

A Project Report

On

"Web Based Time and Productivity Analysis"

Batch Details Team: CSE-G142

Sl. No.	Roll Number	Student Name
1	20201CSE0754	GAGANASHREE D
2	20201CSE0755	VARSHA G

School of Computer Science, Presidency University, Bengaluru.

Under the guidance of,
Dr. Prakash Shanmurthy
School of Computer Science,
Presidency University, Bengaluru

CONTENTS

1.	Introduction about Project
2.	Literature Review
3.	Objectives

- 4. Methodology
- 5. Timeline for Execution of Project
- 6. Expected Outcomes
- 7. Conclusion
- 8. References

ABSTRACT

For the successful project management and its success, many studies have been done but still, many of the software projects cannot end up well. One of the main reasons behind it is time management and also analyzing the productivity. So, the time tracking software is being developed, this will collect and analyses the insights to improve overall efficiencies, like Identifying inefficiencies, Resource Allocation, enhancing team efficiency, task management, performance measurement and ensuring the successful project outcomes. By applying these insights, organizations can unlock their full potential and achieve their goals effectively.

1. INTRODUCTION

- Time and productivity analysis can be defined as the process of systematically examining how time is utilized and how it affects the overall productivity of individuals, teams, or organizations.
- **Time Management** refers to the practice of allocating and using time wisely to accomplish tasks and achieve objectives efficiently. Effective time management helps reduce stress, increase work-life balance, and boost individual and team performance.
- **Productivity** is a measure of how efficiently resources, including time, are used to produce desired results. Improved productivity leads to higher outputs with the same or fewer resources. It is essential for competitiveness and profitability in business and overall personal effectiveness.
- The main objectives of time and productivity analysis are to optimize resource allocation, improve efficiency, and enhance overall productivity. Analyzing time and productivity is crucial for organizations as it allows them to identify bottlenecks, streamline processes, and make informed decisions to achieve better outcomes.
- The goal of this web-based software project is to create a comprehensive tool to track and analyze resource activity in order to improve time management and productivity in businesses. Users of the system can track time spent on a variety of tasks, such as coding, writing documentation, using SQL, and using the internet.

2. LITERATURE REVIEW

- The Influence of Agile Methodology(scrum) on software Project Management, Aisal Hayat, (2020).
- Advance Recommendation System for the Formation of More Prolific and Dynamic Software Project Team, Wasi Haider Butt (2019).
- Effect of Project management in requirement engineering and requirement change management processes for global software development, Muhammad Shafiq. (2018).
- Time management method for software development projects-analytical summary, (2018).

EXISTING SYSTEM DRAWBACKS:

- The Problem at hand is the absence of a centralized and user-friendly system for monitoring and analyzing resource time allocation in organizations. Existing solutions are frequently disjointed and unable to give a comprehensive picture of how resources are used, which results in inefficiencies and decreased productivity.
- Organizations struggle to maximize resource allocation and productivity because the lack of actionable insights into resource activities makes it difficult to make well-informed decisions. Without a centralized system, businesses find it difficult to identify time-wasting activities, understand where resources are most productive, and locate workflow bottlenecks. This lack of visibility causes lost productivity, improper resource allocation, and inadequate project planning.
- Our project aims to create a web-based software tool that records and classifies the time spent on various activities and stores this information in a central database in order to address these issues. This system will give businesses the knowledge they need to boost resource productivity, simplify resource allocation, and make data-driven choices that will increase overall efficiency.

3. OBJECTIVES

• Identify Inefficiencies:

Recognize and pinpoint areas where time is being wasted or utilized inefficiently within processes or workflows.

• Resource Allocation:

Determine how time and resources are allocated across different tasks or projects to ensure optimal utilization.

• Task Management:

Within each project, provide the ability to create, assign, and track individual tasks. Users should be able to set priorities and due dates for tasks.

• User Authentication and Access Control:

Implement user accounts and roles, such as admin, manager, and team member, to ensure that only authorized individuals can access and modify project data.

• Notifications and Alerts:

Send automated notifications and reminders to users regarding upcoming deadlines, task assignments, or project milestones.

