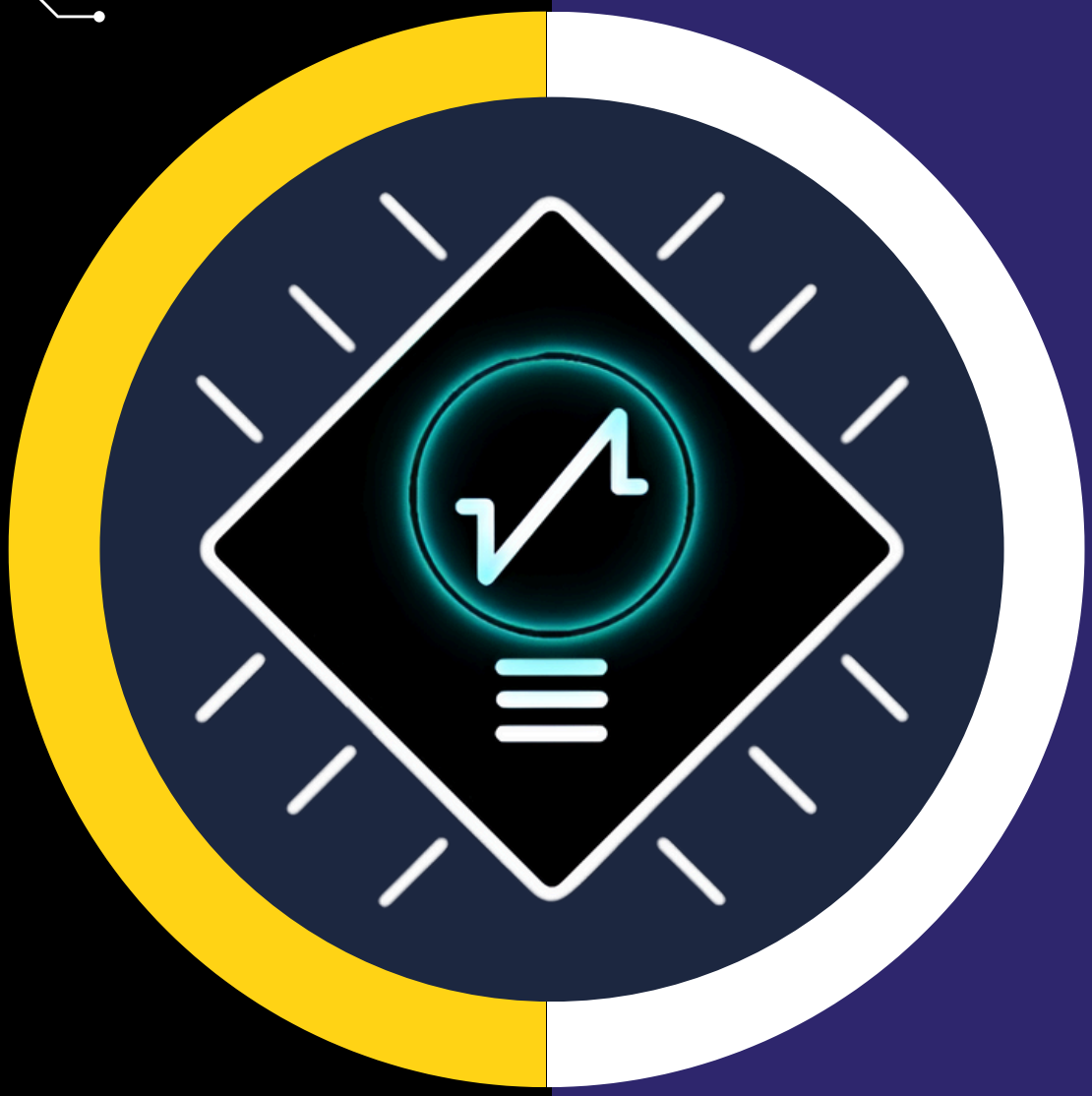

TECKNOW CLUB

DEPT. OF ELECTRONICS AND COMMUNICATIONS, GEC PALAKKAD

ACTIVITY REPORT

2023-25

MISSION

Empower members through shared knowledge, self-capability, and bridging theory with real-world application.

VISION

To be a leading hub for practical expertise and support, shaping skilled students across diverse technology domains.

