



MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

NH-12 (Old NH-34), Simhat, Haringhata, Nadia- 741249,
West Bengal

DEPARTMENT OF INFORMATION TECHNOLOGY

ITimes

TIME TO EXPLORE SKILLS OF IT'S





INDEX

CONTENT	PAGE NO
• ABOUT UNIVERSITY	1
• FROM THE DESK OF VICE	2
CHANCELLOR	
• FROM THE DESK OF HEAD	3
OF DEPARTMENT OF INFORMATION	4
TECHNOLOGY	
• FROM THE DESK OF THE	5
STUDENT EDITORIAL BOARD	
EVENTS ORGANISED	
• A.I., ML WORKSHOP	7
• WEB DEVELOPMENT AND	8
A.I., ML, PYTHON WORKSHOP	9
• CYBERSECURITY AND ETHICAL HACKING	10

CONTENT	PAGE NO.
<ul style="list-style-type: none">• DATA SCIENCE ,A.I. ,ML WORKSHOP• FULL STACK DEVELOPMENT AND ETHICAL HACKING WORKSHOPS	11
TECHNICAL SECTION	
<ul style="list-style-type: none">• EXPLORATION OF CRIMES AGAINST WOMEN USING A.I. AND PREDICTION BASED MODEL• PROVIDING DATA PRIVACY OF E-HEALTHCARE DATA• FACE RECOGNITION BASED ATTENDANCE SYSTEM• BOOK RECCOMENDATION SYSTEM	12 13 14 15
NOTE	16

ABOUT UNIVERSITY



Maulana Abul Kalam Azad University of Technology, West Bengal, formerly West Bengal University of Technology (WBUT), is a State Government Technological University in West Bengal. It was founded in the year 2000 and has 200 affiliated Engineering and Management Colleges all over the State. The University provides facilities for the quest of degree and advanced-level courses in Engineering, Management and other professional areas through affiliated institutions and In-House departments. The University is recognised by UGC and has been awarded B++ with CGPA of 2.87 by NAAC on first visit. The University takes pride in introducing a quarterly journal that aims to convert “Today’s Ideas to Tomorrow’s Technology” in the field of Science, Engineering, Management and Technology. The journal is devoted to publication of original research articles, review articles, short communications and eminent research work by Scientists and Academicians in various disciplines.

FROM THE DESK OF VICE CHANCELLOR

PROF.(Dr.) SAIKAT MITRA

VICE CHANCELLOR

**MAULANA ABUL KALAM AZAD UNIVERSITY OF
TECHNOLOGY, WB**



I am glad to know that the Department of Information Technology is going to publish the issue of its Departmental magazine. It is indeed a phenomenal achievement given the disruptions that we all have faced during the last couple of years and the huge amount of effort that is necessary to capture the variegated activities undertaken by the students in the forms of reports and articles. Information Technology plays a very significant role on the day to day life and contributes magnanimously on the growth of the society catering to its needs through its varied range of innovations, research and contribution in every field from mechanics, to medicine, agriculture, production, logistics, manufacturing etc. The publication of this Departmental student magazine is therefore a step in the right direction. I believe the Magazine will capture the attention of all the stake holders through its kaleidoscopic contents and for contributing articles and reading the Magazine it will be a wonderful experience for all. I congratulate all the students for taking this endeavor in publishing the first issue of the Departmental magazine and wish them all success in future.

FROM THE DESK OF HEAD OF INFORMATION OF TECHNOLOGY

Dr. Somdatta Chakravorty

Head of the Department Department of
Information Technology Maulana Abul Kalam Azad
University of Technology, West Bengal



It gives me immense pleasure to be a part of the Students Magazine initiated by the Department of Information Technology. since its inception. I feel very happy and proud that my students have worked very hard in bringing out the first issue which has successfully showcased the diverse student activities of the Department. It is commendable that the Editorial Board has tried to project all the creative, technological and developmental aspects of students and I congratulate them for their endeavor. I wish it every success in its future issues.

I wish it every success in its future issues.

