



## ST. STEPHEN'S SCHOOL

Hazaribagh, Jharkhand - 825301

Affiliated to CBSE, New Delhi

*"Striving for Excellence in Education"*

# INFORMATION TECHNOLOGY

## Practical File

Academic Session: 2025-2026

### Student Information

Name: Mohammad Sultan

Class & Section: IX (A)

Roll Number: 17

Subject: Information Technology

Subject Teacher: Ravi Sir

Date of Submission: \_\_\_\_\_

# **INDEX**

S.NO	CONTENTS	DESCRIPTION
1	<b>School Magazine Design (Open Office Writer)</b>	Design a 4-page school magazine with proper formatting, images, table of contents, and creative layout.
2	<b>Crosslist Spreadsheet (Open Office Calc)</b>	Create a student mark sheet with calculations, formulas, charts, and conditional formatting.
3	<b>Annual Sports Day Presentation (Open Office Impress)</b>	Design a presentation highlighting the importance, events, and achievements of Annual Sports Day.
4	<b>Computer Maintenance and Hygiene</b>	Documentation of hardware and software maintenance procedures, cleaning guidelines, and best practices.
4.1	Hardware Maintenance	Cleaning procedures, component checks, and preventive maintenance.
4.2	Software Maintenance	OS updates, antivirus scans, disk cleanup, and performance optimization.
4.3	Hygiene Practices	Workspace organization, personal hygiene, and equipment care.
5	<b>Acknowledgement</b>	Expression of gratitude to teachers, school, parents, and friends for their support and guidance.

# SCISCAPE 2025

Annual Science Exhibition

 November 2025

# Exhibition Overview

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SciScape 2025, held from March 15-17, 2025, was a monumental celebration of scientific inquiry and innovation that brought together young minds, educators, and science enthusiasts. The exhibition showcased over 150 projects spanning various scientific disciplines, each demonstrating remarkable creativity and technical skill.

## Exhibition Highlights

- 150+ innovative projects displayed
- 500+ student participants across all grades
- 12 different scientific categories represented
- 45 expert judges from academic and industry backgrounds
- 3,000+ visitors over three days
- 25 special awards for outstanding projects

The exhibition transformed our campus into a vibrant hub of scientific exploration, with interactive displays, live demonstrations, and engaging presentations. What made SciScape 2025 particularly special was the emphasis on practical applications and real-world problem-solving, with many projects addressing contemporary challenges in sustainability, technology, and healthcare.



### Igniting Curiosity

The exhibition successfully sparked scientific curiosity among visitors of all ages, with interactive displays that made complex concepts accessible and engaging.



### Community Engagement

Local scientists, university professors, and industry experts participated as judges and mentors, creating valuable connections between students and professionals.

# Why Science Exhibitions Matter



## Fostering Inquiry

Science exhibitions encourage students to ask questions, design experiments, and seek evidence-based answers - developing critical scientific thinking skills.



## Practical Application

Students learn to apply theoretical knowledge to real-world problems, bridging the gap between classroom learning and practical implementation.



## Collaborative Learning

Team projects teach collaboration, communication, and division of labor - essential skills for future scientific careers.



## Skill Development

From research methodology to data analysis and presentation skills, exhibitions provide comprehensive scientific training.

## Beyond the Classroom

Science exhibitions like SciScape 2025 extend learning beyond textbooks, allowing students to experience the thrill of discovery and the satisfaction of solving problems through scientific methods. They provide a platform for students to showcase their unique talents, receive constructive feedback from experts, and gain confidence in their abilities as young scientists and innovators.

# Project Categories



## Environmental Science

Projects addressing climate change, sustainability, renewable energy, and conservation



