GHARDA FOUNDATION'S
GHARDA INSTITUTE OF TECHNOLOGY

(Approved by AICTE, New Delhi, DTE, Maharashtra, Affiliated to Mumbai University & Accredited by NAAC)
A/P- Lavel, Tal –Khed, Dist- Ratnagiri, PIN-416708 M.S> Tel- 02356-262795-99
Email- principal@git-india.edu.in

Department of Computer Engineering
Academic Year 2024-25
Major Project Gallery

Sr. No	Name of the Project	Group ID	Name of Students	Name of the Guide
1	IOT Home Automation	G1	Surve Sanil Pradip Pratiksha, Pol Gourav Yuvraj Rupali, Varak Harsh Subhash Sarita, Rane Vedant Sanjay	Prof. S. S. Tathare
2	Travel Buddy	G11	Bhoje Aditya Sandip Vaishali, Chavan Shivam Sanjay Snehal, Palande Prem Anil Priyanka, Patil Atharv Vijay Manasi	Prof. P. C. Dhamane
3	ERP College Attendance System	G13	Ambare Shiv Sanjay Sanjana, Desai Vaishnavi Mangaldas Shalan, Modak Sahil Sadanand Swati, Tibhe Ankita Hemant Jayashri	Prof. K. M. Gajmal
4	Market Pulse	G14	Jadhav Shruti Dilip Disha, Ghole Rutvik Haresh Harshada, Rathod Avinash Shivaji Sumitra, Jawale Pooja Rajesh Deepali	Prof. K. M. Gajmal
5	Creative Writing Collaborative Platform	G19	Chavan Akshay Kiran Shanu, Chavan Vinit Subhash Nandini, Ahire Kshitij Gulab Pranita, Ansari Adil Abdul Qayyum Tahira	Prof. P. C. Dhamane
6	Genealogy Tracking	G2	Kadam Pratik Pandurang Geeta, More Adarsh Vitthal Ranjana, More Sumedh Virsen Nayana, Kokate Om Sudesh Rama	Prof. P. V. Oak
7	AI Healthcare Platform	G4	Angaj Vaishnavi Sarjerao Sushama, Kamble Samruddhi Santosh Sanjivani, Solkar Abdul Basit Shoukat Munira, Tondekar Janhavi Sachin	Prof. R. B. Pawar

			Reshma	
8	CarePulse	G5	Kale Rutuja Rajendra Kavita, Karekar Tejashri Arun Anjali, Malekar Namrata Deepak Deepika	Prof. M. A. Khandke
9	Fingerprint Attendance System	G8	Brid Sakshi Sandip Akshata, Khambe Sneha Nandesh Nikita, Khedekar Tanmay Rajesh Rajeshri, Surve Salwa Ayub Raziya	Prof. V. N. Rane
10	Cloud Based Patient Monitoring System using Data Science	G12	Bodhe Maithilee Mahesh Prema, Dahivalkar Soham Sandip Snehal, Khetale Ketan Ashok Sangita, Shinde Akash Sunil Kishori	Prof. R. B. Pawar
11	GCL CSR Fund Management System	G15	Chavan Akash Ankush Dipali, Mandhare Utkarsh Bhikaji Sarika, Bangi Ayman Inayat Nargis	Prof. M. A. Khandke
12	Educational Social Media Website	G18	Kamble Prathamesh Sanjay Nandini, Mahadik Omkar Balkrishna Arati, Shinde Sahil Ravindra Rutuja, Shinde Shubham Sandip Smita	Prof. V. N. Rane
13	Automated Quizzes Generator	G6	Pawar Tejas Anant Anjan, Badade Snehal Sandeep Rohini, Rane Shubham Santosh Shraddha, Tiwarekar Arya Sanjay Sakshi	Prof. J. V. Khalkar
14	Foodie Fleet	G7	Raul Riya Ravindra Revati, Sawant Aaditi Amol Nisha, Surve Surabhi Deepak Pragati, Londhe Sourabh Vijay Vrishali	Prof. S. D. Latkar
15	College Website	G9	Honale Shreyas Kiran Shilpa, Kazi Atik Asif Zahida, Mhatre Sakshi Uday Sangita, Khaire Madhavi Vijay Manisha	Prof. S. N. Vailali
16	E-Learning Platform	G10	Nadar Gnana Jebi A Aroon Jebaraj Thanga Bai, Ghaisas Samiksha Sandip Sangita, Pawar Samruddhi Sudhir Supriya, Patil Siddhi Subhash	Prof. S. N. Vailali