4. METHDOLOGY

The proposed system is a web-based application designed to capture and analyze the time spent by resources on various activities, such as coding, documentation, SQL, and internet usage. It offers a user-friendly interface for resource input and centralizes this data in a secure database. The system allows for customization of activity categories, providing flexibility for different organizational needs. One of the key features is its robust analytics and reporting tools that generate insights into resource productivity and time allocation patterns. Integration with organizational calendars and project management tools ensures seamless data input. Role-based access control safeguards sensitive data, while data visualization aids in interpreting productivity trends. Overall, the system aims to enhance resource productivity, optimize resource allocation, and facilitate data-driven decision-making. It offers transparency, accountability, and improved collaboration within the organization, making it an essential tool for time and productivity analysis.

4.1 ARCHITECTURE DIAGRAM

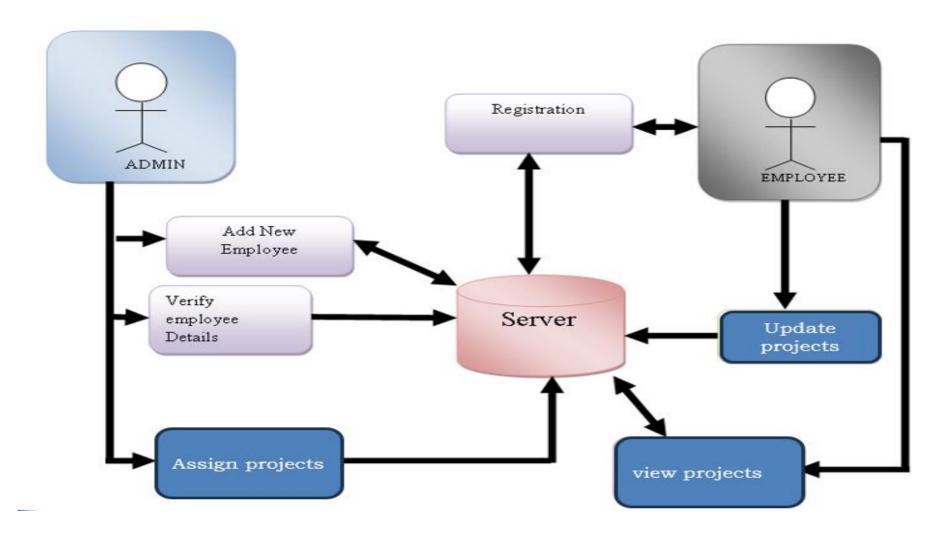


Figure.1

EXPERIMENTAL DETAILS:

a. Front-End

- HTML
- CSS
- JavaScript
- PHP
- Bootstrap

b. Back-End

- PHP for server side
- Scripting

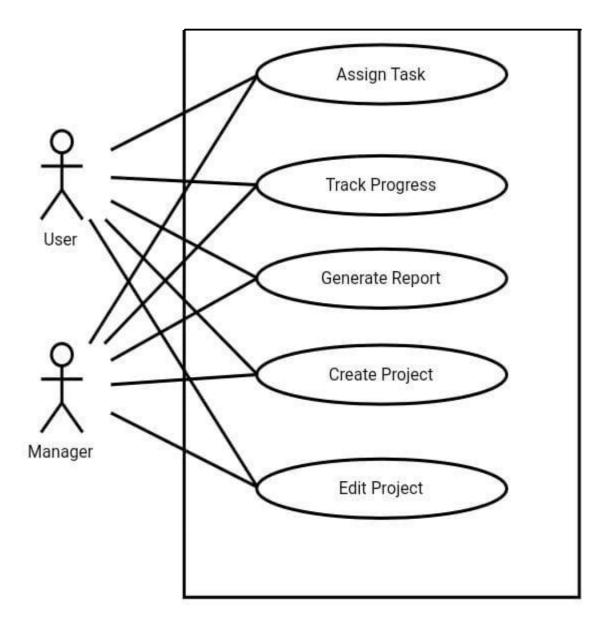
c. Software

- Any web Browser and
- Wamp Server/ Xampp

d. Database

• MySQL for data storage

USE-CASE DIAGRAM:



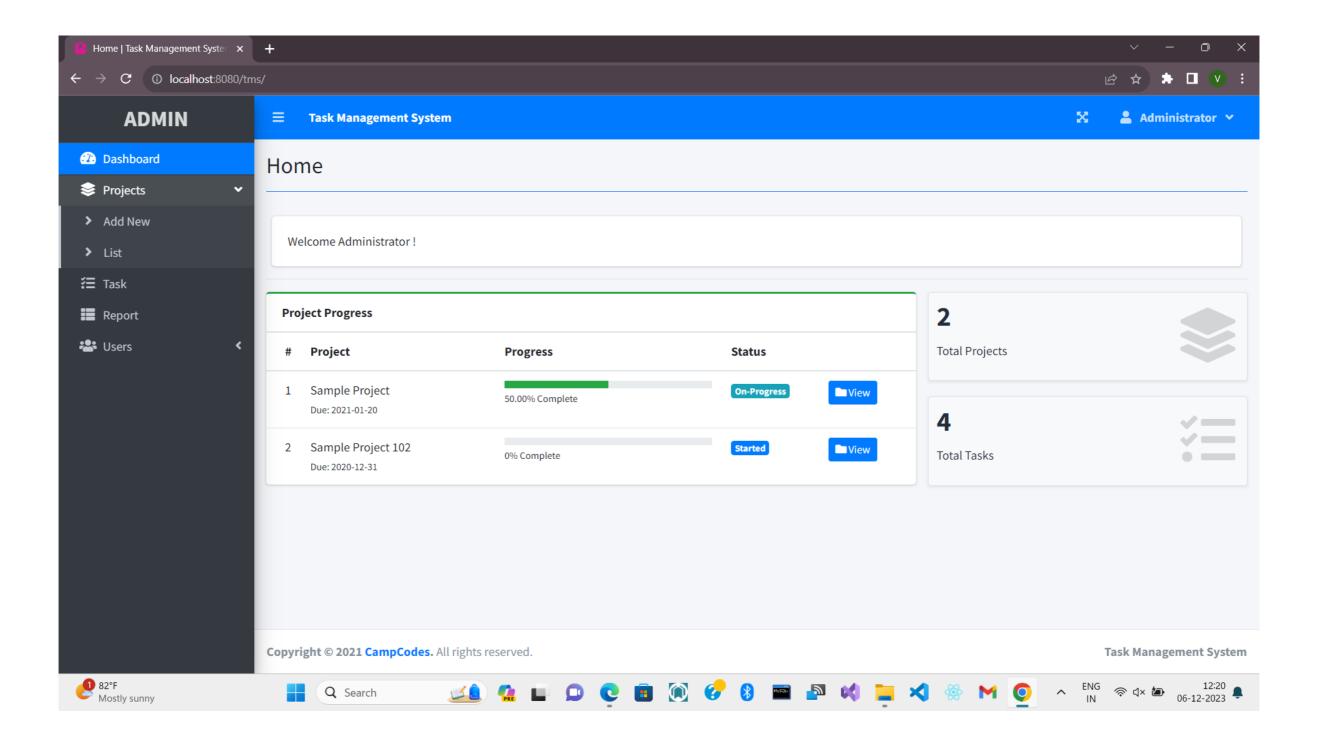
5. TIMELINE OF THE PROJECT/ PROJECT EXECUTION PLAN

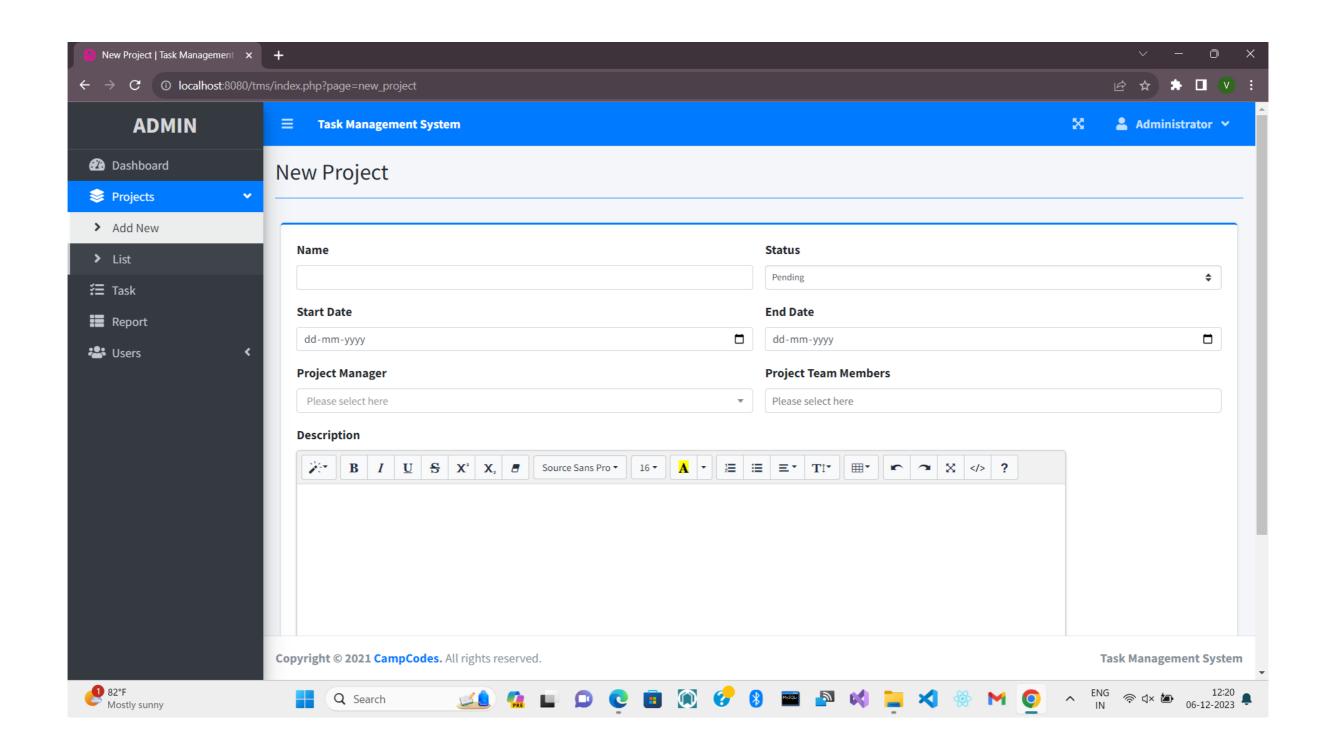
- **Review 0** Title finalization with supervisor, Literature survey, Finalizing the objectives and deciding the methodology.
- **Review 1** Title, Abstract, Literature survey, Research paper, objectives, existing method- drawbacks, proposed method, Architecture diagram, modules, hardware and software details, timeline by Gantt chart and submitting the hardcopy of report.
- **Review 2** Algorithm details, source code and implementation details with live demo of project with 50% report softcopy to be submitted.
- **Review 3** Algorithm details, source code and implementation details with live demo of project with 50% report softcopy to be submitted.
- Review 4 Final report and submission of project.