## Robotics & AI

Automation, machine learning applications, and intelligent systems



## Biotechnology

Genetic engineering, medical innovations, and biological solutions



## Computer Science

Software development, cybersecurity, and computational solutions



## Physics & Engineering

Mechanical innovations, energy systems, and material science



## Chemistry

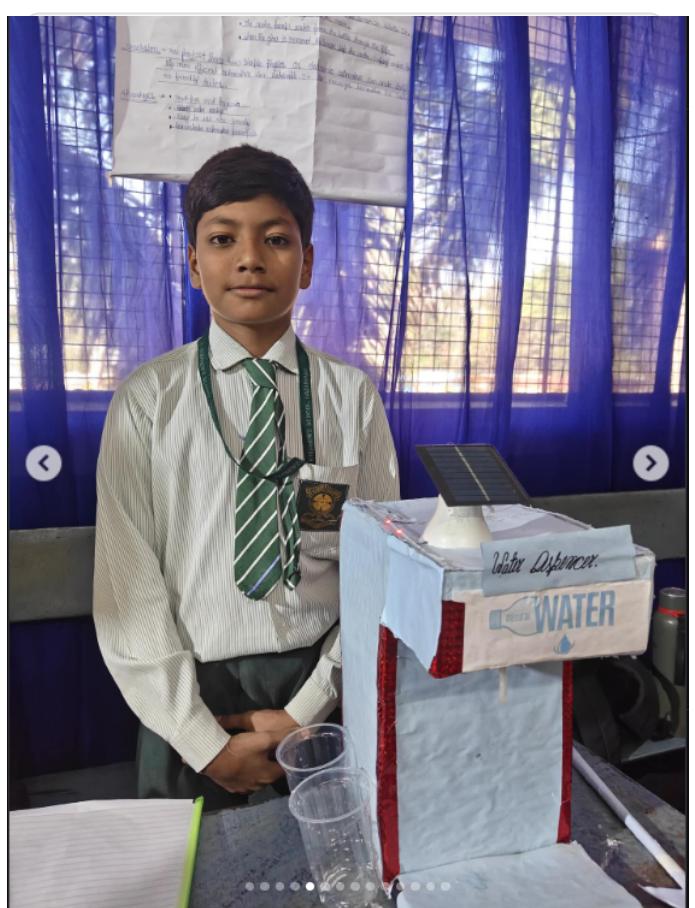
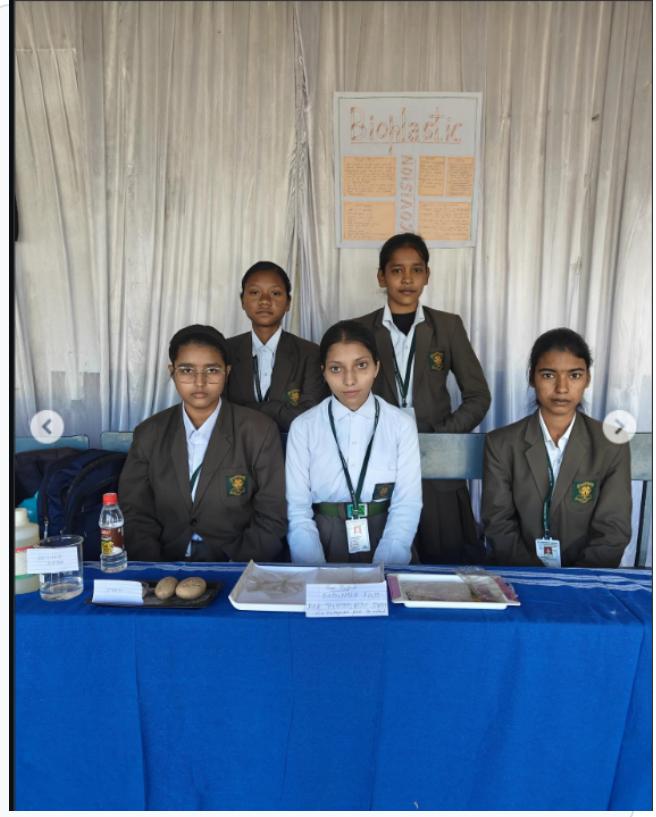
New materials, chemical processes, and analytical techniques

Each category featured projects that demonstrated not only technical proficiency but also creativity and social relevance. The Environmental Science section, in particular, showcased numerous projects addressing local environmental challenges with practical, implementable solutions.

The Robotics & AI category attracted significant attention, with interactive demonstrations that allowed visitors to experience cutting-edge technology firsthand. Many projects in this category focused on assistive technologies and automation for everyday applications.