17	Language Exchange Platform	G16	Lolam Sanika Dattaram Dipika, Deshmane Soham Hanmant Seema, Deulkar Darshan Shriraj Nilkamal, Shinde Aditya Mangesh Mrunali	Prof. J. V. Khalkar
18	Media Minds	G17	Ambre Shivam Prabhakar Pratiksha, Kherade Vedant Sandeep Saloni, Shinde Rhugved Arunoday Arundhati, Todkari Jay Mahesh Anisha	Prof. S. D. Latkar

Index Number: 1

IOT Home Automation

Home automation technology is transforming residential living by integrating IoT-based smart systems for enhanced control, security, and efficiency. This project, Home Automation using IoT, explores the design, development, and deployment of an automated home system, leveraging Arduino, Raspberry Pi, and sensor-based technologies. Through a centralized dashboard, users can control lighting, security, and environmental settings remotely, increasing convenience and reducing energy consumption.
The system utilizes a range of sensors, including motion, temperature, and light sensors, connected to a control hub that processes data and automates appliances accordingly. Actuators, relays, and a Wi-Fi module enable real-time device interaction and monitoring. The core components, such as the Arduino Uno and Raspberry Pi, provide connectivity and processing power for seamless device control via an intuitive web-based interface.
The project demonstrates significant applications in smart home environments, with features that enhance user experience and improve resource management. Benefits include remote operation, customizable automation settings, energy efficiency, and improved security through real-time alerts and surveillance. Overall, this IoT-based home automation system exemplifies how modern technology can create safer, smarter, and more sustainable living spaces

Index Number: 2

Travel Buddy

Travel Buddy is an innovative platform designed to connect solo travelers with each other, fostering a sense of community and making travel more engaging and enjoyable. The website leverages modern technology to allow users to find like-minded solo travelers based on their interests, ensuring a personalized travel experience. By integrating location-based services, Travel Buddy offers real-time access to nearby accommodations, hotels, restaurants, and popular travel spots through an intuitive map functionality. This makes it easier for solo travelers to plan their trips, discover hidden gems, and find essential amenities during their journey.
One of the key features of Travel Buddy is its built-in chat function, enabling travelers to communicate directly with one another. Whether it's for sharing experiences, seeking advice, or coordinating meetups, the platform facilitates seamless interaction among its users. Additionally, Travel Buddy prioritizes convenience, offering features that enhance the travel

experience while making solo travel more social and connected. By bridging the gap between technology and travel, the platform empowers solo travelers to explore the world while forming lasting connections along the way.

Index Number: 3

ERP College Attendance System

The objective of this project is to develop an efficient and automated Attendance Record System for students using an Enterprise Resource Planning (ERP) framework. This system aims to streamline the process of tracking student attendance, providing a user-friendly interface for both educators and students. By integrating various functionalities such as real-time attendance tracking, reporting, and notifications, the system enhances the overall management of student attendance records.
The project utilizes a web-based platform to ensure accessibility and ease of use, allowing educators to manage attendance records effectively while providing students with a transparent view of their attendance status.

Index Number: 4

Market Pulse

This project presents the development of Market Pulse using PHP and MySQL, designed to enhance the e-commerce experience for both consumers and administrators. The platform addresses common challenges faced by online shoppers, such as complicated navigation, account management issues, and lack of efficient order tracking. Key features include a user-friendly interface that facilitates seamless user registration, login, password management, and profile customization. Users can also utilize essential shopping functionalities, including a shopping cart, wishlist, and order history, ensuring a convenient and engaging shopping experience.
For administrators, the portal offers a comprehensive management system that allows for effective oversight of product listings, order processing, and user accounts. Admins can easily add, update, and delete products, manage categories and sub-categories, and monitor order statuses, all through an intuitive control panel. The project emphasizes security, employing measures to protect user data and transactions, while also ensuring optimal performance and scalability to accommodate future growth and enhancements. Overall, this Market Pulse aims to provide a robust, reliable, and efficient solution in the rapidly evolving e-commerce landscape.

(Approved by AICTE, New Delhi, DTE, Maharashtra, Affiliated to Mumbai University & Accredited by NAAC)
A/P- Lavel, Tal –Khed, Dist- Ratnagiri, PIN-416708 M.S> Tel- 02356-262795-99
Email- principal@git-india.edu.in

Index Number: 5

Creative Writing Collaborative Platform

The Creative Writing Collaborative Platform is an innovative web-based application designed to revolutionize the way writers collaborate on creative projects. It offers a dynamic environment where multiple users can simultaneously create, edit, and review written works in real-time. The platform is specifically tailored to the needs of creative writers, ensuring a seamless and interactive experience that fosters collaboration among authors, editors, and peer reviewers.