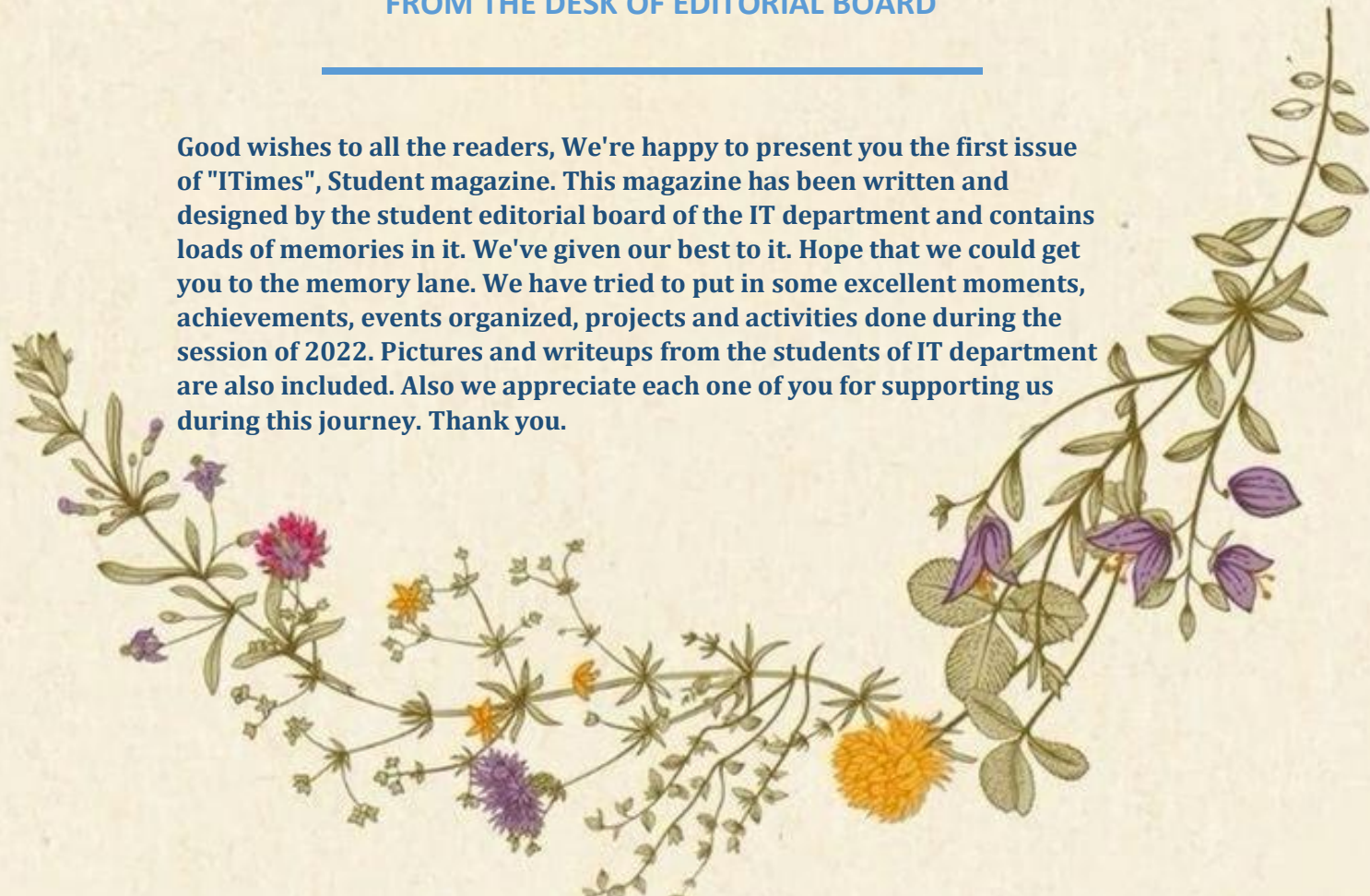


ABOUT ITIMES

ITimes is the official Student magazine of Department of Information Technology designed by the student editorial board of IT department of MAKAUT. It's vision is "IT'S TIME TO EXPLORE THE SKILLS OF IT STUDENTS". This mainly focuses on the events organized by the students of IT, their technical activities (like technical blogs, journals, projects, etc.) and their participation in the non-technical events.

FROM THE DESK OF EDITORIAL BOARD

Good wishes to all the readers, We're happy to present you the first issue of "ITimes", Student magazine. This magazine has been written and designed by the student editorial board of the IT department and contains loads of memories in it. We've given our best to it. Hope that we could get you to the memory lane. We have tried to put in some excellent moments, achievements, events organized, projects and activities done during the session of 2022. Pictures and writeups from the students of IT department are also included. Also we appreciate each one of you for supporting us during this journey. Thank you.