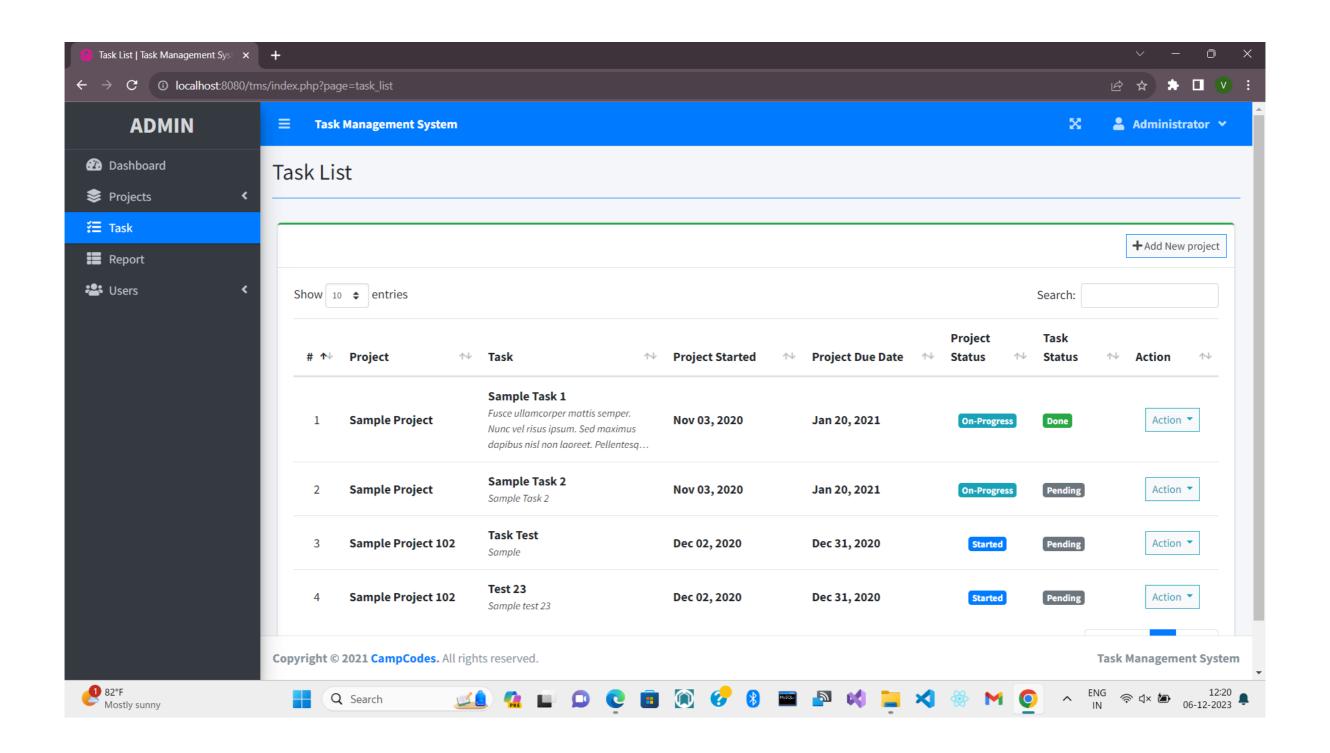
6. OUTCOMES

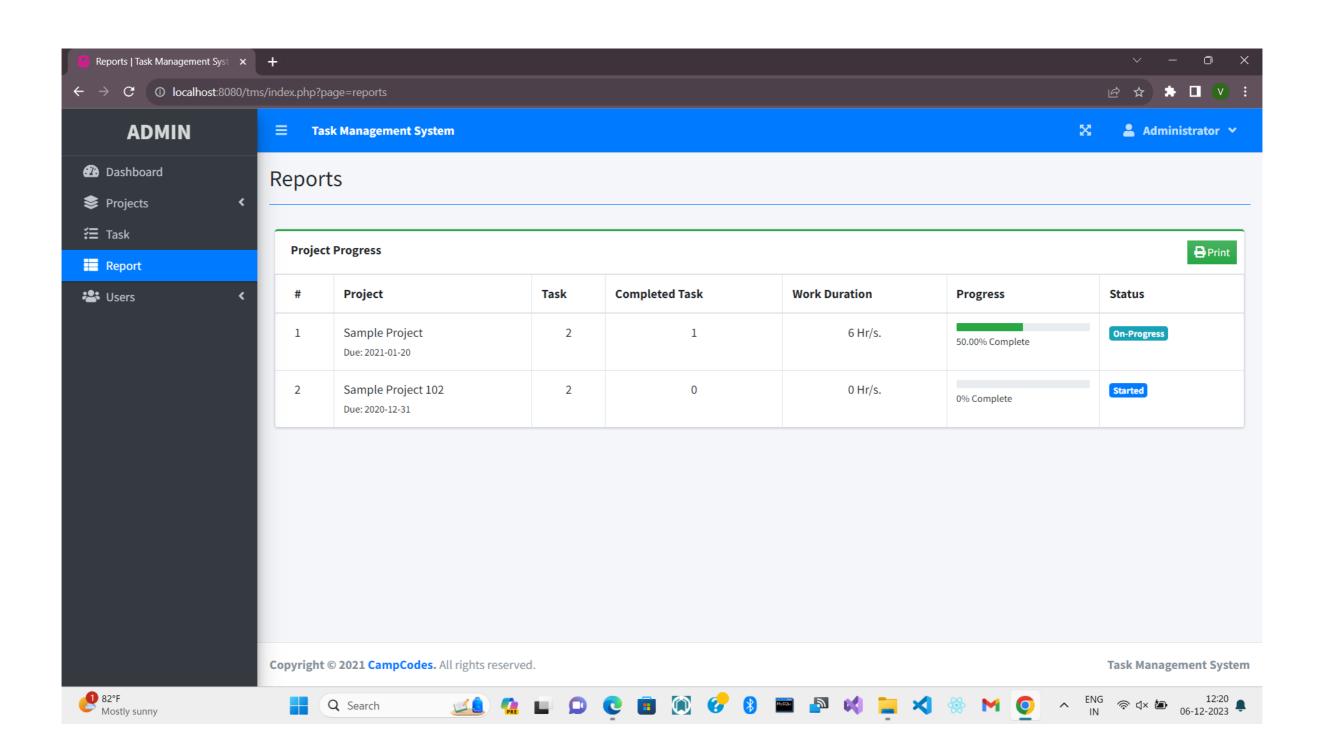
- Identification of Time Wasters.
- Efficiency Improvements.
- Time Allocation Insights.
- Productivity Metrics.
- Reallocating resources.
- Benchmarking: Comparing productivity metrics to industry standards.