EXE-COM MEMBERS

POSITION	NAME	CLASS
STAFF ADVISOR	Prof. GAYATHRI A	
COORDINATOR	VISHNU PU	S6 ECE
SUB-COORDINATOR	VIVEK S	S6 ECE
	ABHIJITH P	
PROJECT HEAD	FEBIN CS	S8 ECE
TREASURER	JINDA JESURYA JP	S6 ECE
MEDIA HEAD	PRUTHWIRAJ NARAYAN P	S6 ECE
4th YEAR REPRESENTATIVES	NIYAS SALIM	S8 ECE
	NANDHANA V	
3rd YEAR REPRESENTATIVES	SREERAM KRISHNA KS	S6 ECE
	ANJANA C	
2nd YEAR REPRESENTATIVES	VISHNU PRASAD VS	S4 ECE
	AYSHA KH	
1st YEAR REPRESENTATIVES	AKSHATHA R	S2 ECE
	NIYA SANTHOSH	

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IOT WORKSHOP

Date: March 16, 2023

Organized By: Tecknow Club

Speaker: Mr. Rahul Kr, Embedded Engineer, Verdent IT Solutions

Number of Attendees: 35 students, including volunteers

1. Objective of the Event

The session aimed to introduce students to the fundamentals of the Internet of Things (IoT). The focus was on understanding IoT architecture, communication protocols, and real-world applications. Additionally, students engaged in a hands-on project to control devices via Wi-Fi using the ESP32 microcontroller.

2. Topics Covered

- **Introduction to IoT:** Definition, significance, and real-world applications.
- **IoT Architecture:** Sensors, actuators, microcontrollers, and cloud integration.
- **Communication Protocols:** Wi-Fi, Bluetooth.
- **Hands-on Project:** Controlling devices through Wi-Fi using ESP32.
- **Career Opportunities in IoT:** Job roles, required skills, and future trends.

3. Hands-on Project

Students participated in a practical demonstration where they learned how to control electronic devices using the ESP32 module via Wi-Fi. The project provided real-time experience in IoT implementation and demonstrated how embedded systems interact with cloud-based controls.

4. Interaction & Feedback

The session was highly interactive, with students actively participating in discussions and asking questions. The hands-on project was well-received, and many attendees expressed interest in exploring more IoT-based projects in the future.

5. Conclusion & Takeaways

The session successfully introduced students to IoT fundamentals and provided practical insights into controlling devices through Wi-Fi. The event was a great learning opportunity for those interested in embedded systems and IoT applications. Future workshops and advanced sessions on IoT are planned to deepen students' knowledge

PHOTOS


TECKNOW CLUB
march
16
INTRODUCTION TO
IOT
sponsered by CORaL
RAHUL KR
Embedded Engineer, Verdant IT solutions
Department of Electronics and Comunication Engineering, GEC Palakka
TECKNOW CLUB

INTRUDER QUEST

Date: November 10 & 11 2023

Organized By: Jyothi Engineering College

Technical Assistance By: Tecknow Club

1. Background

Jyothi Engineering College invited Tecknow Club to provide technical assistance for the "Intruder Quest" event after being inspired by the Laser Maze game conducted during Invento, our college's tech fest. The Laser Maze was a challenge where players had to navigate through laser-based hurdles without touching them to reach the quest.

2. Objective of the Event

The purpose of "Intruder Quest" was to create an engaging and challenging game where participants had to test their agility and precision. The game aimed to simulate real-life security breach scenarios using a laser-based obstacle system.

3. Game Concept & Execution

- Laser Maze Setup: The game consisted of multiple laser beams placed strategically to create hurdles.
- Challenge Mechanism: Players had to reach the quest without breaking the laser beams.
- Technical Implementation: The system was designed using laser modules, sensors, and an alert mechanism to detect laser breaches.
- Safety Measures: Proper precautions were taken to ensure a safe gaming environment.

