REVISTA

May 2022

Department of Information Technology

Hindusthan
College of Engineering and Technology

Shri.T.S.R.khannaiyann

Chairman

Hindusthan Educational and Charitable Trust

Coimbatore.

MESSAGE

REVISTA'22 is an innovative piece, which showcases the hard work put in by the editorial board. I appreciate the efforts of the editorial team who have done an excellent job in compiling REVISTA'22 activities over the year and disseminate them through this magazine. I wish them all success for their future endeavor.

THIRU
T.S.R.KHANNAIYAN
(CHAIRMAN)

Smt.Sarasuwathi Khannaiyann

Secretary

Hindusthan Educational and Charitable Trust

Coimbatore - 641032

MESSAGE

"Education is simply the soul of the society as it's passes from one generation to another"

-G.K.Chesterson

      Engineers play the most vital and important role in nation building. They create new inventions using best engineered technologies to make human life more comfortable, secure, and productive. We have excellent potential to grow in diversified areas and excel in Engineering and Management fields. We need enormous number of engineers and managers to write next story of success.

      I want to express my gratitude to all contributors, including writers, editors, and support staff, for their unwavering commitment to excellence in producing such a remarkable publication. I encourage all members of our community to read and engage with this outstanding edition and share it with colleagues, peers, and students.

Mrs.SARASUWATHI KHANNAIYANN
(SECRETARY)

Ms Priya Sathish Prabhu
Joint Secretary
Hindusthan Educational and Charitable Trust
Coimbatore – 641032

MESSAGE

"Education is the most powerful weapon which you can use to change the world"

-Nelson Mandela.

I am delighted to express my heartfelt congratulations to the team behind REVISTA'22, our departmental magazine, for their exceptional publication. This edition is a remarkable testament to the literary, artistic, and imaginative skills of our students, and I am continuously inspired by the boundary-pushing research and writing showcased in its pages.

REVISTA'22 stands as a testament to the outstanding skills and dedication of our students and faculty, and I look forward to seeing more exceptional work from our community in the years to come. Once again, congratulations to the entire team on this outstanding achievement.

MRS.PRIYA SATEESH PRABU
(JOINT SECRETARY)

Dr Jaya J
Principal
Hindussthan college of Engineering and Technology
Coimbatore – 641032

MESSAGE

It is my pleasure to announce the release of the latest edition of REVISTA'22, the departmental magazine of our Information Technology Department. This edition showcases the expertise, innovation, and passion of our faculty and students in the field of IT.

As technology continues to evolve at an unprecedented pace, our department remains at the forefront of innovation, driving change and shaping the future of the field. This magazine is a testament to our department's commitment to excellence and to the advancement of IT research and education.

Once again, congratulations to all involved in the production of this excellent publication. Your contributions continue to raise the bar for excellence in IT research and education.

IT is Imminent, IT is Real!

Dr JAYA J
(PRINCIPAL)

Department of Information Technology

Dr Jasmine Selvakumari Jeya I
Professor & Head
Department of Information Technology
Hindusthan College of Engineering and Technology
Coimbatore – 641032

MESSAGE

I am pleased to announce that the latest edition of our department magazine, REVISTA'22, is now available for release. This edition features a range of insightful articles and thought-provoking pieces from members of our department in the wider field.

Our goal with this magazine is to provide a platform for the exchange of ideas and information within our department, and to foster a sense of community among our members. We believe that the articles and features in this edition will do just that, and we hope that you find them both informative and engaging.

I would like to take this opportunity to thank all those who have contributed to this edition, whether through writing articles, editing, or providing support in other ways. Your hard work and dedication are greatly appreciated.

We believe that the insights and ideas presented in this magazine have the potential to make a real difference in our field, and we are proud to share them with the wider community.

Wishing you all the best...!

Dr JASMINE SELVAKUMARI JEYA I
(PROFESSOR & HEAD)

Department of Information Technology

VISION OF THE DEPARTMENT

- To develop IT Professionals of the best caliber with Entrepreneurship Zeal.