The background of the image is a stage with deep red, vertically pleated curtains. Scattered across the curtains are numerous small, glowing stars in shades of gold, silver, and blue. At the bottom of the frame, a wooden floor with vertical planks is visible. A bright, circular spotlight illuminates a section of the floor in the foreground, creating a warm, golden glow. The overall atmosphere is festive and theatrical.

EVENT ORGANISED

WORKSHOPS CONDUCTED

Organized by:
School of Information
Science and Technology,
MAKAUT, West Bengal

**Technically
supported by:**
DataSpace Academy

**Online Workshop
on
Machine Learning & A.I.**

23rd June | 2023 10 AM - 1 PM | IST

Contact:
Dr. Debasis Giri
(Program Co-ordinator)
Maulana Abul Kalam Azad University
of Technology, West Bengal, India
Haringhata, Post Office- Simhat,
Police Station- Haringhata, WB- 741249

Speaker
Bipul Nath
Lead Machine
Learning Analyst

 DataSpace Academy, EN 34, SEVEN HILLS BUILDING, 3rd Floor,
SALT LAKE SECTOR 5, KOLKATA 700091

MACHINE LEARNING AND A.I.

This workshop was organized by the School of Information Science and Technology, MAKAUT, West Bengal, with technical support from DataSpace Academy.

Bipul Nath brought his expertise as a machine learning professional to guide participants through fundamental and practical aspects of ML and AI technologies.

This three-hour online session aimed to introduce participants to the foundations of Machine Learning and Artificial Intelligence. Given DataSpace Academy's involvement, the





1-day workshop on
WEB DEVELOPMENT

Date: 27th September, 2022
Time: 11:00am
Venue: University auditorium

Organized by
The School of Information Science and Technology, MAKAUT, WB

Target Audience:
Students of Higher semesters in CS and IT domain

Co-ordinator:
Dr. Debasis Giri
School of Information Science and Technology, MAKAUT, WB

makautwb.ac.in

WEB DEVELOPMENT WORKSHOP

A one-day workshop focused on web development fundamentals, organized by the School of Information Science and Technology, MAKAUT, WB. The session was coordinated by **Dr. Debasis Giri** and targeted students of all domains interested in learning web development skills.

AI, MACHINE LEARNING AND PYTHON WORKSHOP

This workshop covered artificial intelligence, machine learning concepts, and Python programming. Also organized by the School of Information Science and Technology, MAKAUT, WB, under the coordination of **Dr. Debasis Giri**. The event was designed for students from higher semesters in all domains, providing them with foundational knowledge in these cutting-edge technologies.

Both events demonstrate MAKAUT's commitment to providing students with practical exposure to current industry-relevant technologies and programming skills.

WORKSHOP

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY

Workshop on
"AI, Machine Learning using Python"

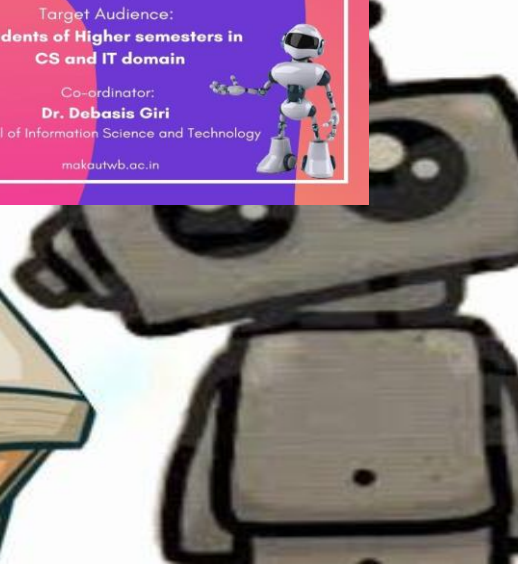
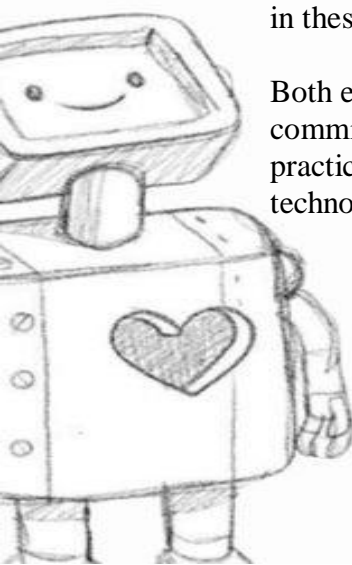
Date: 07-09-2022
Time: 11:00 am - 02:00 pm
Venue: University Auditorium