4. Role of Tecknow Club

- Four members from Tecknow Club provided technical assistance in setting up and configuring the Laser Maze.
- The team handled circuit connections, sensor placements, and troubleshooting during the event.
- **Conducted game trials and demonstrations to ensure smooth execution.**

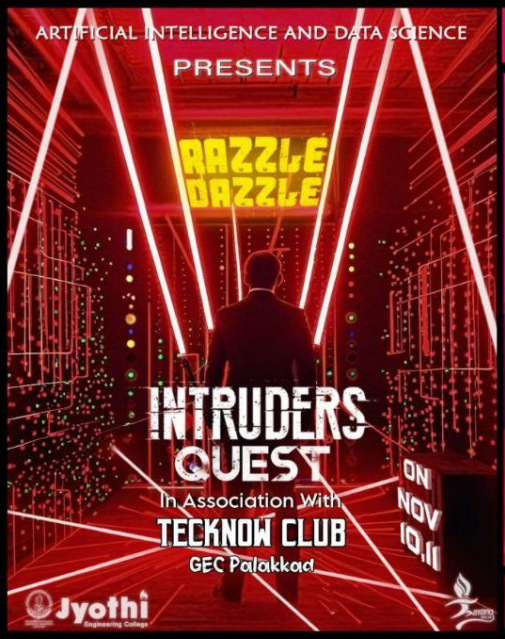
5. Reception & Feedback

The game was well-received by participants, with many appreciating its engaging design and technical execution. **Jyothi Engineering College expressed their gratitude to Tecknow Club for their contribution, and the** event successfully demonstrated the potential of technology in interactive gaming.

6. Conclusion & Takeaways

- The event showcased the technical expertise of Tecknow Club in developing interactive tech-based challenges.
- Strengthened collaboration between Tecknow Club and Jyothi Engineering College.
- Encouraged future cross-college technical partnerships.

PHOTOS



ENTREPRENEURSHIP SESSION FOR INNOVATIVE MINDS

Date: August 21, 2024

Organized By: Tecknow Club

Speaker: Edson CJ (Entrepreneur & Participant of *Flowers TV's Flowers Student Startup Show*)

Number of Attendees: 40 students

1. Introduction

Tecknow Club organized an Entrepreneurship Session aimed at inspiring and guiding students toward business and startup opportunities. The session was handled by Edson CJ, an entrepreneur and participant of *Flowers TV's Flowers Student Startup Show*, who shared his insights on entrepreneurship, job market challenges, and life lessons.

2. Objective of the Session

- To educate students on entrepreneurship and business strategies.
- To discuss the disadvantages of conventional jobs and the potential of startups.
- To provide clarity on business development and challenges.
- To engage students in a brainstorming session for generating innovative ideas.

3. Key Topics Covered

- What is Entrepreneurship? Understanding business fundamentals.
- Challenges & Opportunities in Startups: Risks and growth strategies.
- Why Not a 9-to-5 Job? Discussion on job disadvantages vs. entrepreneurship.
- Life Lessons & Motivation: Overcoming obstacles and staying resilient.
- Brainstorming Session: Encouraging students to come up with new business ideas.

4. Interactive Sessions & Engagement

- The Q&A session helped clarify doubts on startups and funding.
- Students participated in an idea-generation activity, discussing potential business ventures.
- Many attendees expressed enthusiasm for pursuing their own startup ideas.

5. Conclusion & Takeaways

- Students gained valuable insights into the entrepreneurial mindset.
- The session encouraged participants to think creatively and explore business opportunities.

- Strengthened the entrepreneurial ecosystem within Tecknow Club.
- Future sessions will focus on business execution, funding strategies, and mentorship programs.

PHOTOS

TARANG – ASSOCIATION DAY

Date: October 25, 2024

Organized By: Department of ECE

Technical Support By: Tecknow Club

Number of Participants: Large Audience

1. Introduction

"Tarang," the Association Day event, was a grand celebration featuring various cultural and technical activities. Tecknow Club took charge of the technical side of the event, introducing a range of interactive tech-based games that engaged attendees and enhanced the event experience.

2. Objective

- To provide a fun and interactive experience using technology-driven games.
- To showcase the technical creativity and innovation of Tecknow Club.
- To contribute to the Association Day through successful event execution and fundraising.

3. Games & Activities by Tecknow Club

Tecknow Club developed and managed multiple games, including:

- Laser Tag (Laser Shooting Game): A real-time combat simulation using laser-based shooting mechanics.
- Real-Life Temple Run: A physically interactive obstacle course inspired by the popular mobile game.
- Arcade Games: A collection of entertaining digital and hardware-based games for attendees to enjoy.