# Project Gallery

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# Project Gallery



# Innovation & Impact

SciScape 2025 demonstrated how young minds can contribute to solving real-world problems through scientific innovation. Several projects presented practical solutions to local environmental issues, healthcare challenges, and technological needs.

The exhibition highlighted the importance of fostering scientific temper from a young age, encouraging students to think critically, experiment fearlessly, and communicate their findings effectively.



## Future Scientists

Many participants expressed increased interest in pursuing STEM careers, inspired by their exhibition experience and interactions with professionals.



## Global Relevance

Several projects addressed United Nations Sustainable Development Goals, showing global awareness among young scientists.

*"The most exciting phrase to hear in science, the one that heralds new discoveries, is not 'Eureka!' but 'That's funny...'"*

- Isaac Asimov

*"Science knows no country, because  
knowledge belongs to humanity,  
and is the torch which illuminates  
the world."*

- Louis Pasteur

## **Celebrating Young Minds**

To all participants, mentors, judges, and  
volunteers -

## ☰ Cross List

STUDENT'S DETAILS			SUBJECT					MARKS DETAILS			
NAME	CLASS	ROLL NO.	HINDI	ENGLISH	MATHS	SCIENCE	COMPUTER	TOTAL	PERCENTAGE	GRADE	RANK
SULTAN	IX	1	45	75	78	35	66	300	60	B	6
SAMIR	IX	2	74	61	48	35	22	242	48.4	C	7
SUFYAN	IX	3	19	71	29	75	36	233	46.6	C	8
ARMAN	IX	4	17	98	79	68	41	307	61.4	B	5
SAIF	IX	5	28	25	22	19	16	115	23	E	10
AYAN	IX	6	85	78	71	64	57	361	72.2	A	3
MOBASSIR	IX	7	64	69	74	79	84	377	75.4	A	2
AMAN	IX	8	38	51	64	77	90	328	65.6	A	4
ISHAN	IX	9	71	47	23	12	25	187	37.4	D	9
ZISHAN	IX	10	84	86	88	90	92	450	90	A+	1
NASHI	IX	11	81	89	88	80	85	420	80	A+	1
NASHI	IX	12	71	74	53	75	52	378	74.4	D	6
NAMA	IX	13	39	21	91	11	80	358	82.0	A	1

## ↳ Cross List Report



### Total

The sum of all values in the cross list, representing the cumulative score or count from all items in the list.

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%

## Percentage

The proportion of achieved values relative to maximum possible values, expressed as a percentage.

--%



## Grade

The categorical classification based on performance level, determined from the calculated percentage.

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## Position

The relative standing or rank compared to other entries, indicating performance in relation to peers.

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# ANNUAL SPORTS DAY

A Celebration of Sports & Spirit

Made with IMPRESS

Sports Committee Report

# Event Overview

The Annual Sports Day held on October 25, 2023, was a resounding success that brought together students, staff, and community members in a vibrant celebration of athleticism and sportsmanship. The City Sports Complex came alive with energy as participants showcased their talents across various sporting disciplines.

## Key Statistics

- 350+ participants across all age groups
- 28 different sporting events conducted
- 45 medals awarded to outstanding athletes
- 12 new records established
- 500+ spectators throughout the day

The day began with an inspiring opening ceremony featuring a parade of athletes, followed by the traditional torch lighting. The atmosphere was electric as competitors prepared to showcase their months of training and dedication. What made this event truly special was not just the competition, but the spirit of camaraderie that permeated every activity.



## Community Spirit

Parents, teachers, and alumni came together to support young athletes, creating a supportive environment that celebrated effort as much as achievement.



## Teamwork

Beyond individual events, team sports highlighted the importance of collaboration, strategy, and mutual support among participants.

# The True Spirit of Sports



## Sportsmanship Over Victory

Throughout the event, we witnessed numerous examples of athletes helping competitors, celebrating each other's successes, and showing respect regardless of the outcome.



## Perseverance & Grit

Many participants pushed beyond their limits, showing remarkable determination in long-distance races and challenging field events.



## Personal Achievement

For many young athletes, simply participating and completing their events represented significant personal milestones worth celebrating.



## Excellence Displayed

Outstanding performances were seen across track and field events, with several athletes breaking previous records and setting new benchmarks.