Organized by
The School of Information Science and Technology, MAKAUT, WB

Target Audience:
Students of Higher semesters in CS and IT domain

Co-ordinator:
Dr. Debasis Giri
School of Information Science and Technology

makautwb.ac.in



1-day workshop on
CYBER SECURITY & ETHICAL HACKING

Date: 28th September, 2022
Time: 11:00am
Venue: University auditorium

ORGANIZED BY:
THE SCHOOL OF INFORMATION SCIENCE AND TECHNOLOGY, MAKAUT, WB

TARGET AUDIENCE:
STUDENTS OF HIGHER SEMESTERS IN CS AND IT DOMAIN

Co-Ordinator
DR. DEBASIS GIRI
School of Information Science and Technology, MAKAUT, WB

makautwb.ac.in

CYBER SECURITY AND ETHICAL HACKING WORKSHOP

This one-day workshop explored the fundamentals of cybersecurity and ethical hacking techniques. Organized by the School of Information Science and Technology, MAKAUT, WB, the session was designed for students in higher semesters of CS and IT domains. Dr. Debasis Giri served as Co-ordinator, guiding participants through security principles, vulnerability assessment, and ethical hacking practices essential for protecting digital systems.

DATA SCIENCE, ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

This comprehensive workshop covered the interconnected fields of data science, AI, and machine learning. Also coordinated by Dr. Debasis Giri from the School of Information Science and Technology, MAKAUT, WB, the event targeted students from higher semesters across all domains, providing them with insights into data analysis, AI algorithms, and ML applications.

MAKAUT, WB

1-day workshop on
Data Science, Artificial Intelligence & Machine Learning

Date: 29th September 2022
Time: 11:00am
Venue: University Auditorium

Organized by:
The School of Information Science and Technology, MAKAUT, WB

Co-Ordinator:
Dr. Debasis Giri
School of Information Science and Technology, MAKAUT, WB

Target Audience:
Students of Higher semesters in CS and IT domain

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Organized by:
School of Information
Science and Technology,
MAKAUT, West Bengal

**Technically
supported by:**
DataSpace Academy

**Online Workshop
on
Full-Stack Development**

24th June | 2023 10 AM - 1 PM | IST

Contact:
Dr. Debasis Giri
(Program Co-ordinator)
Maulana Abul Kalam Azad University
of Technology, West Bengal, India
Haringhata, Post Office- Simhat,
Police Station- Haringhata, WB- 741249

Speaker
Abhishek Das
Senior Full Stack Developer
at DataSpace Academy

DataSpace Academy, EN 34, SEVEN HILLS BUILDING, 3rd Floor,
SALT LAKE SECTOR 5, KOLKATA 700091

FULL STACK DEVELOPMENT WORKSHOP

This was a 3-hour online workshop on Full-Stack Development organized by MAKAUT's School of Information Science and Technology in collaboration with DataSpace Academy. The session featured Abhishek Das, a Senior Full Stack Developer, who shared practical insights into modern web development. Dr. Debasis Giri coordinated the event, which aimed to equip participants with comprehensive knowledge of both front-end and back-end development technologies. The

ETHICAL HACKING WORKSHOP

This was a two-day workshop on Ethical Hacking held at MAKAUT's University Auditorium, targeting CS and IT students in their higher semesters. Spanning 3 hours daily, the workshop introduced participants to cybersecurity concepts, ethical hacking techniques, and responsible security practices. Coordinated by Dr. Debasis Giri, the event aimed to enhance students' understanding of network security, vulnerability assessment, and defensive strategies against cyber threats. Such workshops are crucial in preparing students for careers in cybersecurity and raising

**MAULANA ABUL KALAM
AZAD UNIVERSITY OF
TECHNOLOGY**

Workshop on
**Ethical
Hacking**

Dates: 8-9 September, 2022
Time: 11:00am - 02:00pm
Venue: University Auditorium

Organized by
The School of Information
Science and Technology,
MAKAUT, WB

Target Audience:
Students of Higher semesters in
CS and IT domain

Co-ordinator:
Dr. Debasis Giri
School of Information Science and Technology

MAKAUTWB.AC.IN

A black and white illustration of a person from behind, sitting at a drafting table. The person is wearing a sweater and is looking out a large window at a starry night sky. On the drafting table, there are various items including a lamp, a pen, and some papers. The scene is framed by a textured border.

