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StudentSphere - Indicating a Centralized Space for Student Records

Prof. Sonali Murumkar [1], Prof. Rajeshwari Dandage[2], Shraddha Chivadshetti[3], Achal Ingale[4], Purva Lagad[5], Nausheen Sayyed[6]
Keystone School of Engineering, Savitribai Phule Pune University, Pune

Abstract: ***The KeyKundali WebApp revolutionizes student information systems, offering a dynamic framework to assess a student's four-year academic journey. This innovative system transcends conventional datamanagement, introducing a feature set that abstracts complexities, providing an intuitive visual representation of a student's trajectory. From entry to exit, the app records academic milestones, intelligently compiling data forinsightful reports on GPA, attendance, and extracurriculars. The Application has five types of users :Student, GFM,GFM Coordinator HOD And Principal .The Key Kundali empowers institutions with nuanced insights for informed decision-making andstudent support.***
Keywords: Student Information System, Academic Performance, Database Management, Student Journey, User Interface, Academic Analysis

I. INTRODUCTION

The KeyKundali WebApp redefines studentinformation systems, offering a dynamic framework for a comprehensive assessment of a student's four-year academic journey. it ensuresrobustness, flexibility, and security. This groundbreaking application introduces a feature set that abstracts complexities, providing an intuitive representation of a student's trajectory. From initial milestones to insightful reports on GPA, attendance, and extracurriculars, Key Kundali facilitates informed decision-making and targeted interventions for academic support. It goes beyond data management, empowering institutions with nuanced insights and fostering reflective tools for students. Key Kundali is not just an app; it's a catalyst for positive change in education, merging technology with holistic student development.

II. SYSTEM ARCHITETURE

The system architecture begins with the student has access to both the android application as well as web portal. The other faculties and principal (Admin) can access only the web portal. All the users need to login into the android application or web portal. The application and web portal have access to the shared database through the internet.Database is on Cloud.

1) *Student:* The students can access both theandroid application and web portal. To do this thestudents have to login first. Student can access various features on the application like to viewthe their personal as well as academical records. The records will be from the first year of student to the final year. the student can only fill their personal information. The application is to make the interaction between the student and staff.
2) *GFM(Guardian faculty Member):* The teacherscan login into the web portal and can access the various features. Teachers are the one who will edit student information, attendance of the student, marks obtained semester wise. And students extracurricular activites like technical and Non technical.
3) *HOD:* The HOD can login into the web portal and can access student information. HOD has allaccess to the system to view student information, etc.
4) *GFM Co-Ordinator:* The GFM can login into the web portal and can access the features. GFM can add events such as marks, Attendance, Extracurricular activities of students etc. The form will be filled by the students. All student from FE to BE have access to this portal.
5) *Principal:* The principal is Master admin of the System. The principal will be going to have all the authority to add or remove student and GFM as well. Principal have class wise view of college.
6) *Web Portal:* All the users have access to the web portal including the students.
7) *Database:* The database is stored on the cloud. We have used MySql database, All the data of android application and the web are stored in theshared database.

III. LITERATURE SURVEY

Author: Dr. K. VenkataSubbiah et al.Date: August 2016
Dr. K. VenkataSubbiah's research explores the broader concept of Management Information Systems (MIS) in educational institutions.The paper discusses the significance of automation
through database management systems, aligningwith the objectives of the proposed system.[1]

Authors: R.Kumar, A Chandana Priya, U.Ramya sree, S.Eswar Sai.
Date: January 2023International Journal of Advanced Research in Science Communication and Technology
DOI:10.48175/IJARSCT-8020
This project focuses on improving student information management in educational institutes by integrating mobility and automation. Traditional methods of communication, such as notices and manuals, are being replaced with a mobile application developed using Android technology. College staff utilize Android devices to upload results and important information securely to an application. Data undergoes thorough validation on a server managed by the college administrator, stored in a MySQL database, reducing paperwork and access time to student records. Leveraging smartphone-based applications streamlines the process, making it more accessible, efficient, and secure. Keywords: Student Database Management System, Android SDK, User Android Application.[2]