MISSION OF DEPARTMENT

- To establish a best Learning Environment that helps the Students to face the challenges of Information Technology field.
- To enable Students, develop skills to solve technical problems and endorse collaborative and multidisciplinary activities through Curricular, Co-curricular and Extra-Curricular activities.
- To increase the visibility of Academic programmes at all level and fascinate talent to meet Entrepreneurship Skills.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- **PEO1:** Graduates of the program will be proficient in identifying, formulating, and solving complex problems by applying their knowledge of mathematics, science, and Information Technology principles.
- **PEO2:** Graduates of the program will be capable of analyzing, designing, implementing, and managing software projects through continuous learning and use modern tools to meet real-world constraints.
- **PEO3:** Graduates of the program exhibits professionalism with ethical attitude, communication, team work and will contribute to society needs.
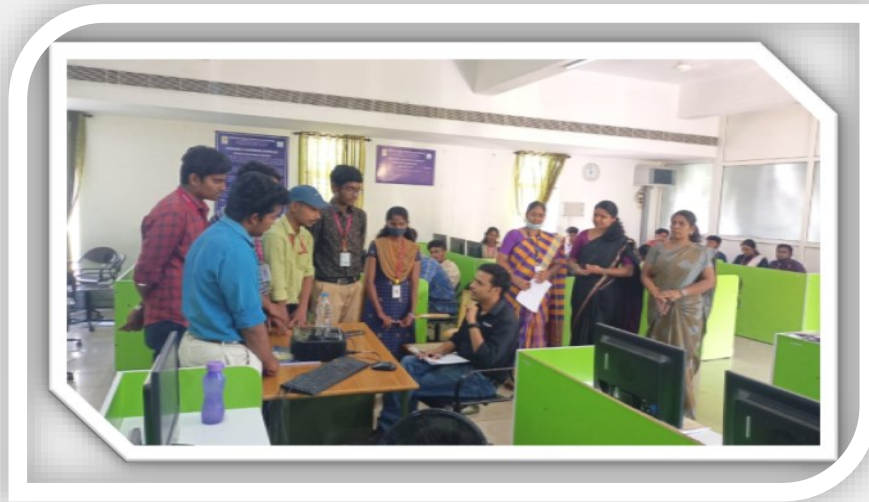
PROGRAM SPECIFIC OUTCOMES (PSOs)

- **PSO1:** Students will be able to Design and develop software solutions by employing appropriate problem-solving strategies, including Logically thinking, create a user interface, write code to connect a frontend user interface with a backend database using a contemporary object-oriented language.
- **PSO2:** Students will have an ability to design and develop mobile applications and Web based Applications with testing skills which consequently leads to employability and entrepreneurship skills.
- **PSO3:** Students must apply the appropriate techniques and modern engineering hardware and software tools to engage in life-long learning and to successfully adapt in multi-disciplinary environments.

Department of Information Technology

TECHNICAL PRAGRAMMES
Internal Hackathon on 12.03.2022

Jury Members

Mr.H. Rajesh Kumar, Managing Director, BuzzTech Training Institute, Coimbatore.
Mr. Manuraj Rajamanikandan, Technology Specialist, Cognizant, Kozhi.

Mr. N.B. Bharath, Graduate Engineer, Lluvia industries, Coimbatore.

Department of Information Technology

Department of Information Technology

Three Day Youth Enclave on Developing Employability Skills among Young Graduates from 7th March 2022 to 9th March 2022.

Day 1 Training Program, Mr.Mani Narayan handled a session on Emotional Intelligence and Developing Personal Skills.

Day 2 Session was handled by Ms.Rachel Caroline, Corporate Trainer, Pragmatix Learning Resource which focused on Workplace

Day 3 training was initiated by Mr.P.K.Prasanna Venkatesan, Founder, Mindroid Academy, about the Social Power of Positive.

Department of Information Technology

A National Level Seminar on Opportunities and Challenges for Women and Girls in Scientific Interventions on 12.05.2022 & 13.05.2022

ARTICLES

Chat GPT

What is ChatGPT?

