**DAVANGERE****University**

**Shivagangothri, Tolahunase-577002**

***A Project Report on***

**Leave Flow**

***Smart tracking for smarter teams…***

**Submitted for the partial fulfilment of the requirement for the completion of the Degree**

**BACHELOR OF COMPUTER APPLICATION**

**(Academic Year 2024-25)**

**SUBMITTED BY**

|  |  |
| --- | --- |
| **U13XE22S0009** | **ADARSH. B** |
| **U13XE22S0036** | **BHAVANA. M.K** |
| **U13XE22S0037** | **SIDDESH H.S** |
| **U13XE22S0038** | **RAKESH .V** |
| **U13XE22S0043** | **AMRUTHA. B.J** |

**Project Guide**

***Mr. RAGHU GURUMURTHY MCA***

|  |  |  |  |
| --- | --- | --- | --- |
|  | **HOD** |  | **Principal** |
|  | **Mr. RAGHU GURUMURTHYMCA** |  | **Mrs. NAGAVENI N. P M.Sc, B.Ed** |

A logo with red letters and black lines

AI-generated content may be incorrect.

**Interface College of Computer Applications**

Anjaneya Badavane, DAVANGERE-577 004.



**DEDICATED TO**

**OUR BELOVED PARENTS, LECTURERS**

**AND**

**FRIENDS**

**ACKNOWLEDGEMENT**

*The satisfaction that comes with the successful completion of any task would be incomplete without acknowledging those who made it possible. We express our heartfelt gratitude to all those who provided continuous guidance and encouragement, which were instrumental in ensuring the success of this project. We deeply appreciate the support of everyone who contributed, both directly and indirectly, to the successful completion of our work.*

*We would like to thank* ***Mrs. Nagaveni. N.P.*** *Principal,* ***Interface College of Computer Applications, Davangere****, for his encouragement and support throughout the project.*

*We would like to express our sincere gratitude to our esteemed HOD,* ***Mr. Raghu Gurumurthy****, MCA, for his invaluable support and for enabling us to carry out our project efficiently. We are also deeply thankful to our chairman for his exceptional guidance throughout the course of our work, which was instrumental in refining our software and making it competitive. It has been a true privilege to work under his leadership; his enthusiasm and constant encouragement have been a great source of inspiration to us.*

*We extend our sincere thanks to all the staff and non-staff members of our college, whose assistance and support have been invaluable in addressing challenges and ensuring the success of our project.*

*We would also like to acknowledge the guidance and encouragement we have received from our family members and friends, whose contributions, both past and ongoing, have played a crucial role in the achievement of this project. Their constant support has been vital to its success, and we are deeply grateful for their help.*

**INDEX**

**CONTENTS**

**Abstract**

1. **Introduction**
   1. **General information 1**
   2. **Statement of Problems 1**
   3. **Scope and limitations of the study 1**
   4. **Objectives of study 2**
   5. **Hardware and software requirements 3**
2. **System requirement specification**
   1. **Functional Requirements 4**
   2. **Non-Functional requirements 5**
3. **System analysis 6**

**3.1 Existing system 6**

**3.2 Limitations of existing system 6**

**3.3 Proposed systems 6**

**4. Design**

**4.1 E-R Diagram 7**

**4.2 Data Flow Diagram 8**

**4.3 Use case 8**

**4.4 Class Diagram 11**

**5. Implementation**

**5.1 Technology 12**

**5.1.1 Language used 13**

**5.1.2 Sample code 16**

**6. Testing 23**

**6.1 Test cases 24**

**7. Product Snippets 25**

**8. Conclusion 29**

**9. Future enhancement 30**

**10. Bibliography 30**

**Abstract**

*The* ***Leave Flow System*** *is a modern, responsive web application designed to streamline the process of student leave management within an academic institution. The system aims to replace traditional paper-based and manual leave request procedures with a digital workflow that enhances efficiency, transparency, and accessibility for both students and faculty.*

*At its core, the application enables students to* ***submit leave requests*** *through an intuitive and user-friendly interface. These requests include relevant details such as leave dates, reasons, and optional supporting documents. Once submitted, the requests are routed to the appropriate faculty members or administrators for* ***review and approval****.*

*This project showcases modern web development practices using* ***React JS*** *for the frontend and* ***C# ASP.NET Web API*** *for the backend. It employs* ***SignalR*** *for real-time updates and leverages responsive design principles to ensure accessibility across devices.*

*The Leave Flow System ultimately aims to* ***reduce administrative burden****,* ***minimize errors****, and* ***improve communication*** *between students and faculty regarding leave-related matters.*