at NVIDIA GTC about making better recommendations by framing a recommendation as a contextual sequence prediction. This approach uses a sequence of contextual user actions, plus the current context, to predict the probability of the next action. In the Netflix example, given one sequence for each user—the country, device, date, and time when they watched a movie—they trained a model to predict what to watch next. To provide a better, feasible, user interactive web portal where the both book giver and book receiver can be facilitated. The main objective is to built a web application for providing rental facility of books, magazines to the user, where he can give a book on a rent or lend a book on rent.

Using our platform, both parties problem will get solved. Person which is possessing any book will get some sort of rent price so he will get benefitted and the person who want to read the book can get a book at a much less price and should return that book as per the norms and conditions decided.

Users of these portal first of all will register their details. They will see the list of books which they can take on rent. If users want to give a book on rent then they can upload the book details like Book Title Author name, etc on the portal.

If user want to take a book on rent and in case it is not available then they can generate a request for their demanded book and their request will be displayed on the home page of the portal.

DESIGN METHODOLOGY AND ITS NOVELTY

1. Initial Analysis

We analyse current figures, data assets, and customer goals, processes, and big data on business. In this step, the team defines the growth points, determines the timeline and budget, and develops all corresponding documentation.

2. Prototype Deployment

We develop a draft of the recommendation engine according to the data gathered during the previous phase. Together with paying attention to the probable risks, we prove the hypothesis and show the efficiency of the recommendation system prototype.

3. Recommender Release and Implementation

We make final improvements on the recommendation system prototype to satisfy

the customers' needs and integrate it with the existing infrastructure.

For a recommendation system to be useful, it should be flexible to new user behaviour. In case few customers log in to use your services, use different devices,

and search for products anonymously, it would be beneficial to look at a probabilistic model to identify a single user over time and across devices.

1. Collecting Data

AI-based recommendation systems collect user data using a combination of explicit

and implicit methods. Examples of explicit data collection include:

- Request to evaluate the object;
- Request to rank a group of objects from best to worst;
- Presenting two objects to the user with the question of which one is better;

- Request to create a list of objects appealing to the user.

Examples of implicit data collection are:

- Monitoring what the user's search and views in online stores;
- Keeping records of user behavior online;
- Tracking the contents of the user's computer;
- Analysing the user's social network and discovering similar likes and dislikes.

When the system has gathered enough data, it offers more relevant recommendations, enhancing the chances of interest users.

2. Accumulating Data

The usual explanation is the more data the system gathers, the better recommendations it eventually provides. Thus, you should create more data for the

algorithms to have more appealing recommendations.

3. Analysing Data

To find items with computer vision, it is necessary to filter them with the use of various analysing methods. Depending on the time, needed to analyze users' data,

we may distinguish the following systems:

- Real-time analysis. When every second counts, fast AI recommendation systems will provide recommendations immediately, as soon as the data is created.
- Near-real-time analysis. When speed is important, but you don't need it immediately, this system is the best. With an ever-growing Netflix catalog, finding the right content for the audience in near real-time provides the best personalized experience.
- Batch analysis. This analysis can take hours, or perhaps even days. Only after having gathered a considerable amount of data, it presents

recommendations, for example, as daily e-mail letters.

4. Filtering Data

When the system has gathered and analysed enough data to make relevant recommendations, the last step is filtering the data. One can filter the data in different ways, depending on what

REQUIREMENT ARTIFACTS

Language translation software is used to translate documents from one human language to another. There are three basic types of products: automatic, on the-fly, and hybrid. Automatic translation software or global translation software is designed to translate an entire document at one time. These machine translation (MT) applications are used mainly with longer documents and may provide multi language translation. On-the-fly translation software is used to transfer individual words or phrases, typically in shorter documents such as Web pages or email. Hybrid products are not pure translation programs, but provide translation-related tools such as a verb conjugator, dictionary, and spell checker

Key features

- a. Terminology management
- b. Workflow management
- c. Translation quality assurance
- d. Localisation automation
- e. Integration with a variety of CMSs and developer's tools
- f. Translating via API
- g. Project management automation

PROJECT OUTCOME AND APPLICABILITY

Phase 1:-Analysis of the definition of the project. +81 relevant experts are

Phase 2: - Discussed with senior, guide, subject experts about the modules of the project. online

Phase 3- Found better solutions to deal with the problems and obstacles.

HIRE WRITER

Phase 4:- Decided technology and framework to work on.