ChatGPT is a natural language processing tool driven by AI technology that allows you to have human-like conversations and much more with a chatbot. The language model can answer questions, and assist you with tasks such as composing emails, essays, and code.

Who made ChatGPT?

ChatGPT was created by OpenAI, an AI and research company. The company launched ChatGPT on Nov. 30, 2022. OpenAI is also responsible for creating DALLE•2, a popular AI art generator, and Whisper, an automatic speech recognition system.

How big a deal is ChatGPT?

It's certainly made a big splash. "ChatGPT is scary good. Sam Altman, OpenAI's chief, said on Twitter that ChatGPT had more than 1 million users in its first five days after launching. Altman told Musk the average cost of each response was in "single-digits cents" but admitted it will need to monetize it eventually because of its "eye-watering" compute costs.

According to analysis by Swiss bank UBS, ChatGPT is the fastest growing app of all time. In January, only two months after its launch, UBS analysis estimates that ChatGPT had 100 million active users. For comparison, it took nine months for TikTok to reach 100 million.

The AI ChatGPT has been a surprise sensation, even rattling Google due to its fast-rising popularity - and now analysts at Swiss bank UBS think it is also the fastest-growing consumer app in history.

AVINESH S
III IT - A

VERSION CONTROL USING GIT

Version control is an essential tool for software development that allows teams to manage changes made to their codebase. Git is a popular version control system that has become the de facto standard for version control in the industry.

Git provides a distributed approach to version control, allowing developers to work on their own local copies of a codebase and then merge changes with a central repository.

With Git, developers can track changes made to their code over time and easily collaborate with other team members. Git provides a range of features such as branching, merging, and tagging that allow developers to manage complex codebases with ease.

Branching allows developers to work on separate copies of a codebase without affecting the main codebase. Merging allows developers to combine changes made to separate branches into the main codebase. Tagging allows developers to mark specific versions of their codebase for easy reference.

Git is a powerful version control system that allows developers to collaborate effectively and manage changes to their codebase. It is an essential tool for any software development team and can help streamline the development process.

SRI VISHNU R
III IT- B

SELENIUM

Nowadays, number of software system has been implemented as web-based applications. These web applications are very complex. It is very difficult to test such complex web applications. The purpose of automation testing is to reduce the need for human intervention and to automate tasks that can be repeated.

This is done using selenium, an open-source tool for automated testing. It supports a number of browsers (Google Chrome 12+, Internet Explorer 7,8,9,10, Safari 5.1+, Opera 11.5, Firefox 3+) and operating systems (Windows, Mac, Linux/Unix).

Selenium also provides compatibility with different programming languages – C#, Java, JavaScript, Ruby, Python, PHP. Testers can choose which language to design test cases in, thus making Selenium highly favorable for its flexibility.

Selenium has become an essential tool for web application testing because of its many benefits. Firstly, it supports multiple browsers and operating systems, allowing developers to test their applications in different environments. Secondly, it is open source and has a large community of developers who contribute to its development and provide support. Thirdly, it integrates with popular testing frameworks such as JUnit and TestNG, making it easy to incorporate into existing testing processes.

As there will be a continuous demand for software for various objectives in most of the companies and as no software has ever been produced without bugs, indulging with this open-source and easy-to-use tool will ensure a fruitful career.

VIGNESH K
III IT - B

INFORMATION TECHNOLOGY

INTRODUCTION

Information Technology (IT) refers to the use of technology to manage and process information. This can include hardware, software, networks, and databases used to store, organize, retrieve, and transmit data. IT is essential in modern society and has revolutionized the way we communicate, work, and access information.

IT is used in various industries such as healthcare, finance, education, and government. Some common examples of IT systems include:

- Computer systems and hardware such as desktop computers, laptops, servers, and mobile devices

- Software applications such as word processors, spreadsheets, databases, and specialized industry-specific software

- Computer networks such as the internet, intranets, and local area networks (LANs)

- Cloud computing, which allows users to access software, data, and computing resources remotely over the internet

- Cybersecurity systems such as firewalls, antivirus software, and intrusion detection systems

IT professionals work in a wide range of roles, including software development, network administration, cybersecurity, data analysis, and project management. As technology continues to evolve, the demand for skilled IT professionals is expected to grow.