By integrating real-time editing features, the platform allows users to work together on the same document without delays or conflicts, enhancing the efficiency of collaborative efforts. One of its core functionalities is a sophisticated version control system, which tracks changes and maintains a detailed history of all edits. This ensures that no work is ever lost and that users can revert to previous versions if necessary, providing a safety net for creative exploration.

Additionally, the platform incorporates advanced feedback mechanisms, allowing users to comment, suggest revisions, and review each other's work in an organized and efficient manner. This feature promotes a culture of constructive peer reviews, helping writers improve their craft and refine their work based on collaborative input. Writers can engage in discussions directly within the platform, making it a hub for communication and creativity. Leveraging modern web technologies such as HTML5, CSS3, JavaScript, and backend frameworks like Node.js or Python with Django, the platform delivers a smooth and responsive user experience. Its scalable architecture ensures that the platform can support large teams of writers, enabling them to collaborate on various projects regardless of their geographical location. Security is also a top priority, with robust measures in place to protect user data and maintain the privacy of shared creative content.

Index Number: 6

Genealogy Tracking

This major project aims to develop a comprehensive geological tracking system utilizing the concept of family tree generation. By drawing parallels between geological formations and family lineages, we propose a novel approach to visualize and analyze complex geological relationships. The family tree analogy provides a visually intuitive framework for understanding the evolution, interconnectivity, and dependencies of various geological features.

The core of this project involves creating a hierarchical structure, akin to a family tree, where each node represents a specific geological unit. The parent-child relationships between nodes signify the genetic or chronological sequence of geological processes. This system will facilitate the exploration of geological histories, identification of ancestral formations, and assessment of potential correlations between different regions.

To implement this concept, we will employ advanced geospatial analysis techniques and leverage existing geological databases. Geographic Information Systems (GIS) will be utilized to map the spatial distribution of geological units and establish their connections. Additionally, geological data such as rock types, ages, and structural features will be integrated to enrich the family tree structure.

The proposed geological tracking system offers several advantages. It provides a visually appealing and easily understandable representation of complex geological relationships. By organizing geological information in a hierarchical manner, it enhances pattern recognition and facilitates the identification of trends and anomalies. Moreover, this system can be used for various applications, including geological mapping, resource exploration, hazard assessment, and educational purposes.

Index Number: 7

AI Healthcare Platform

Medigen is an advanced healthcare platform that leverages machine learning (ML) to offer personalized medical insights, revolutionizing the way healthcare is delivered. Designed to integrate seamlessly with patient records, diagnostic data, and wearable health devices, Medigen empowers both patients and healthcare providers with real-time, data-driven decisions. By utilizing sophisticated ML algorithms, the platform can analyze vast amounts of health data to predict potential health risks, recommend treatment plans, and enhance preventive care. Medigen's core functionalities include intelligent disease diagnosis, treatment optimization, and predictive analytics for personalized healthcare. It supports early detection of chronic conditions by identifying patterns in patient histories and biomarkers. Additionally, the platform enables remote monitoring and virtual consultations, making healthcare more accessible and efficient. Healthcare providers can leverage Medigen's data

insights to deliver precision medicine, reducing the margin for error in treatment and improving patient outcomes.
The platform is scalable and designed to comply with stringent healthcare regulations, ensuring data security and patient privacy. Furthermore, its adaptive learning capabilities allow Medigen to continually evolve, improving accuracy and expanding its range of medical applications. Medigen is a pioneering AI-driven healthcare platform that transforms traditional healthcare into a proactive, personalized, and data-centered model, paving the way for the future of precision medicine.

Index Number: 8

CarePulse

The CarePulse Hospital Application is designed to enhance healthcare delivery by providing real-time monitoring and management of patient flow within a hospital setting. The application leverages live streaming, multisource data to analyze, identify, and alert users of system bottlenecks, ensuring efficient utilization of resources. By displaying variations in testing and treatment flow, CarePulse enables hospital staff to track patient flow in real-time, compare it with historical patterns, and make informed decisions for timely staffing and resource allocation.
The application aims to improve patient care, reduce emergency room visits, and boost overall health outcomes by facilitating seamless communication and coordination among healthcare providers. With features like instant visualization of bottlenecks, optimization of emergency department capacity, and improved staff accountability, CarePulse ensures a more efficient and patient-centric healthcare environment.