4. Audience Engagement & Response

- The event attracted a large number of participants, with many eager to try the games.
- The interactive setup and real-world gaming experience received positive feedback from attendees.
- The fun yet technical approach to gaming showcased Tecknow Club's expertise in innovation.

5. Financial Contribution & Impact

- Tecknow Club generated a profit from the event, which was contributed to the Association Day fund.
- The club's success in event execution reinforced its reputation as a leading tech community within the college.

6. Conclusion & Takeaways

- The event successfully blended technology with entertainment, making it a standout attraction of "Tarang."
- The participation and response validated the club's ability to execute large-scale interactive events.
- The experience encouraged future collaborations for similar college events.

PHOTOS

OPEN – MIC

Date: January 31, 2025

Organized By: TinkerHub Club (in collaboration with Tecknow Club)

Number of Attendees: 50 members

Workshop Conducted By: Tecknow Club (7 members)

1. Introduction

The "Open-Mic" event was organized by the TinkerHub Club in collaboration with Tecknow Club to provide a platform for students to learn and discuss Arduino and IoT concepts. The session aimed to introduce participants to the basics of Arduino programming and hands-on projects using Tinkercad software.

2. Objective of the Workshop

- To provide an introductory understanding of Arduino and IoT.
- To offer practical exposure through Tinkercad simulations.
- To explore PWM (Pulse Width Modulation) and other IoT-related topics.

3. Topics Covered

The workshop included both theoretical explanations and hands-on sessions, covering:

- Introduction to Arduino: Basics of microcontrollers, applications, and setup.
- Hands-on in Tinkercad: Simulating circuits and coding Arduino online.
- IoT Concepts: Overview of smart devices and network communication.
- PWM & Control Techniques: Understanding analog output and LED dimming.
- Other IoT Topics: Real-world applications and project-based learning.

4. Role of Tecknow Club

- Seven members from Tecknow Club conducted the workshop.
- Explained fundamental concepts and guided participants through Tinkercad-based simulations.
- Provided technical assistance and addressed queries related to Arduino programming and **IoT.**