WHY 'IT' IS IMPORTANT?

Information Technology (IT) is important for several reasons, including:

1. **Communication:** IT enables communication to happen at a faster pace and with greater efficiency. This has revolutionized the way people connect with each other, regardless of geographic location, making communication quicker and more convenient.

2. **Data Management:** IT has made it easier to store, organize, and retrieve data. This has helped organizations and individuals to make informed decisions by analyzing data patterns and trends.

3. **Efficiency:** IT has automated many processes that were previously done manually, leading to increased efficiency and productivity in the workplace. This has reduced the time and cost associated with manual tasks and has allowed organizations to focus on more critical tasks.

4. **Globalization:** IT has played a significant role in making the world a global village. With the advent of the internet, people can connect with each other from different parts of the world. This has facilitated international trade and cooperation.

5. **Innovation:** IT has enabled people to create and develop new products and services that were previously impossible. This has opened new opportunities for entrepreneurship and innovation.

6. **Security:** With the increased use of digital systems, cybersecurity has become an essential aspect of IT. It ensures that data is kept secure and prevents unauthorized access to sensitive information.

Overall, IT has transformed the way we live and work, making our lives more efficient, convenient, and secure. It continues to shape the future, and its importance in society is only set to increase.

Department of Information Technology

LATEST SOFTWARE DEVELOPMENT TOOLS

GitLab

- This is a web-based Git repository manager that helps in version control and code management. It is used for continuous integration and deployment, issue tracking, and continuous delivery.

Docker

- This is a containerization platform that helps in packaging, deploying, and running applications in a containerized environment. It provides a lightweight alternative to virtual machines and helps in creating portable and scalable applications.

Kubernetes

- This is an open-source container orchestration platform that automates the deployment, scaling, and management of containerized applications. It provides a platform to manage and deploy containers at scale.

Jenkins

- This is a continuous integration and continuous delivery (CI/CD) tool that helps in automating the build, test, and deployment process of software applications. It supports a wide range of plugins and integrations and can be used to build and deploy applications across multiple platforms.

Visual Studio Code

- This is a lightweight, cross-platform code editor that supports multiple languages and provides a rich set of features for code editing, debugging, and source control. It is widely used for web and cloud development.

Selenium

- This is an open-source automation tool that is used for testing web applications. It provides a framework to write test scripts in multiple programming languages and supports multiple browsers and platforms.

Department of Information Technology

PUZZLES

Which letter replaces the question mark?

2	2	8

L	S

3	7	8

R	?

Answer   : U

Explanation : Multiply the numerical values of the letters in each pair to give the 3 digit result in the spaces above.

Which number replaces the question mark?

6	EJI	3
M F K		D P G
9	NRG	?

Answer   : 12

Explanation : The value at each corner of the diagram equals the difference between the sums of the numerical values of the letters in the boxes adjacent to the corner.