## Beyond Competition

Sports Day wasn't just about winning medals. It was about building character, learning to handle both victory and defeat gracefully, and understanding that true success comes from giving your best effort. The event demonstrated how sports can teach valuable life lessons about discipline, time management, and resilience.

# Memorable Moments

## The Photo Finish

The 100m sprint final ended with three athletes crossing the line within milliseconds of each other, requiring photo finish technology to determine the winner.

## Team Spirit

During the relay races, teams that had practiced together for months demonstrated flawless baton exchanges and strategic running orders.

## Junior Enthusiasm

The junior events were filled with pure joy and enthusiasm, reminding everyone that participation and fun are as important as competition.

## First-Time Winners

Several athletes won their first-ever medals, with emotional celebrations that moved spectators and fellow competitors alike.

**The Closing Ceremony** was particularly moving, with athletes from competing houses standing together as one community. The award ceremony celebrated not just the fastest and strongest, but also those who displayed exceptional sportsmanship, team spirit, and perseverance.

Special recognition was given to volunteers, coaches, and officials whose dedication made the event possible. Their behind-the-scenes efforts ensured smooth operations, safety, and fair competition throughout the day.

# Why Sports Matter



## Mental Health

Physical activity reduces stress, improves mood, and boosts self-confidence through achievement.



## Physical Fitness

Regular sports participation improves cardiovascular health, strength, coordination, and overall wellbeing.



## Academic Performance

Studies show that student-athletes often demonstrate better concentration, time management, and academic results.



## Social Skills

Team sports teach communication, cooperation, and conflict resolution in real-world settings.



## Character Building

Sports teach discipline, resilience, and how to handle both success and failure gracefully.



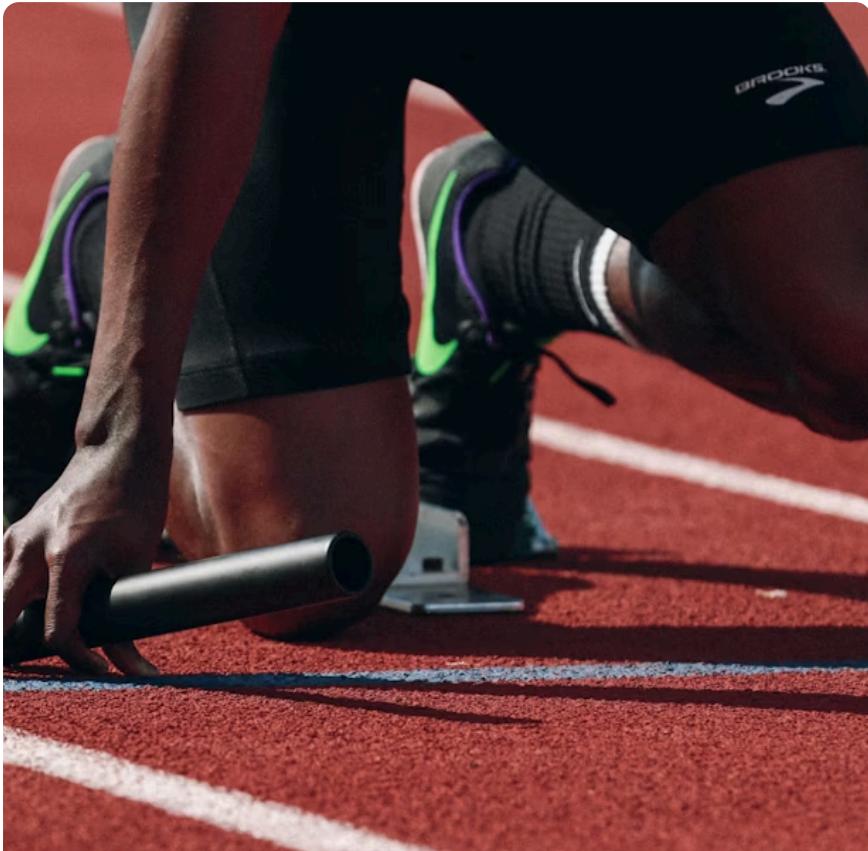
## Life Skills

Goal setting, strategic thinking, and leadership skills developed through sports translate to all areas of life.