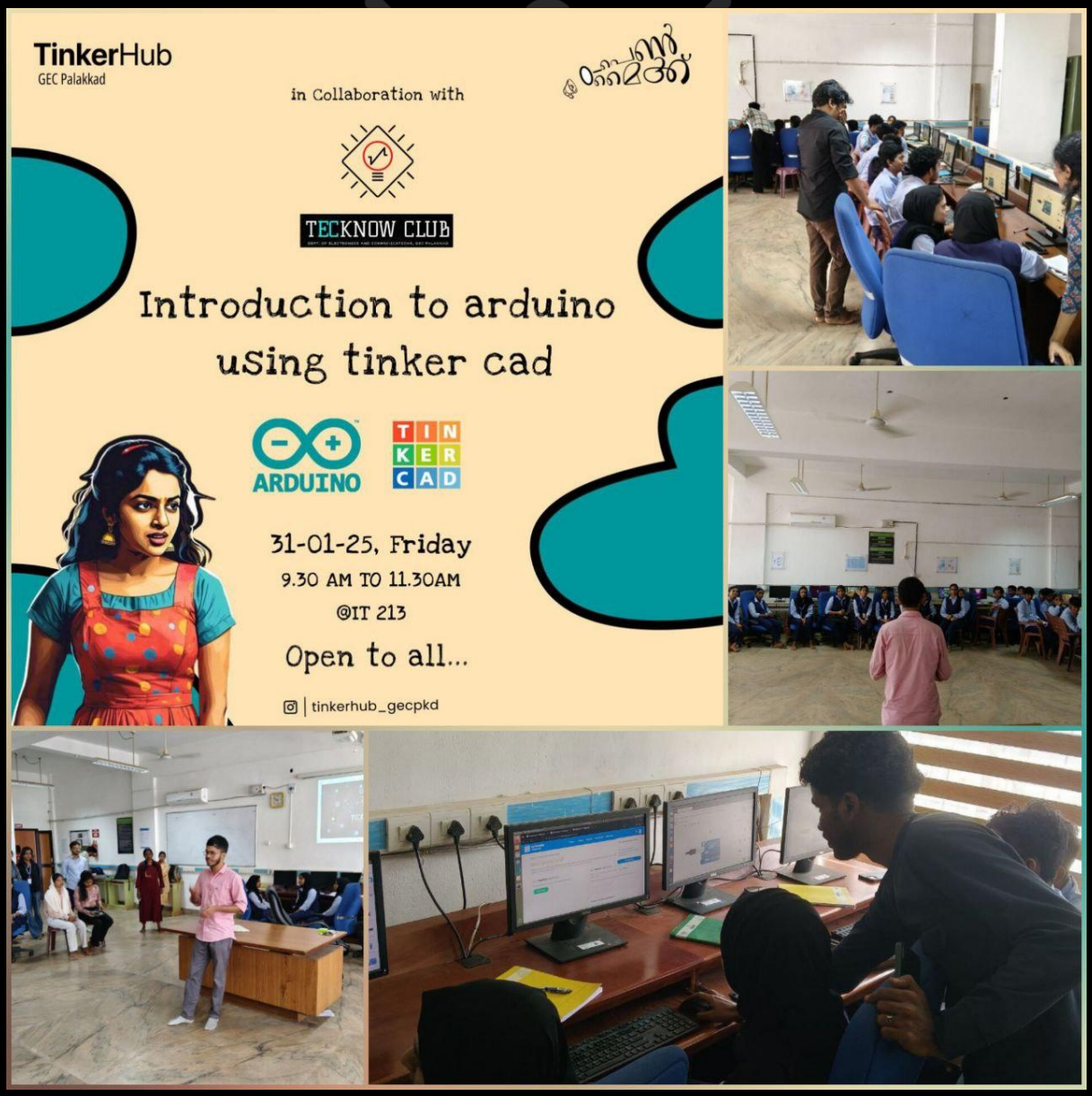
5. Reception & Feedback

The workshop was well-received, with participants actively engaging in Tinkercad projects and IoT discussions. Many attendees found the practical demonstration helpful in understanding real-world IoT applications.

6. Conclusion & Takeaways

- Successfully introduced students to Arduino and IoT concepts.
- Encouraged interactive learning through simulations and discussions.
- Strengthened the collaboration between TinkerHub Club and Tecknow Club for future workshops.

PHOTOS



FIRMWARE FRENZY

Date: March 8-9, 2025

Organized By: Tecknow Club in collaboration with TinkerHub

Speaker: Sreekumar A (Senior Engineer, Infineon Technologies)

Number of Attendees: 50 students

1. Introduction

Tecknow Club, in collaboration with TinkerHub, organized Firmware Frenzy, a two-day technical workshop focused on embedded systems, Proteus Simulator, and STM chips. The session was conducted by Sreekumar A, a Senior Engineer at Infineon Technologies, who shared his expertise from 13+ years of industry experience.

2. Objective of the Workshop

- To introduce students to embedded systems and firmware development.
- To provide hands-on experience with the Proteus Simulator and STM microcontrollers.
- To give students insight into career opportunities in the semiconductor and embedded systems industry.

3. Topics Covered

The workshop included both theory and hands-on sessions, covering:

- Introduction to Embedded Systems: Basics, applications, and importance in real-world scenarios.
- Proteus Simulator: Circuit design, simulation, and debugging.
- STM Microcontroller Programming: Basics of STM chips, interfacing, and development environment.
- Practical Session on Proteus: Simulating and testing embedded system projects.
- Career Guidance: Insights into the embedded industry, job roles, and skills required to succeed.

4. Hands-on Activities & Engagement

- Participants worked on real-time simulations using Proteus.
- Practical exercises helped them understand microcontroller functionality and firmware development.
- An interactive Q&A session allowed students to clarify doubts and explore career guidance.

5. Reception & Feedback

- The session was highly informative and engaging, with students appreciating the practical exposure.
- Many attendees found career insights and industry experience shared by Sreekumar A invaluable.
- The hands-on work with Proteus and STM chips provided a strong foundation for future projects.

6. Conclusion & Takeaways

- The workshop successfully introduced students to industry-level embedded system concepts.
- Participants gained practical knowledge of Proteus and STM chip development.
- The real-world experiences shared by the speaker motivated students to explore careers in embedded systems.

PHOTOS