PLACED STUDENTS

COGNIZANT TECHNOLOGY SOLUTIONS

ABDULARIES M
2018 - 2022

ARUMUGAM S
2018 – 2022

MUKILAN V
2018 – 2022

HARSHINNI R
2018 - 2022

CHANDRASEKAR T S
2018- 2022

RAFIQ J
2018 – 2022

KAILASH S
2018 - 2022

KAYATHRI S
2018 – 2022

PAVITHRA ANAND V
2018 - 2022

MOUN PRASATH R
2018 - 2022

SAJESHPRAVEEN R
2018 - 2022

SAKTHIVEL M
2018 - 2022

SARANYA S
2018 - 2022

VASANTHKUMAR K
2018 - 2022

INFOSYS

BETSIN KURUVILA MEKKAT
2018 - 2022

BHARATHI KANNAN S
2018 - 2022

RAKSHAN T
2018 - 2022

WIPRO TECHNOLOGIES

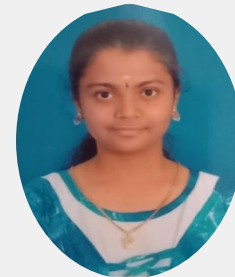**CYLVIA MAYBELL N**
2018 - 2022

LASHMI NARAYANAN S
2018 - 2022

LOKESH S
2018 - 2022

MALARVANAN A
2018 - 2022

NAVEEN KUMAR P
2018 - 2022

NILAVARASI S
2018 - 2022

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TAMILARASAN P
2018 – 2022

TATA CONSULTANCY SERVICES

TRINGAPPS RESEARCH LABS

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2018 - 2022

NIVEDHITHA K R
2018 - 2022

SIVARANJANI M
2018 - 2022

INFOSYS

AJAY KUMAR J.S
2018 - 2022

AKASH K
2018 - 2022

AKASH R
2018 - 2022

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2018 - 2022

CHANDRU D R
2018 - 2022

JAGAN Y
2018 – 2022

LOKESH KUMAR GK
2018 – 2022

PRAVEEN IYYAPPAN R
2018 – 2022

RANJITH K
2018 – 2022

SURYA PRAKASH.N
2018 – 2022

THIRUMAL J
2018 – 2022

VIGNESH K
2018 – 2022

VIJAY M
2018 – 2022

VIJAYAKUMAR S
2018 – 2022

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WIPRO

CHINNADURAI S
2018 - 2022

BOOST MYSHOP

RUBAN KUMAR B
2018 - 2022

ZOHO CORPORATION PVT LTD

SHELVAASUNDARI M
2018 - 2022

MPHASIS

SRISHA G
2018 - 2022

DIVAGAR M
2018 - 2022

RIYAGENCIKA P
2018 - 2022
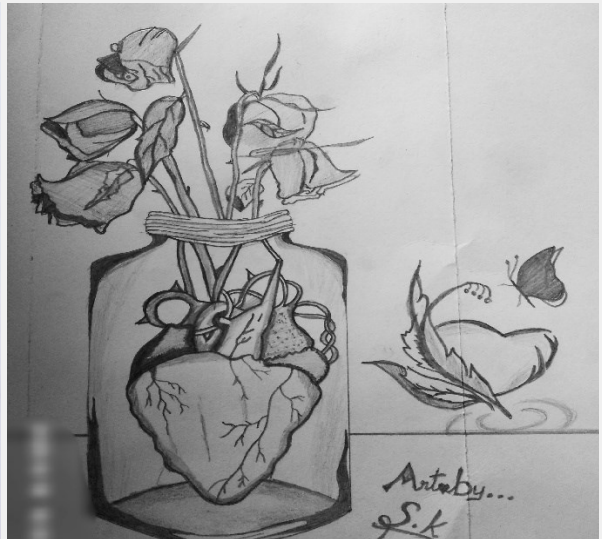
REVATURE

MOHAMMED MAIDEEN NOWFAL V A
2018 - 2022

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STUDENT PROJECTS PUBLISHED AS PATENT

S.NO	PATENT APPLICATION NO.	INVENTOR(S) NAME	TITLE OF THE PATENT	PATENT PUBLISHED DATE	STATUS OF PATENT
1	202241020870	RAJKUMAR M RANJITH K VIJAYAKUMAR S SABARIRAJAN K	MULTI BANKING SYSTEM	29-04-2022	PUBLISHED
2	202241020873	SABARI GIRI VASAN L SUBASH CHANDRA BOSE G VENKATESH S YOGESH K	SMART VEHICLE ASSISTANCE	29-04-2022	PUBLISHED
3	202241020875	ABDULARIES M KEVIN K S MOHAMED SHAFEEK M NANDHAKUMAR R	FACE RECOGNITION USING LOCAL BINARY PATTERN HISTOGRAM ALGORITHM	29-04-2022	PUBLISHED
4	202241020876	RAKSHAN T RUBAN KUMAR B RAGURAM T	VOTING SYSTEM USING POLYGON BLOCK CHAIN	29-04-2022	PUBLISHED
5	202241020878	RAFIQ J SAJESHPRAVEEN R SAKTHIVEL M TAMILARASAN P	DETECTION OF ANONYMOUS OBJECTS FOR SURVEILLANCE SYSTEM USING MACHINE LEARNING	29-04-2022	PUBLISHED
6	202241020879	AISHWARYA G JAI IRIN MYSTICA J LAGUMESH V	ID CELLULAR AUTOMATA FOR IMAGE ENCRYPTION AND DECRYPTION	29-04-2022	PUBLISHED
7	202241020883	AJIT A CHINNADURAI S HARIHARAN R KAILASH S	AN INTELLIGENT CHABOT FOR STUDENT CAREER COUNSELING	29-04-2022	PUBLISHED