TECHNICAL

SECTION

EXPLORATION OF PATTERNS OF CRIMES AGAINST WOMEN IN INDIA AND DEVELOP AN ARTIFICIAL INTELLIGENCE BASED CLASSIFICATION AND PREDICTION MODEL



Supervisor's name
Dr. Somdatia Chakravorty
Department of Information Technology MA AIT, W 8



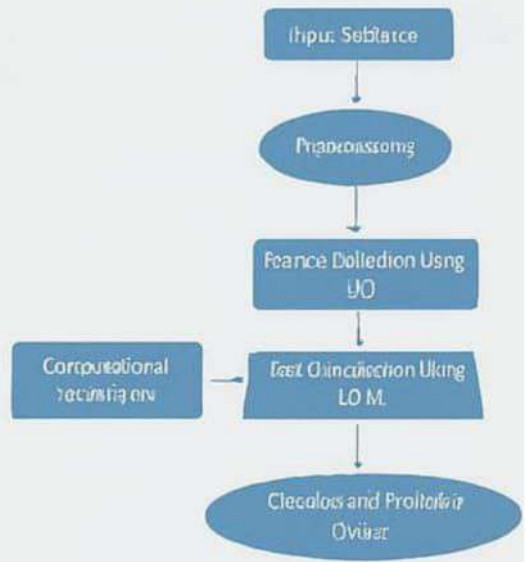
INTRODUCTION

A crucial field of research that provides information on the varied forms of violence and prosecution against women. It provides a helpful rethi- aware for addressing a pattern discovery lic- ature extraction & and prediction model, When india is a country where crimes against women are prevalent and It addresses effective techniques in predicting crimes against women.

Ayantika Dhar

Roll No.: 10000219907
Reg. No.: 030988 of 2018-20

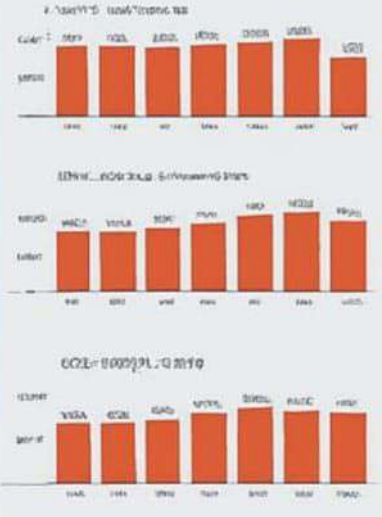
PROPOSED METHODOLOGY



CONCLUSION

A big stride has been made in the projects understanding and recapimding and response to crimes- agpinck women india it provides a helpful frame- work for integrating part- ern discovery, feature-ex- traction and an AI 'sase ed classification and predi- ction model, demipathe- cnilive society safer and more accommogating for nr women irralinala a quidi th rough thcory, stur dy, collaboraton and implementation.

Major Crimes Against Women

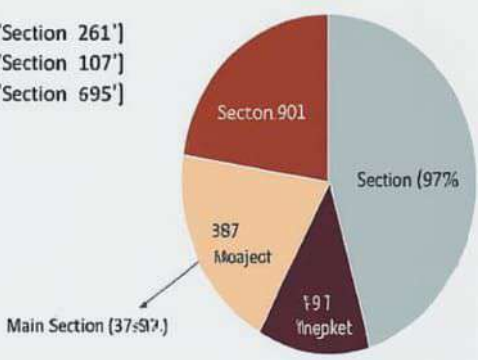


RESULTS

Regular expression used:
searcher eNir ^\bsect/toniDiut", sentence)

Output tetched as:

('Section 261')
(Section 107')
(Section 695')



REFERENCES

1. Ravindra B, Ghool, Sonke R. Deshpurde May 2015 Volence Against Women in India A Case for Teacher in Traming, ton 10.2139/sam. 24/335
2. Gourrer,.L.I.: 1999, Women onf Crime, New Odki. Amicl Publications Pvt Ltd.

(3) 8 Sunelarrol and B.
(52411 Alirafix trials, am Errv C
orange terage and ichial system



Face Recognition based Attendance System



Name	Roll No	Registration no
Adni Das	100002147	043347 BT
Shwete Kumart	100002176	042840 BTcn
Anuche Dsi	100002167	043380 BTcn
Ashivite Das	20200102000	— BTch

*Under the Supervision
Dr. Xumanjunan*

Introduction

With the rapid growth of IoT cloud computing and AI many devices are now capable of automating a task; through machine learning. Attendance marking is one such task. Traditional attendance systems use Depend on the Local Binary Patterns Histogram (LBPH) algorithm with the Haar cascade and database for face recognition.