Authors: Pragum Agarwal,Anubhav Joshi,Bharat Bhushan Naib
Date: ISSN: 2249-8958 (Online), Volume-10 Issue-4, April 2021
The Student Information System (SIS) serves as a vital tool for educational institutions in efficiently storing and maintaining student records. It encompasses a wide range of functionalities, including academic reports, institutional details, curriculum management, and resource allocation. By transitioning from traditional paper-based systems or costly hardware solutions to a software-based approach, institutions can significantly reduce expenses and contribute to environmental sustainability by minimizing paper usage. The SIS facilitates easy sorting and searching of student records, addressing the time-consuming and manual nature of file-based systems. Developed with a user-centric approach, the software ensures ease of understanding and usability for all users. Extensively tested to ensure smooth functionality, the SIS provides a seamless solution for managing student information effectively.[3]

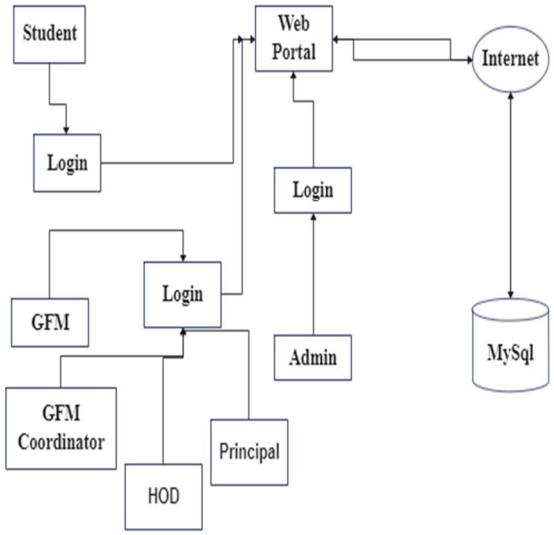
Authors : Mr. Sangamesh K, Mr. Akash Samanekar,Mr.Ningappa T Pujar
DOI : 05-01-2019/ 2278-0181
Abstract Most of the Academic institutions face difficulty in managing records of students, attendance, accounts, admissions, etc., and track the information of their interest as they still rely on paperwork and manual processes. A web-based school management system will reduce the manual work by deploying centralized software incorporated with various loosely coupled services which interact with each other to address above mentioned issues and improves the communication between management and the student/guardian through notifications via email, SMS and push messages. As it is a server-side enterprise application it is designed to support desktop browsers, mobile browsers and native mobile applications. The use of micro-service architecture and ReST (Representational State Transfer) architecture makes it easy for designing and developing loosely coupled web services.[7]

IV. METHODOLOGY

The development methodology for KeyKundali involves a systematic and iterative approach, ensuring the creation of a robust and user-friendly student information system. Here's an overview of the methodology used in KeyKundali

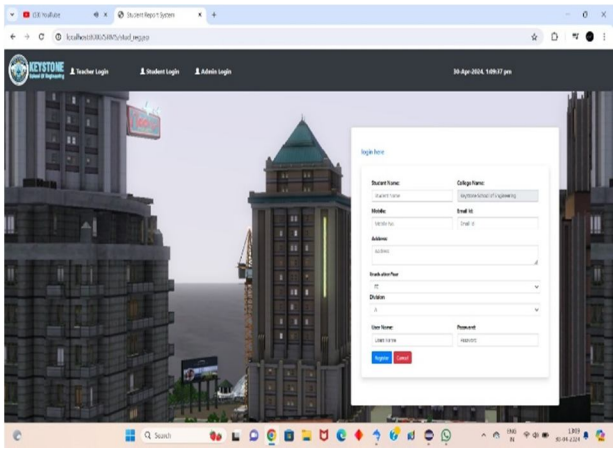
1) *Requirements Gathering:* **Conducted a thorough analysis to understand the needs and expectations of educational institutions, faculty, administrators, and students. Identified challenges in existing student information systems and opportunities for improvement**
2) ***System Planning:*** **Defined the scope, objectives, and key featuresof KeyKundali. Established the overallarchitecture and structure of the system.**
3) ***Technology Stack Selection:*** **Chose the for the its scalability, flexibility, andeffectiveness in web application development.**
4) ***Database Design:*** **Designed a robust database structure to efficientlystore and manage student information academic records, and performance data.**
5) ***User-Centric Design:*** **Adopted a user-centric design approach to create an intuitive and visually appealing interface. Ensured that the design facilitates easy navigationand accessibility for both administrators and students.**