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8	202241020884	SUJITHKUMAR T TAMILARASU V VIGNESH C VIGNESH K	COMPUTER AIDED EMERGENCY SERVICE SYSTEM	29-04-2022	PUBLISHED
9	202241020886	P. ARUNPRASATH CHANDRU D.R HARIHARAN. V MOHAMMED MAIDEEN NOWFAL V.A	SECURED SOCIAL NETWORKING PLATFORM IN CLOUD COMPUTING	29-04-2022	PUBLISHED
10	202241020888	SANTHOSH R SHRI PRAKSH K SIVARAAM R TAMIL SELVAN M	NATURAL LANGUAGE PROCESSING BASED CHAT BOT FOR HEALTH CARE SERVICES	29-04-2022	PUBLISHED
11	202241020892	SARANYA S SIVARANJANI M PAVITHRA ANAND V SRISHA G	ONLINE PRODUCT RANKING SYSTEM USING AGGREGATION AND FILTRATION	29-04-2022	PUBLISHED
12	202241021084	HARIHARAN M HARIHARAN R KARTHICK RAJA.J KRITHICK VASAN S	BLOCK CHAIN BASED PRIVACY PRESERVATION IN CLOUD ENVIRONMENT	29-04-2022	PUBLISHED
13	202241021103	AKASH K ARUMUGAM S KAVIYARASAN K LOKESH KUMAR G. K	ARTIFICIAL INTELLIGENCE VOICE ASSISTANCE FOR COMPUTERS USING PYTHON	29-04-2022	PUBLISHED
14	202241021104	RANJITH S RISHI M RITHICKISHORE R M SANJAY RAJ A	AN ASSISTIVE MOBILE APPLICATION FOR THE VISUALLY IMPAIRED PEOPLE	29-04-2022	PUBLISHED
15	202241021105	AKASH R BHARATHI KANNAN S CHANDRASEKAR T S DIVAGAR M	LOSE IT-A FITNESS COMPANION	08-04-2022	PUBLISHED