This method is divided into four steps.

1. Dataset Creation
2. Face Detection
3. Face Recognition
4. Attendance Update

A presarch survey method

1. identify students. physically present
2. Store a large amount of attendance data
3. Prevent students from faking attendance

Results

Results process

- Fake attendance
- Avoid time
- Saving time
- Contactless

- execution
- Dependent
- Image quality
- Decourage
- Attendance output

Pros

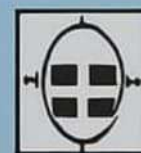
- Fake attendance
- Saves time and money
- Reduce manual effort

Cons

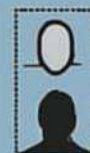
- Prevention
- Time
- Consumption
- Large
- Limited attendance

Face Recognition Model

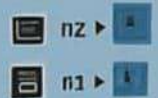
Face recognition computer system that captures an image or uploads via webcam, analyzing facial features and compares to stored images in a database.



img. 1



img. 5



img 3

This method is widely used

- Prevention
- Time & cost
- Large storage
- Acceptance
- High quality
- Angle
- Large storage
- Limited access





Book Recommendation System



Hervrk	Roltin Ro,	Rohl No	Program Name
Harshuhankar	1000020013	Rril. R.	BTech ITS ^{old} 8 <i>Undet the Supervision</i>
Nifhruscall R	10002205.	Rril. R	BTech ITS ^{old} 84 01
Kishan Rolkar	10000101	Rril. R	BTech ITS ^{old} 8 <i>Dy Survaqi Dey</i>
Prosal Ranf	10001005	Rril. R	BTech ITS ^{old} 5
Sucha Parab	10003101	Rril. R	BTech IT

introduction

Recommender systems are created to assist users to customize their uses on a variety of platforms. These systems use a variety of algorithms to recommend items to users based on their past behavior. They are used in a variety of applications, including e-commerce, social media, and entertainment. They are designed to help users find items that they are interested in and to provide a personalized experience.

The uses provided data is offered by the recommender system. It is designed to be accurate but it is not perfect. It is designed to be accurate but it is not perfect. It is designed to be accurate but it is not perfect. It is designed to be accurate but it is not perfect. It is designed to be accurate but it is not perfect.

Objectives

- Increasing the system's precision
- enhancing suggestions's quality for suggesting books by
- expanding the user experiences
- the reasing scalability

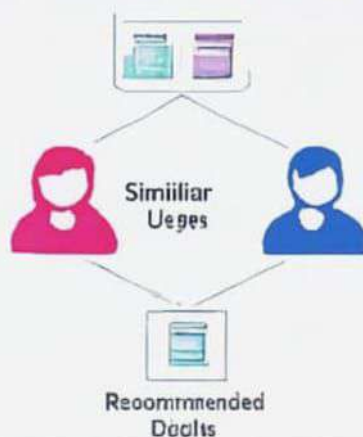
Conclusion

We propose a web application that suggests books to users. It is designed to be accurate but it is not perfect. It is designed to be accurate but it is not perfect. It is designed to be accurate but it is not perfect. It is designed to be accurate but it is not perfect. It is designed to be accurate but it is not perfect.

Result

As a collaborative recommendation system, our project is a Book recommendation system. It can make collaborative filtering. Content-based filtering or a combination of both. We developed a hybrid technique for our project that involves content-based filtering and collaborative filtering. Both have advantages and disadvantages.

COLLABORATIVE FILTERING



Obseatives

Data Collection

1. Importing Libraries
2. Computing the was. application
3. Book Popularity
4. Book Recommendation Function
5. User-based
3. Top 10 books tab.
6. Recommended Book Tab:

Disseivantages

Because the embeddings are input in the input space, the model is not able to capture the relationships between the input and output. This is a disadvantage of the model.

Dsseleentages

The model's production initially separates data with a clear cut. As more data points are trained, the model's performance improves. It is designed to be accurate but it is not perfect. It is designed to be accurate but it is not perfect. It is designed to be accurate but it is not perfect. It is designed to be accurate but it is not perfect. It is designed to be accurate but it is not perfect.

NOTE



This publication belongs to the Department of Information Technology, Maulana Abul Kalam Azad University of Technology, West Bengal and is designed by the editorial board of students of IT under the supervision of HoD and faculty members of the department.

EDITED BY ANNIE MANDAL AND JYOTI KUMARI, B.TECH(I.T.)2nd year
(2024-28)