## The Bigger Picture

Events like our Annual Sports Day serve as more than just competitions. They're platforms for holistic development, community building, and discovering talents that might otherwise remain hidden. The discipline learned in training, the camaraderie developed in team sports, and the resilience built through competition prepare young people for challenges far beyond the playing field.

# Photo Gallery



Opening Ceremony - Parade of Athletes



Intense Competition on Track



Field Events Showcase Talent



Joy of Achievement



Team Spirit & Camaraderie



Team Sports in Action

# Looking Forward

The success of this year's Sports Day has set a new benchmark for future events. The enthusiasm and participation levels have inspired plans for expanding the event next year. Based on feedback from participants and spectators, we're considering adding more inclusive events, increasing para-sports participation, and introducing technology for better event management and spectator engagement.



## Developing Talent

Several outstanding performers have been identified for specialized coaching and development programs to nurture their potential.



## Community Outreach

Plans are underway to involve more community members and local sports clubs in next year's event to strengthen community bonds.

*"Sports have the power to change the world. It has the power to inspire, it has the power to unite people in a way that little else does."*

- Nelson Mandela

*"The strength of the team is each individual member. The strength of each member is the team."*

- Phil Jackson

## **Thank You!**

To all participants, volunteers, coaches, officials, and supporters -  
your enthusiasm and dedication made this Sports Day unforgettable.

# Computer Maintenance & Hygiene Guide

Best Practices for Keeping Your Computer Clean, Secure, and Running Smoothly

A Comprehensive Guide to Computer Care



## Complete Maintenance Handbook

Protect your investment and ensure optimal performance with regular maintenance

### Why Maintenance Matters

- Extends hardware lifespan by 2-3 times
- Improves system performance and speed
- Prevents data loss and security breaches
- Reduces overheating and hardware failures
- Saves money on repairs and replacements
- Maintains resale value of equipment

**Quick Start:** Begin with weekly antivirus scans and monthly physical cleaning. Follow the detailed schedule on page 3 for comprehensive maintenance.

# Physical Maintenance & Cleaning

Keeping Your Hardware Clean and Functional

## Keyboard & Mouse

### Keyboard Cleaning

- ✓ Turn off and unplug before cleaning
- ✓ Use compressed air between keys
- ✓ Wipe with isopropyl alcohol (70%)
- ✓ Remove keys for deep cleaning
- ✓ Use keyboard covers for protection

### Mouse Cleaning

- ✓ Clean with isopropyl alcohol
- ✓ Use cotton swabs for tight spaces
- ✓ Clean mouse pad regularly
- ✓ Check optical sensor for debris

## Monitor & Peripherals

- ✓ Use screen cleaner (not glass cleaner)
- ✓ Wipe with microfiber cloth in circular motions
- ✓ Clean monitor bezel and stand
- ✓ Dust speakers and external drives
- ✓ Clean webcam lens gently

## Cooling System

- ✓ Clean fans every 3 months
- ✓ Use compressed air on vents
- ✓ Check heat sinks for dust
- ✓ Ensure 2-3 inches clearance around vents
- ✓ Consider additional case fans if needed

**Important:** Hold fan blades while using compressed air to prevent damage.

## Internal Components

- ✓ Clean inside case every 6-12 months
- ✓ Use anti-static brush for components
- ✓ Check all cable connections
- ✓ Look for swollen or leaking capacitors
- ✓ Reapply thermal paste every 2-3 years

**Tip:** Take photos before disconnecting cables for easy reassembly.

## Power & Connections

- ✓ Check power cables for damage
- ✓ Clean dust from power supply vents
- ✓ Secure all cable connections
- ✓ Use surge protectors
- ✓ Organize cables with ties

# Software Maintenance & Schedule

## Digital Care and Regular Maintenance Timeline

### Software Maintenance

#### Updates

- OS updates - Monthly
- Antivirus updates - Weekly
- Driver updates - Every 6 months
- Application updates - As available

#### Cleanup

- Remove temporary files monthly
- Clear browser cache regularly
- Uninstall unused programs
- Empty recycle bin weekly
- Defragment HDDs monthly

#### Backup Strategy

- 3-2-1 Rule: 3 copies, 2 media, 1 offsite
- Weekly incremental backups
- Monthly full backups
- Test restoration quarterly
- Use both local and cloud backup