6) ***Data Abstraction and Integration:*** **Implemented abstraction layers to simplify the complexities of data aggregation and analysis. Integrated academic records, grades, attendance, and extracurricular activities into a user friendly dashboard.**
7) ***Performance Metrics Definition:*** **Established key performance indicators (KPIs) for evaluating student performance, including GPA, attendance trends, and participation in extracurricular activities.**
8) ***Security Measures:*** **Prioritized data security by implementing encryption measures and access controls. Ensured the confidentiality of student information and performance data.**
9) ***Testing and Quality Assurance:*** **Conducted rigorous testing at various stages, including unit testing, integration testing, and user acceptance testing.Addressed any bugs or issues through systematic debugging and quality assurance processes.**
10) ***Deployment and Integration:*** **Implemented a strategic deployment plan to integrate KeyKundali seamlessly into educational institutions. Ensured compatibility with existing systems and processes.**

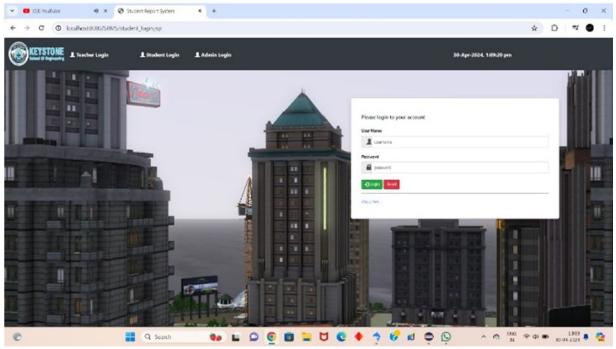


a. System Architecture

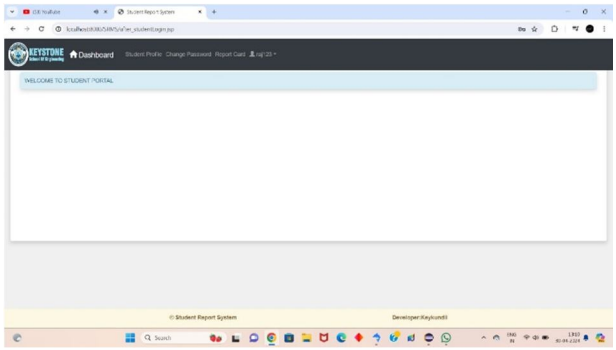
V. RESULT

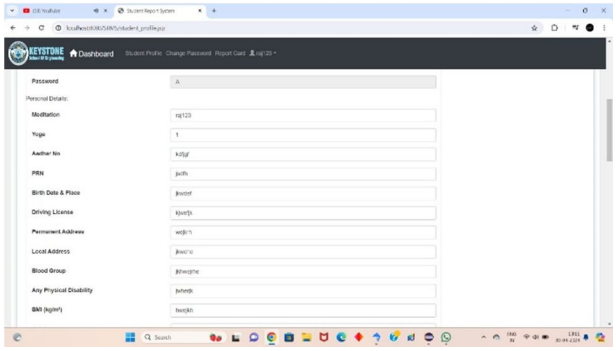


b. Registration page

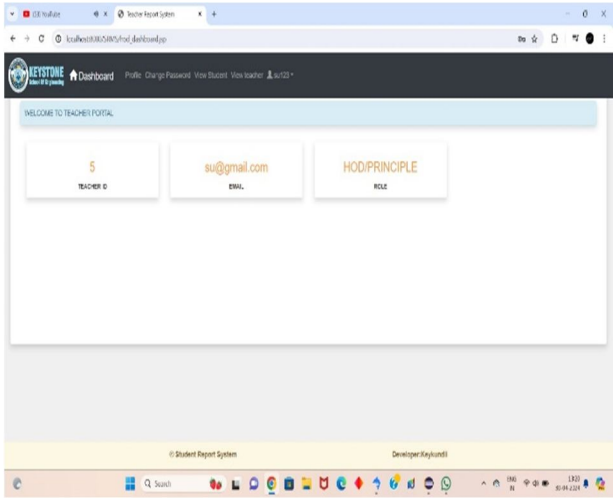


c. login page

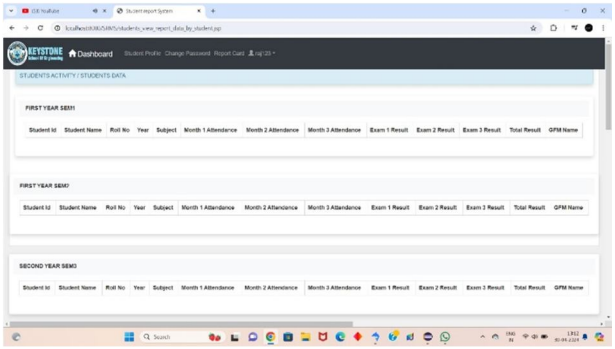


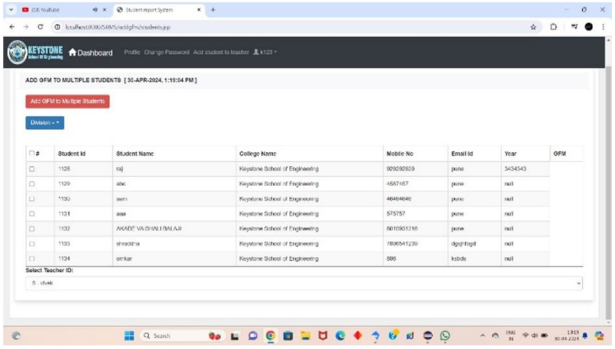


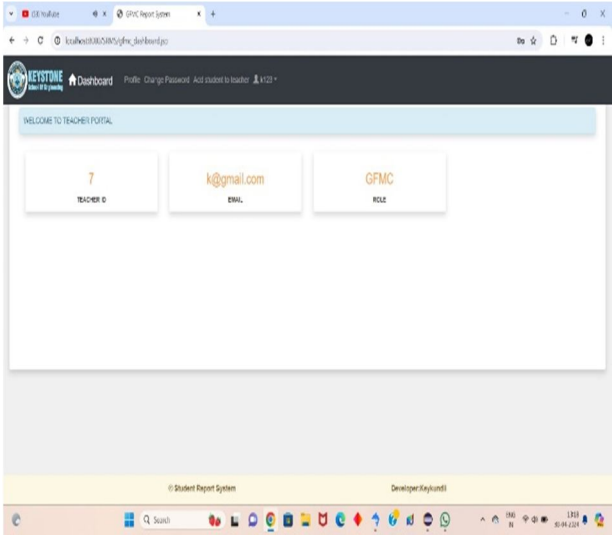
d. Student information form



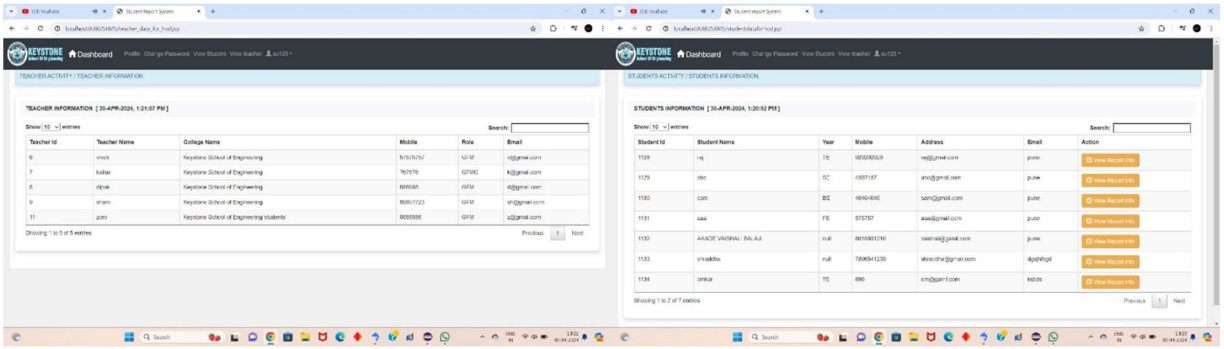
e. GFM dashboard.



