

Alva's Institute of Engineering and Technology, Moodbidri



Activity Report on

“EDWIN'S LINUX LAB”

1.Vision, Mission and Objectives of the Lab

Vision

Developing a culture of open source environment, which is a type of licensing agreement that allows users to freely modify a work, use said work in new ways, integrate the work into a larger project or derive a new work based on the original.

Mission

Open-source software is computer software that is released under a license in which the copyright holder grants users the rights to use, study, change, and distribute the software and its source code to anyone and for any purpose. Open-source software may be developed in a collaborative public manner.

Objectives

- The objective of this lab is to introduce the students to LINUX kernel programming techniques and also the advanced C systems programming and debugging techniques in a LINUX environment. In this lab students are able to describe and use the fundamental LINUX system tools and utilities. Problems in the field of networking, data structures and system software can be easily built on Linux platform because of the various inbuilt system calls available in Linux.
- The main objective of the Linux lab is **to make the students aware of the features and capabilities of Linux** so that they can utilize its improved functionalities to develop new Linux based software and can also contribute to the development of the operating system itself.

2. Establishment details of the lab

Alva's Institute of Engineering & Technology, Moodbidri. Department of Computer Science & Engineering established an Edwins' Lab during the Academic Year 2016-17. Prof. Edwin, Former Professor of Philadelphia University was the incharge for the lab. The lab is established to explore the open source softwares in the Linux platform. The various workshops have been conducted and in this lab for the students of AIET.



Outer view of Edwins' Linux Lab

3. Equipment/System Details

List of Software

- LINUX O.S.
- C/C++ for Linux
- Java for Linux

List of Hardware

- PC – 20
- Workstation – 01
- Laser jet Printer – 01
- Network Switch – 02
- Multimedia Projector – 01
- UPS 10 KVA – 01

4. Activities carried out under Linux Lab

Conducting various workshops use of open source software's and providing the students continuously through various training sessions about the usage of open source environment, Open-source software is computer software that is released under a license in which the copyright holder grants users the rights to use, study, change, and distribute the software and its source code to anyone and for any purpose. Open-source software may be developed in a collaborative public manner.

5. Composition details

Coordinator & Faculty: Dr. Madhusudhan S,

Sr. Assistant Professor ,

Department of CSE, AIET, Moodbidri



ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

A Unit of Alva's Education Foundation (R)

(Affiliated to Visvesvaraya Technological University, Belagavi.

Approved by AICTE, New Delhi & Recognized by Government of Karnataka)

Shobhavana Campus, Mijar, Moodbidri- 574 225, Mangalore, D.K., Karnataka State.

Phone: 08258-262724 (O), 262725(P), Telefax: 08258-262726

(Accredited by NAAC with A+ Grade and Accredited by NBA New Delhi CSE & ECE)

EDWIN'S LAB



Date: 6th July 2024

Time: 12:45pm

Dr. Aslam B Nandyal, the faculty in-charge, conducted a session for the student coordinators and members of Edwin's Club aimed at enhancing their understanding and skills in various aspects of Computer Science, as well as preparing them for the challenges of the professional world.



Current Job Markets: Dr. Aslam provided an in-depth analysis of the current job markets in the field of Computer Science, emphasizing the importance of adapting to the evolving demands of the industry. He highlighted the trends in technology, such as the rise of artificial intelligence, cybersecurity, and data science, and discussed the need for students to align their skills with the market requirements. Dr. Aslam also stressed the significance of developing versatile skill sets to remain competitive in a dynamic job market.

Example: Dr. Aslam cited the increasing demand for professionals with expertise in cloud computing and explained how this trend is shaping job opportunities in the IT industry.

Setting Deadlines for the Project and Working Accordingly: The session delved into the crucial aspect of project management, with Dr. Aslam emphasizing the significance of setting realistic deadlines and adhering to them. He highlighted the importance of time management and prioritization in project execution, emphasizing that meeting deadlines is imperative for successful project completion.