### Safety Precautions

#### Electrical Safety

- Always unplug before opening case
- Use anti-static wrist strap
- Avoid working on carpeted floors
- Keep liquids away from equipment

#### Cleaning Safety

- Use isopropyl alcohol (70% or less)
- Never spray directly on components
- Avoid abrasive materials
- Allow to dry completely before use

#### Ergonomic Tips

- Monitor at eye level
- Keyboard at elbow height
- Take breaks every 20 minutes
- Ensure proper lighting

### Maintenance Schedule Summary

Frequency	Tasks
Weekly	Antivirus scan, Backup data, Empty recycle bin
Monthly	Clean keyboard/mouse, Dust exterior, Disk cleanup, OS updates
Every 3 Months	Clean cooling fans, Monitor cleaning, Browser cache clear
Every 6 Months	Internal cleaning, Driver updates, Cable check
Yearly	Deep clean, Program review, Backup verification



## Hardware Maintenance

### Keyboard & Mouse

- Turn off and unplug before cleaning
- Use compressed air between keys
- Wipe with isopropyl alcohol (70%)
- Remove keys for deep cleaning
- Use keyboard covers for protection
- Clean mouse with isopropyl alcohol and cotton swabs
- Clean mouse pad regularly
- Check optical sensor for debris

### Monitor & Peripherals

- Use screen cleaner (not glass cleaner)
- Wipe with microfiber cloth in circular motions
- Clean monitor bezel and stand
- Dust speakers and external drives
- Clean webcam lens gently

### Cooling System

- Clean fans every 3 months
- Use compressed air on vents
- Check heat sinks for dust accumulation
- Ensure 2-3 inches clearance around vents
- Consider additional case fans if needed

#### **Important**

Hold fan blades while using compressed air to prevent damage from overspinning.

## Internal Components

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- Clean inside case every 6-12 months
- Use anti-static brush for components
- Check all cable connections for tightness
- Look for swollen or leaking capacitors
- Reapply thermal paste every 2-3 years

## Power & Connections

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- Check power cables for damage or fraying
- Clean dust from power supply vents
- Secure all cable connections
- Use surge protectors for all equipment
- Organize cables with ties or sleeves



## Updates Schedule

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- **OS updates:** Monthly
- **Antivirus updates:** Weekly
- **Driver updates:** Every 6 months
- **Application updates:** As available

## System Cleanup

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- Remove temporary files monthly
- Clear browser cache regularly
- Uninstall unused programs quarterly
- Empty recycle bin weekly
- Defragment HDDs monthly (SSDs excluded)

## Backup Strategy

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- **3-2-1 Rule:** 3 copies, 2 media types, 1 offsite
- Weekly incremental backups
- Monthly full system backups
- Test restoration process quarterly
- Use both local and cloud backup solutions

## Electrical Safety

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- Always unplug before opening the computer case
- Use anti-static wrist strap when handling components
- Avoid working on carpeted floors
- Keep liquids away from all equipment
- Ensure proper grounding of all devices

## Cleaning Safety

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- Use isopropyl alcohol (70% or less concentration)
- Never spray liquids directly onto components
- Avoid abrasive materials or paper towels
- Allow all components to dry completely before use
- Use lint-free cloths for sensitive surfaces

## Ergonomic Tips

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- Position monitor at eye level
- Keep keyboard at elbow height
- Take 20-second breaks every 20 minutes
- Ensure proper lighting to reduce eye strain
- Use wrist rests for keyboard and mouse

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# ACKNOWLEDGEMENT

Computer Science Project

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I wish to express my sincere gratitude to my Computer Science teacher, **Ravi Sir**, for his invaluable guidance and support throughout this project. His expertise and encouragement were instrumental in its completion.

I acknowledge the use of artificial intelligence tools for assistance in coding, debugging, and design aspects of this project. These tools helped optimize the development process and enhance the final output.

Various online resources including documentation, tutorials, and forums were consulted during development, which helped resolve technical challenges and expand my understanding of web technologies.

I also thank my family for their patience and encouragement during this work.

This project has been a valuable learning experience in practical web development and problem-solving.

**Mohammad Sultan**

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