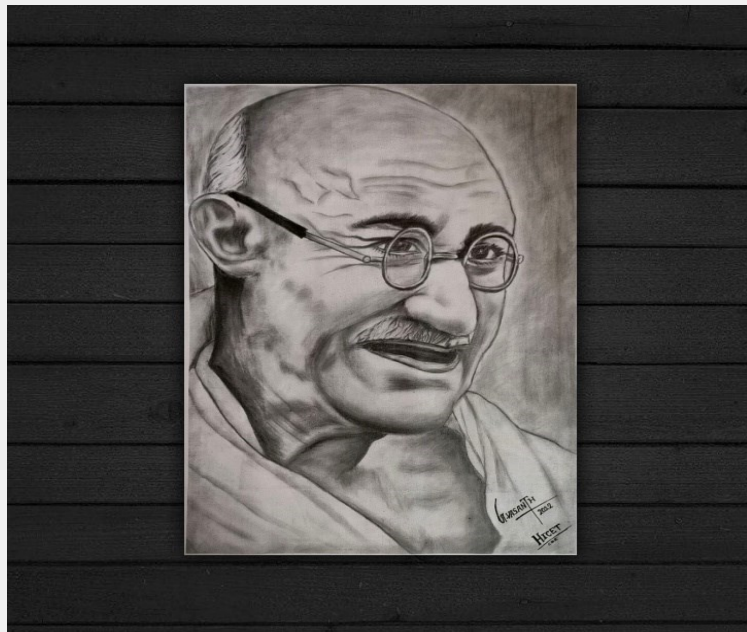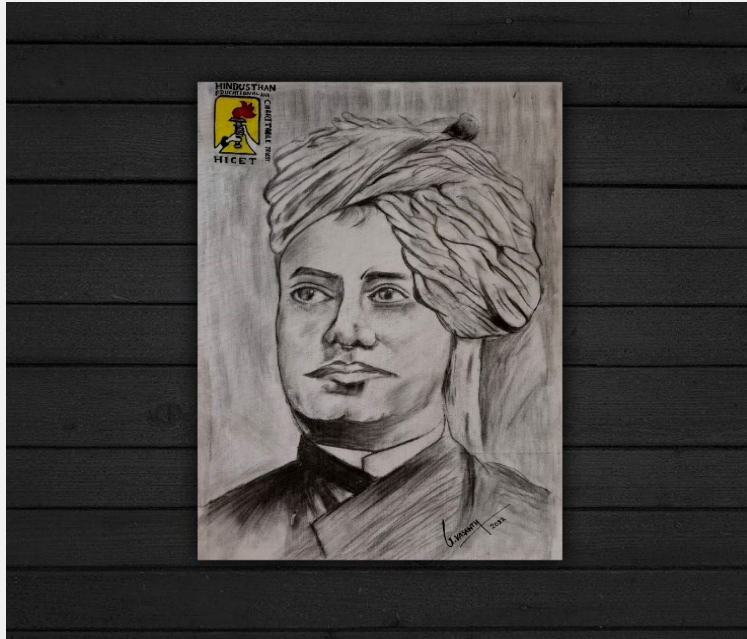Department of Information Technology

16	202241021106	BETSIN KURUVILA MEKKAT DEVANARAYANAN.P HARI KRISHNA. J JAGAN Y	AN EFFICIENT PORTABLE REMOTE APPLICATION FOR VEHICLE PARKING SYSTEM	29-04-2022	PUBLISHED
17	202241021111	MALARVANAN A MOHANABALAJI S MOHAN KANTH.D MOUN PRASATH R	PRE-SCHEDULED ONLINE FOOD ORDERING MANAGEMENT SYSTEM	08-04-2022	PUBLISHED
18	202241021445	AJAY KUMAR J.S LOKESH S MOHAMED ASHIF NAVEEN KUMAR P	ANDROID SAFETY APPLICATION USING GPS AND MESSAGING SYSTEM	29-04-2022	PUBLISHED
19	202241021447	DHANASEKAR E LASHMI NARAYANAN S MUKILAN V MOULI R	TRAINING AND DEVELOPMENT OF EMPLOYEE TRAINING PORTAL SYSTEM	29-04-2022	PUBLISHED
20	202241021449	GOWSALYA P NILAVARASI S	DRIVER"S ATTENTION MONITORING SYSTEM	29-04-2022	PUBLISHED
21	202241021450	SIVASUBRAMANIAN M SURYA PRAKASH. N VASANTH KUMAR K VIGNESH S	FAKE PRODUCT REVIEW MONITORNG SYSTEM	29-04-2022	PUBLISHED
22	202241021451	PRAVEEN IYYAPPAN R THIRUMAL J VIJAY M VIMAL KARTHICK S	CODE TRACKER- A LIGHTWEIGHT APPROACH TO TRACK AND PROTECT AUTHORIZATION CODES IN SMS MESSAGES	29-04-2022	PUBLISHED
23	202241021447	DHANASEKAR E LASHMI NARAYANAN S MUKILAN V MOULI R	TRAINING AND DEVELOPMENT OF EMPLOYEE TRAINING PORTAL SYSTEM	29-04-2022	PUBLISHED

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ART GALLERY

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III IT - A

VASANTH G
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