Example: Dr. Aslam presented a case study of a software development project and illustrated how effective deadline setting and adherence contributed to the project's success, while also discussing the consequences of missed deadlines.

Learning and Teaching Latest Technologies to and from Fellow Members: Dr. Aslam encouraged the students to foster a culture of knowledge sharing within the club. He emphasized the value of learning from each other's expertise and experiences, and discussed the benefits of peer-to-peer education in keeping pace with rapid technological advancements.

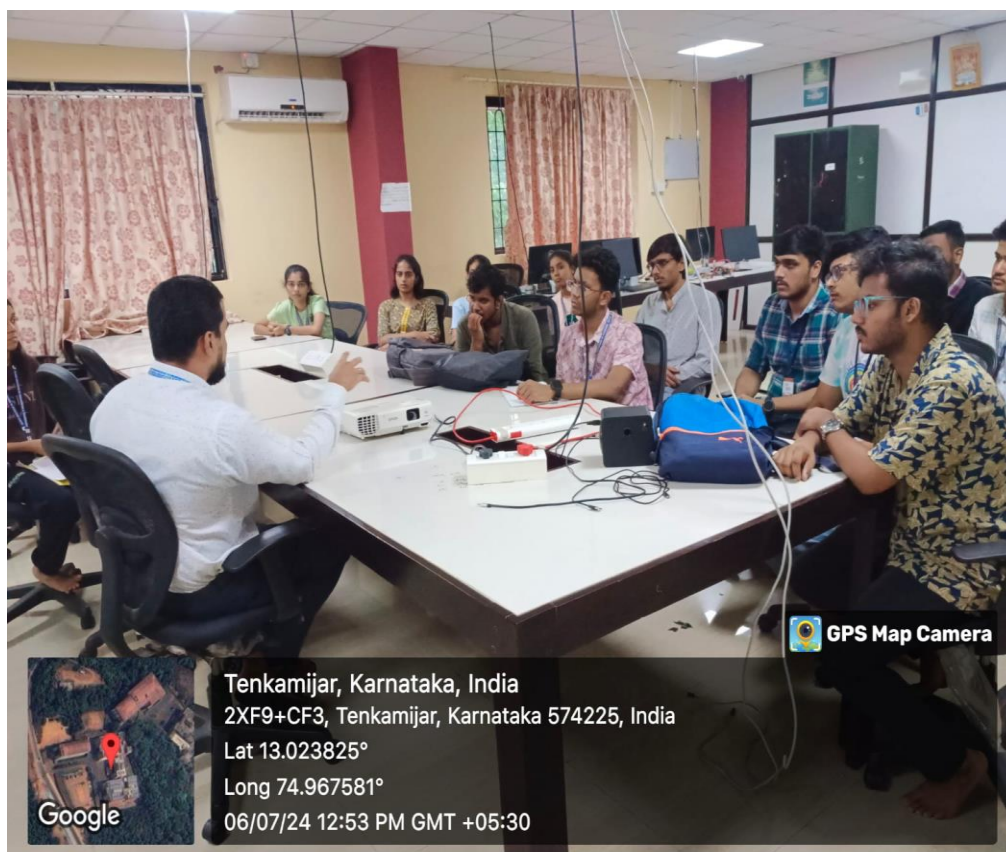
Example: Dr. Aslam shared a story of a group of students who collectively explored a new programming language and efficiently taught each other, resulting in a collaborative learning experience that enriched their skill sets.

Not Taking Things Lightly and Getting Out of the Comfort Zone: The session emphasized the need for students to embrace challenges and step out of their comfort zones to maximize their potential. Dr. Aslam stressed the importance of being proactive, taking on new responsibilities, and seeking growth opportunities beyond one's familiar domain.

Example: Dr. Aslam shared his personal experience of venturing into an unfamiliar research area outside his expertise, highlighting how embracing discomfort led to valuable insights and personal development.

Proper Entry in the Attendance Register to be Maintained: Dr. Aslam reiterated the necessity of maintaining accurate attendance records for club activities. He emphasized the importance of this practice for accountability, documentation, and future reference.