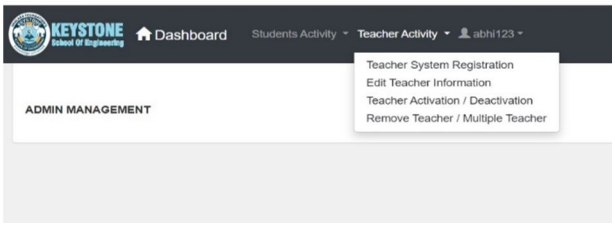


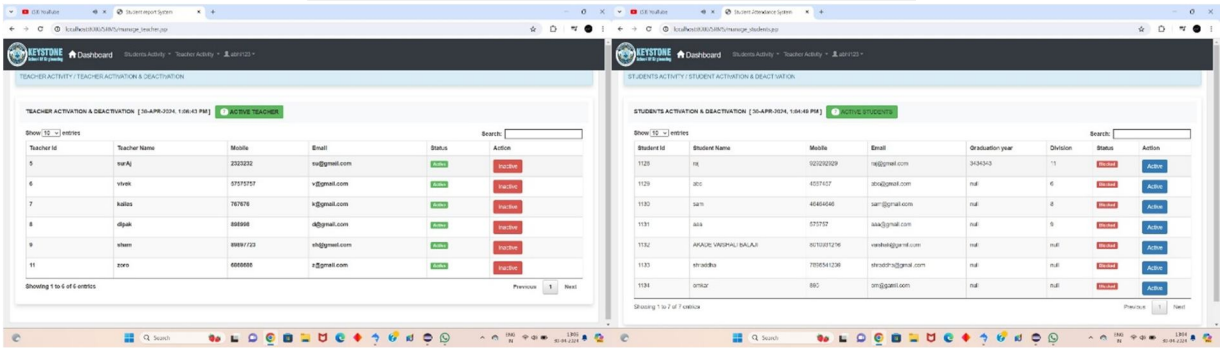


f. GFM coordinator section



g. Hod Section





h. Admin Section

VI. CONCLUSION

The KeyKundali WebApp stands as atransformative force in the realm of student information systems, reshaping the landscape of academic management. Its seamless integration of academic records, grades, attendance, and extracurricular activities provides a holistic view of a student's educational journey. The innovative abstraction of complex data processes ensures efficiency and security, empowering educators and administrators to glean valuable insights effortlessly.

The KeyKundali WebApp is not merely a technological tool; it symbolizes a commitment to simplifying and enhancing the academic experience. Its timeless elegance and user- friendly interface redefine the standards for navigating and understanding student performance over the course of their educational tenure. By providing a comprehensive and accessible platform the, Keykundali WebApp becomes a catalyst for informed decision-making, targeted academic support, and meaningful student reflection.

As education continues to evolve, the Key Kundali WebApp stands at the forefront, offeringa harmonious blend of simplicity and sophistication, ultimately contributing to the success and growth of both students and educational institutions. In essence, the Key Kundali WebApp is not just a tool; it is a key to unlocking the full potential of academic excellence.

VII. AKNOWLEDGEMENT

We would like to express our deep and sincere gratitude to our Director Prof. Y.R.Soman, Principal Dr.Sandeep Kadam HOD Prof. Sagar Rajebhosale, Project guide Prof. Sonali Murumkar and project Co-guide Prof. Rajeshwari Dandage .for giving us the opportunity to do this project and provide valuable guidance throughout this project. From the inception of the project to its completion, provided unwavering encouragement, expert insights, and constructive feedback that significantly contributed to the success of this project. Their dedication to fostering learningand innovation has been a constant source ofinspiration. We are truly fortunate to have had the opportunity to work under Prof. Sonali Murumkar's Guidance. Their wealth of knowledge, patience, and commitment toexcellence have not only enriched the project butalso enhanced my understanding of the subject matter.