Index Number: 9

Biometric Fingerprint Attendance Record System

The Biometric Fingerprint Attendance Record System is an advanced solution designed to automate attendance tracking using fingerprint recognition technology. This system aims to address the limitations of conventional attendance methods, such as manual registers or card-based systems, which are prone to human error, time theft, and proxy attendance. This mini project aims to highlight the practical application of biometric technology and its effectiveness in solving real-world problems. The project involves hardware components (fingerprint sensor) and software integration (user interface, database, and algorithm for fingerprint matching).

Index number 10:

Hospital Management System

The purpose of the project entitled as "HOSPITAL MANAGEMENT SYSTEM" is to computerize the Front Office Management of Hospital to develop software which is user friendly, simple, fast, and cost-effective. It deals with the collection of patient's information, diagnosis details, etc. Traditionally, it was done manually. The main function of the system is to register and store patient details and doctor details and retrieve these details as and when required, and also to manipulate these details meaningfully. System input contains patient details, diagnosis details, while system output is to get these details on to the screen. The Hospital Management System can be entered using a username and password. It is accessible either by an administrator or receptionist. Only they can add data into the database. The data can be retrieved easily. The data is well protected for personal use and makes the data processing very fast.

Index Number: 11

GCL CSR Fund Management System

The CSR Project Management System is designed to streamline the management of Corporate Social Responsibility (CSR) initiatives, addressing inefficiencies in current tools that struggle with scalability, data integration, and impact measurement. The system's purpose is to provide organizations with a unified platform that enhances the coordination, execution, and reporting of CSR projects, ensuring that they achieve maximum social and environmental impact.
Key Features:

1. Scalability and Global Project Management – Handles multiple CSR projects across different geographies, supporting diverse regulations and requirements.
2. Seamless Data Integration and Workflow Automation – Integrates with enterprise systems, automating project tracking, resource allocation, and report generation.
3. Advanced Impact Measurement – Tracks the social and environmental impact of CSR initiatives, aligning them with global standards like the United Nations SDGs.
4. Built-In Compliance Tools – Automates the generation of regulatory-compliant reports, ensuring adherence to regional CSR mandates.

Index number 12:

Educational Social Media Platform WebApp

The Educational Social Media Platform WebApp is an innovative tool designed to blend social networking with educational resources, enhancing the learning experience. It features essential functionalities such as photo uploading, chatting, and group creation to foster a collaborative digital learning environment.
The photo uploading feature allows users to share visual content like project images, educational materials, or event photos, enabling a more engaging and interactive approach to learning. The chat functionality supports both individual and group communication, promoting real-time discussions and quick feedback. This enhances collaborative learning by allowing students to discuss assignments or seek guidance, while educators can provide timely support outside the classroom.
Group creation is another vital feature, enabling the formation of study groups, class communities, or interest-based teams. These groups facilitate the sharing of materials, discussions on assignments, and organization of events, fostering a sense of community among students and educators.
Designed with privacy and security as priorities, the platform ensures safe content sharing and communication. By combining these social media elements with educational needs, the web app aims to create a connected and inclusive learning space, making education more accessible and engaging in the digital era.

Index Number: 13

Automated Quizzes Generator

An online quiz generator is a versatile tool designed to create, manage, and administer quizzes and assessments easily. It allows educators, trainers, and businesses to develop customized quizzes tailored to specific learning objectives or training goals. Users can choose from various question formats, including multiple choice, true/false, and open-ended questions, while incorporating multimedia elements such as images and videos to enhance engagement. With features like automatic grading, analytics, and reporting, the generator streamlines the evaluation process, providing instant feedback to participants. This technology not only saves time but also promotes interactive learning experiences, making it an essential resource in both educational and corporate environments.
An online quiz generator is a digital tool that allows users to create, customize, and distribute quizzes and assessments over the internet. These generators are particularly beneficial for educators, trainers, and organizations looking to assess knowledge or skills in an efficient manner. Overall, online quiz generators are powerful tools that streamline the assessment process, enhance learning experiences, and provide valuable insights, making them essential in modern educational and training environments.

An online quiz generator is a robust tool that streamlines the process of creating, customizing, and administering quizzes for various applications, such as education, corporate training, and entertainment. These platforms offer a wide variety of question formats, including multiple choice, true/false, short answer, and fill-in-the-blank, allowing users to assess knowledge in diverse ways. Customization options enable users to personalize the appearance of quizzes with themes, colors, and branding elements, enhancing engagement for participants. Many generators incorporate features like timed quizzes, where users can set limits to simulate real testing environments, while automated grading provides instant feedback, calculating scores based on correct answers and allowing for immediate performance insights. Advanced analytics tools track participant performance over time, identifying trends and knowledge gaps that can inform targeted interventions. Accessibility is a key feature, as quizzes can be easily shared via links or embedded on websites, with many being mobile-friendly for use on various devices. Additionally, integration with learning management systems (LMS) allows for centralized management of quizzes alongside other course materials, facilitating a cohesive educational experience. Multilingual support makes these tools suitable for diverse audiences, and engagement features like gamification elements—such as points, badges, and leaderboards—further enhance motivation and interaction. Overall, online quiz generators significantly improve the learning and assessment process by making it more interactive, efficient, and tailored to individual needs.