Example: Dr. Aslam discussed the implications of inaccurate attendance records and how they can impact the club's organizational efficiency, especially in cases of collaborations with external stakeholders or academic evaluations.



Conclusion: The session concluded with an interactive Q&A session, allowing students to seek further clarity on the discussed topics and engage in constructive dialogue with Dr. Aslam. The insights and guidance provided by Dr. Aslam are expected to equip the student coordinators and members of Edwin's Club with valuable knowledge and skills essential for their academic and professional pursuits in the field of Computer Science.



ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

A Unit of Alva's Education Foundation (R)

(Affiliated to Visvesvaraya Technological University, Belagavi.

Approved by AICTE, New Delhi & Recognized by Government of Karnataka)

Shobhavana Campus, Mijar, Moodbidri- 574 225, Mangalore, D.K., Karnataka State.

Phone: 08258-262724 (O), 262725(P), Telefax: 08258-262726

(Accredited by NAAC with A+ Grade and Accredited by NBA New Delhi CSE & ECE)

EDWIN'S LAB



Date: 7th July 2024 (Sunday)

Time: 05:00-7:00pm

Meeting Report

Location: Google Meet (<https://meet.google.com/tzb-ijfr-wjm>)

Attendees:

Dr. Aslam B Nandyal, Faculty Incharge

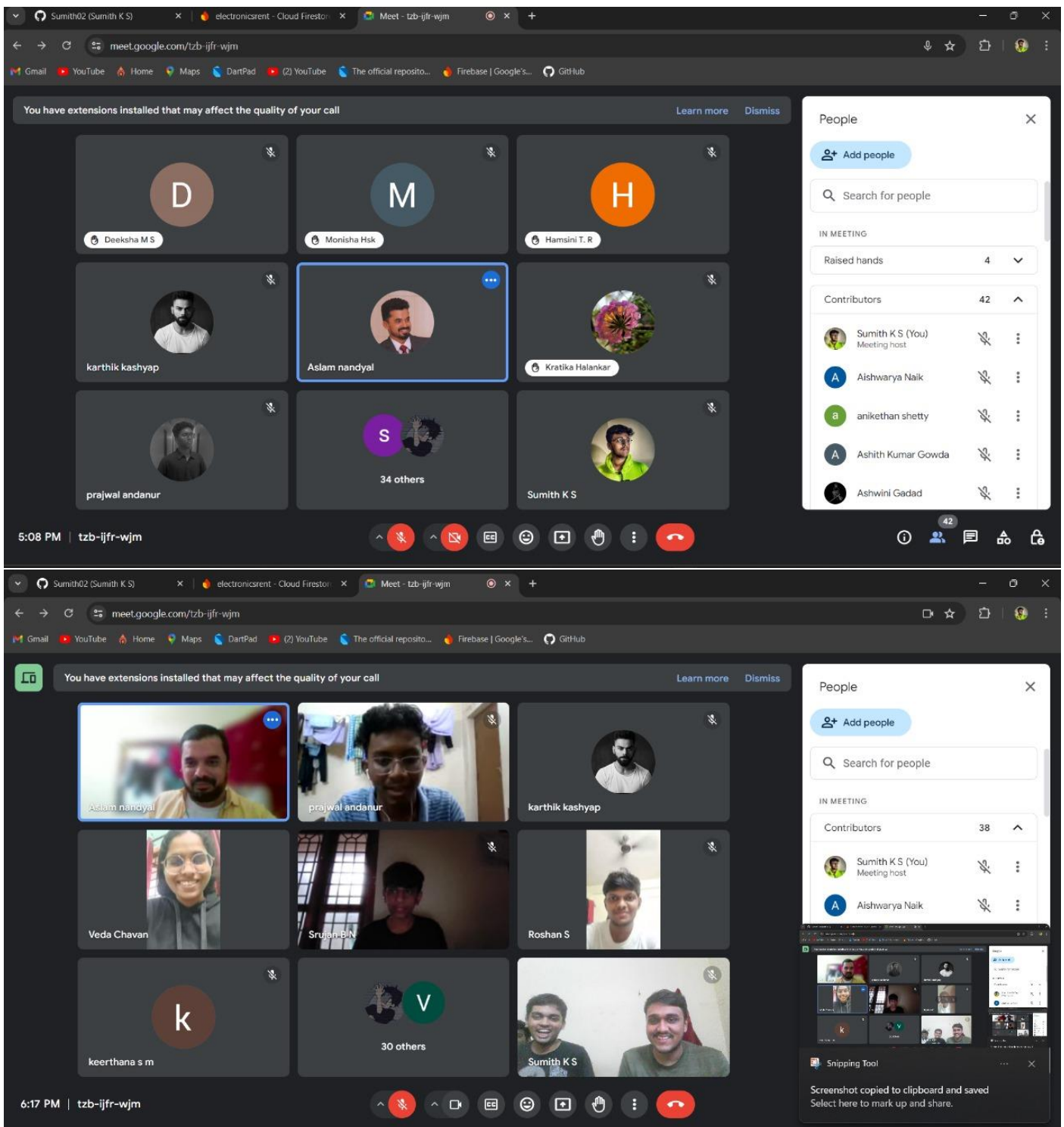
Student Coordinators and Members of Edwin's Club