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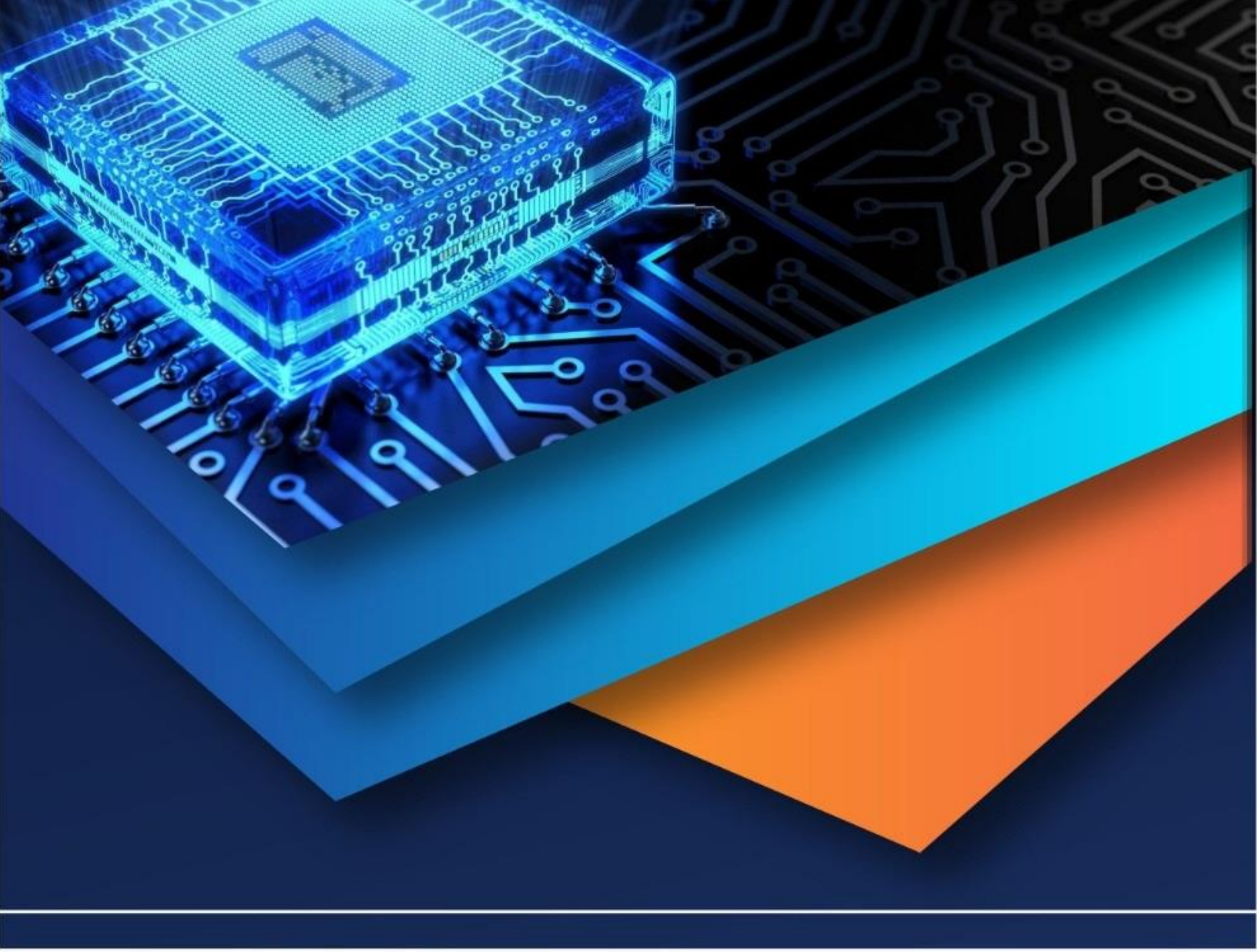

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