Index Number: 14

Foodie Fleet

An online food delivery app allows users to order food from local restaurants using their smartphones or computers. It provides a convenient platform where users can browse menus, select dishes, place orders, and make payments. The app connects customers with restaurants and delivery services, ensuring food is delivered quickly and efficiently. It also offers features like real-time tracking, customer reviews, and various payment options, making the food ordering experience simple.
An online food delivery app streamlines the process of ordering food by offering a user-friendly interface where customers can easily explore a variety of restaurants, view menus, and customize their orders. The app handles everything from order placement to secure payments, and it also includes features like order history, promotional discounts, and estimated delivery times. Restaurants benefit by reaching a wider audience, while customers enjoy the convenience of having their favorite meals delivered to their doorstep with just a few taps. Additionally, real-time updates and customer support enhance the overall user experience.

Index Number: 15

Campus Connect

This project report presents the development of the Campus Connect website, designed to enhance the college system by facilitating online management for students, teachers, and administrative authorities. The primary objective of Campus Connect is to streamline various college activities, including library management, hostel administration, and student services. The platform allows users to efficiently manage library operations such as searching for and issuing books based on parameters like book title, author, and subject. Additionally, it addresses hostel-related issues, including admissions and mess management, ensuring a comprehensive solution for student needs.
The project aims to consolidate all college-related functions onto a single platform, thereby improving accessibility and efficiency. By leveraging online tools, Campus Connect seeks to reduce administrative burdens and enhance the overall educational experience for students and staff alike. This report discusses the methodologies employed in developing the website, highlights the key features of the system, and outlines the potential benefits of adopting such an integrated approach in modern educational environments. Ultimately, Campus Connect aspires to create a cohesive and user-friendly interface that supports the college's operational goals while fostering a collaborative learning environment.

Index Number: 16

E-Learning Platform

This project involves the design and development of an e-learning platform aimed at enhancing accessible, flexible, and interactive online learning experiences. The platform, built with MongoDB as the primary database, supports various educational features, including user management, course creation, multimedia content sharing, and assessments. MongoDB's schema-less structure enables efficient handling of diverse data types and supports scalability, making it an ideal choice for managing the platform's evolving data needs. The platform architecture includes a dynamic front end developed with React, a Node.js-based backend for server-side processing, and a RESTful API for seamless communication. Key functionalities include secure user authentication, multimedia content hosting, and interactive quizzes. Through comprehensive testing, the system demonstrates stable performance and responsiveness, providing an intuitive, user-friendly interface for students and educators alike. This project contributes to the field of digital education by delivering a versatile platform that adapts to the needs of modern learners and educators.

Index Number: 17

Language Exchange Platform

In an increasingly globalized world, the need for language learning and cross-cultural exchange has become essential. Our project introduces a user-friendly and efficient online Language Exchange platform, built using the React.js framework, aimed at connecting users around the globe to practice and learn new languages. The platform offers two key user roles: Admin and User. The admin can manage platform operations by adding and moderating language resources, monitoring user activity, and managing interactions.
Users can register and create profiles, specifying the languages they want to learn or teach. They can connect with other users for one-on-one language exchange sessions, join group discussions, and access language learning materials. Additional features include tracking personal progress, scheduling sessions, and receiving feedback from language partners. This platform fosters a global community of learners, enabling users to improve their language skills through real-time communication and cultural exchange.

Index Number: 18

Media Minds

The "Media Minds" project analyzes social media data to provide insights into user engagement, content performance, and overall social media strategy effectiveness. The objective is to help businesses, influencers, and marketers make data-driven decisions to enhance their online presence and reach.
Data from social media platforms such as Twitter will be collected and analyzed. Key metrics such as Top Hashtags, Sentiment Distribution, Word Cloud, and Sentiment Polarity will be examined to understand the performance of different content types. Additionally, sentiment analysis will be conducted to gauge audience perception and identify areas for improvement. The outcome of this analysis will be presented through visually rich dashboards and reports, offering actionable insights to optimize social media strategies. The project will also highlight trends and provide recommendations to improve audience engagement, drive traffic, and increase brand awareness.