Phase 5: - Created database and sample front end. D

Materials and Tools Required

Essay details Category

Literature

We are going to use following tools for developing as well as designing

Book Report Book

Topic

Ravine Lhermitte

Sublime Text

Review

MySQL

Worth

1394 (3 pages)

Html

Down

Bootstrap

- Java

O Chat

Javascript/jQuery

This SRS gives complete information about the Online book rental system. It is the online portal in which anyone can rent book of their choice. Defining and describing the functions and specifications of the Book Rental System is the primary goal of this Software Requirements Specification (SRS) Users of these portal first of all will register their details. They will see the list of books which they can take on rent if users want to give a book on rent then they can upload the book details like Book Title Author name, etc on the portal if user want to take a book on rent and in case it is not available then they can generate a request for their demanded book and their request will be displayed on the home page of the portal, and all the users will get notification about the requested book. And finally they can pay for the books they want on rent The main objective of the project is to search and rent a book based on title and author. It will also help the users to know about the latest books in the market: The selected books are displayed in a tabular format and the user can order their books online through cash on delivery Rental System provides a solution to reduce and optimize these expenses authorised customers do not need to go to the factual shops to choose and bring the books it saves time and save human efforts. The customer can save money up to 75% of the book price. Also reusing books proves helpful to save nature.

```

1  *{
2    margin: 0;
3    padding: 0;
4    box-sizing: border-box;
5    font-family: sans-serif;
6  }
7
8  section{
9    width: 100%;
10   height: 100vh;
11   background-image: url(https://www.weform.org/agenda/2021/12/diversity-in);
12   background-size: cover;
13   background-position: center;
14 }
15
16 section nav{
17   width: 100%;
18   display: flex;
19   align-items: center;
20   justify-content: space-around;
21   box-shadow: 0 0 10px #7b3f00;
22   background: #c4a484;
23   position: fixed;
24   left: 0;
25   z-index: 100;
26 }
27
28 section nav .logo img{
29   width: 100px;
30   cursor: pointer;
31   margin: 8px 0;
32 }
33
34 section nav ul{
35   list-style: none;
36 }
37

```

```

38  section nav li{
39    display: inline-block;
40    padding: 0 10px;
41  }
42
43  section nav li a{
44    text-decoration: none;
45    color: #000;
46  }
47
48  section nav li a:hover{
49    color: #089da1;
50  }
51
52  section nav .social_icon i{
53    margin: 0 5px;
54    font-size: 18px;
55  }
56
57  section nav .social_icon i:hover{
58    color: #089da1;
59    cursor: pointer;
60  }
61
62  section .main{
63    display: flex;
64    align-items: center;
65    justify-content: space-around;
66    position: relative;
67    top: 10%;
68  }
69
70  section .main h1{
71    position: relative;
72    font-size: 55px;
73    top: 80px;

```

```

74 |     left: 25px;
75 | }
76 |
77 | section .main h1 span{
78 |     color: #000;
79 | }
80 |
81 | section .main .main_img img{
82 |     width: 780px;
83 |     position: relative;
84 |     top: 90px;
85 |     left: 20px;
86 | }
87 |
88 | /*services*/
89 |
90 | .services{
91 |     width: 100%;
92 |     height: auto;
93 |     margin: 35px 0;
94 | }
95 |
96 | .services .services_box{
97 |     width: 95%;
98 |     margin: 0 auto;
99 |     display: flex;
100 |     align-items: center;
101 |     justify-content: space-around;
102 | }
103 |
104 | .services .services_box .services_card{
105 |     text-align: center;
106 |     width: 310px;
107 |     height: auto;
108 |     box-shadow: 0 0 8px #c4a484;
109 |     padding: 15px 10px;
110 | }

```

```

111 |
112 | .services .services_box .services_card i{
113 |     color: #c4a484;
114 |     font-size: 45px;
115 |     margin-bottom: 15px;
116 |     cursor: pointer;
117 | }
118 |
119 | .services .services_box .services_card h3{
120 |     margin-bottom: 10px;
121 | }
122 |
123 |
124 |
125 | /*about*/
126 |
127 | .about{
128 |     width: 100%;
129 |     height: auto;
130 |     padding: 20px;
131 |     display: flex;
132 |     align-items: center;
133 |     justify-content: space-around;
134 | }
135 |
136 | .about .about_image img{
137 |     width: 800px;
138 | }
139 |
140 | .about .about_tag h1{
141 |     font-size: 50px;
142 |     position: relative;
143 |     bottom: 35px;
144 | }
145 |
146 | .about .about_tag p{

```

CONCLUSION

In the proposed program, the desktop system is designed for library book recommendations. In this system, all the books in the library will be rated. Library users who borrow books submit their ratings (5 star ratings) and high rating books will be displayed to users in this program. This is an automated program that will help the library user select the best version of his or her favorite book in a few seconds depending on the ratings provided for that book. The user can select a book, borrow a book and deliver the book to his or her address by simply sitting in front of a computer. This program uses a shared filtering algorithm that filters books based on user ratings and recommendations. This process takes user ratings and user feedback to consider recommending letters to users. In general by this project one can rent book from anywhere at any time. The convenience of an online book rental is a major consideration for most of us, especially those living in areas where the access to a large bookstore is limited or is quite far away. Many books are too much expensive and for this types of books This system most preferable. If book is too much expensive then one can rent that Book on some amount and can read that book by spending very small amount of money. After reading whole book they can return book and another one can take Benefit of this type of expensive books. So overall by this system one can read book of their choice at any time by spending very small amount of money, in this knowledge era this system will help to spread knowledge across wholeWorld and will provide much knowledge