Agenda: Project Status Updates and Deadlines

The meeting convened with Dr. Aslam B Nandyal and the student coordinators and members of Edwin's Club to review the progress and status of ongoing projects. Each project was presented, and Dr. Aslam emphasized the importance of meeting the deadlines and readiness for demonstrations on the mentioned deadline. Additionally, specific guidance was provided related to the ERP Project, stressing the need to design the application according to NBA SAR requirements to facilitate potential monetization opportunities.

Project Discussions:

- **ERP Project** Presented by Kartik, Keertana, and Nisarga: The ERP project was presented, with a focus on its current status and the roadmap for completion. Dr. Aslam emphasized the significance of aligning the ERP design with NBA SAR requirements to enhance the potential for in-house production level software that can be monetized extensively.
- **Biometric Lock System** Presented by Keertana, Vedika, Veena, Deeksha, and Roshan (Deadline: 2nd Sept 2024): The status and progress of the biometric lock system project were discussed, with an emphasis on meeting the upcoming deadline and ensuring readiness for a demonstration on the specified date.
- **LLM based Robot Project:** An overview of the LLM-based robot project was provided, and the team was encouraged to work diligently to meet project milestones and deadlines.
- **Web App Docker Containers** Terminals to Students: The status and progress of the web app project were assessed, and the importance of meeting the project's timeline was highlighted by Dr. Aslam to ensure timely completion and future demonstrations.



- **Traveling App** (Itinerary Application) Hotels and Lodges Presented by Anikethan, CSD 1st Year: The presentation of the traveling app project was reviewed, and the team was advised to work towards meeting project deadlines and prepare for upcoming demonstrations.
- **Component Management** Application Presented by Shubhanga and Kartik (Deadline: 10th Oct): The project timeline and progress were discussed, and Dr. Aslam stressed the importance of adhering to the deadline for timely completion and demonstration.

- **Farming Project Idea** Presented by Santosh, 1st Year (IOT and Cyber-security): The farming project idea was presented, and the team was urged to work diligently on the project, emphasizing the importance of keeping pace with project deadlines and milestones.

Dr. Aslam reiterated the importance of working within the specified deadlines for each project and being prepared for demonstrations as per the given deadlines. Special emphasis was placed on the ERP Project team to align the project with NBA SAR requirements to enable potential monetization opportunities.

Action Items:

The teams working on the various projects to adhere to the specified deadlines and ensure readiness for demonstrations as scheduled.

The ERP Project team to incorporate NBA SAR requirements in the project design to enhance its potential for in-house production level software.

Next Meeting: The next meeting will be scheduled to track the progress of the projects and ensure that the teams are on track to meet the established deadlines.