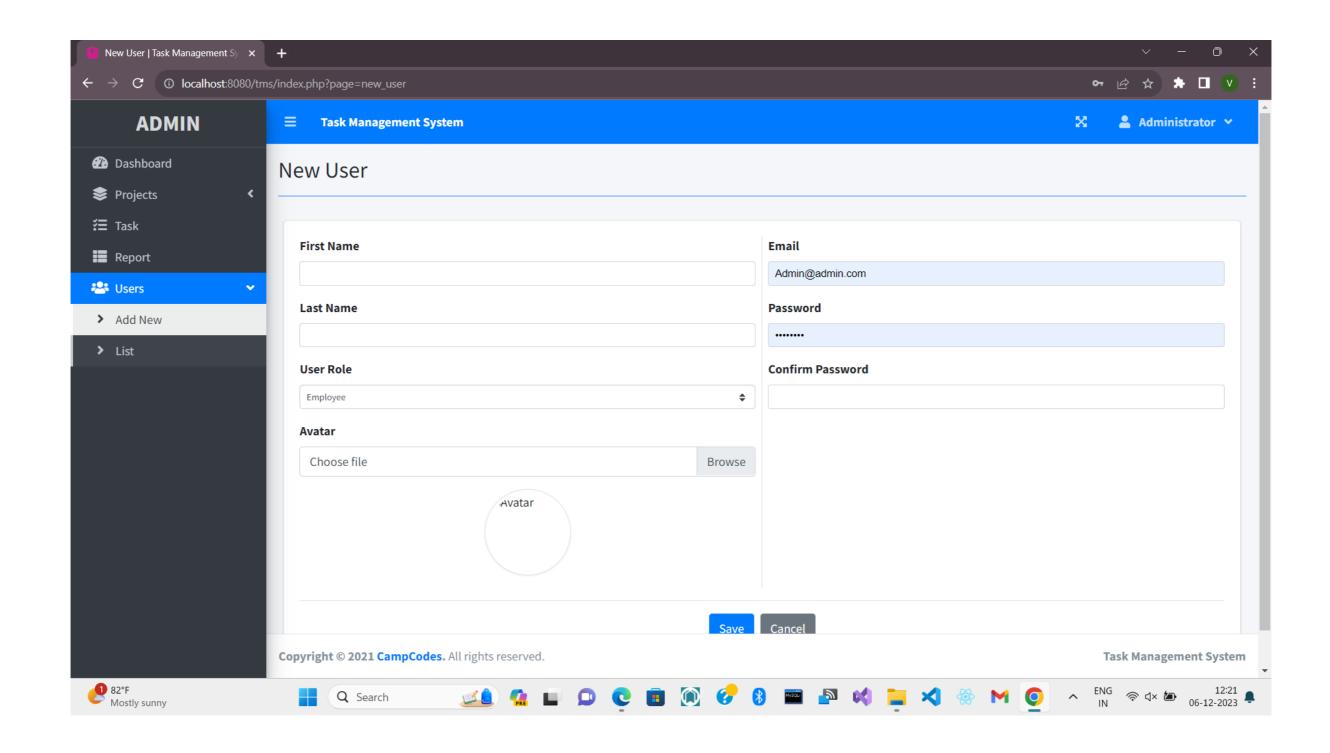
6.1 SNANSHOTS

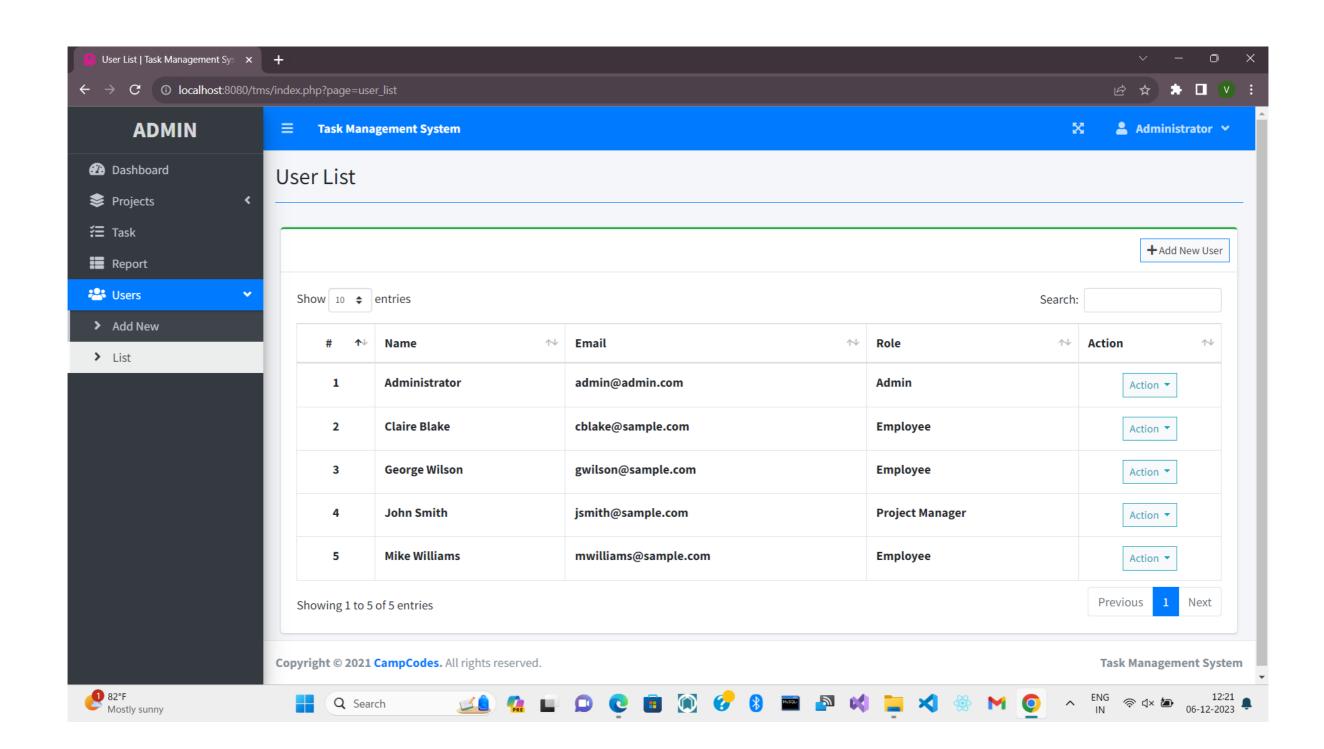












7. CONCLUSION

In conclusion, time and productivity analysis is a fundamental component of organizational success. By implementing effective analysis methods, organizations can improve efficiency, optimize resource allocation, and drive performance.

Key takeaways from this project include the importance of data-driven decision making, the role of technology in shaping the future of analysis, and the actionable recommendations for organizations to enhance their productivity. By applying these insights, organizations can unlock their full potential and achieve their goals effectively.

8.REFERENCES

- 1. Advance Recommendation System for the Formation of More Prolific and Dynamic Software Project Teams, Mahreen Ahmad, 2018.
- 2.R. Latone and J. Suarez, "Measuring social networks when forming information system project," The Journal of Systems and Software, pp. 304-323, 2017.
- 3."A framework for freelancer assessment in online marketplace," in ICSE-SEIP '17 Proceedings of the 39th International Conference on Software Engineering: Software Engineering in Practice Track, Buenos Aires, Argentina, 2017.
- 4.B. M. M. Q. R. U. Q. M. A. Fateh urn Rehman, "Scrum Software Maintenance Model: Efficient Software Maintenance in Agile Methodology," in 2018 21st Saudi Computer Society National Computer Conference (NCC), Riyadh, Saudi Arabia, 2018.
- 5.S. B. S. S. Apoorva Srivastava, "SCRUM Model for Agile Methodology," in International Conference on Computing, 2017.
- 6.M. J. (MJ), "Scrum Reference Card," [Online]. [Accessed December 2018].
- 7.N. Ali and R. Lai, "A method of requirements change management for global software development," Inf. Softw. Technol., vol. 70, pp. 49–67, Feb. 2016.
- 8.M. A. Akbar et al., "Statistical analysis of the effects of heavyweight and lightweight methodologies on the six-pointed star model," IEEE Access vol. 6, pp. 8066–8079, 2018.