Internet of Things
COCSC20

Lecture 1: Introduction to Course Structure

Semester 6

Course Website

- Google Classroom: https://classroom.google.com/c/NTgwOTkyNjUzNTA4?cjc=kgvf7c6
- Class Joining Code: kgvf7c6
- We will continuously putting reading material, lectures and labs.

Prerequisite

- Interested in the learning of Course.
- Interested in Programming
  - Python and C programming preferred
- Basic Hardware Knowledge.
- Fascinated to solve real life problem using IoT skills.
- Curious to build new/reliable solution.

Evaluation Components

Components of Course Evaluation	**Percentage**
Mid Term Examination	25
Continuous Evaluation	25
End Term Examination	50
Project	
Research Paper	

Course Outcomes

- To understand the concepts of IoT and related protocol.
- To learn to develop the sensor networks for collecting the data.
- To create IoT solutions using sensors, actuators, and Devices.
- To understand the upcoming advancement in the domain of IoT.
- To deploy an IoT solution for the nearby society for improving their experiences.

Major Topics

- IoT: Applications, Requirements, Architectural View, Examples, case studies.
- Sensors and things
- Hardware Components: Arduino, NodeMCU, Raspberry Pi, Jetson Nano.
- IoT Network and Protocols: 6LoWPAN, HTTP, MQTT, CoAP.
- IoT Security, SDN, NFV
- Fog and Edge Computing, NodeRED

Course Structures

- Lectures participation.
- Multiple Quiz during the lectures (Minimum 2)
- Mid Term Exam and End Term Exam
- Reading for Web source and Journals (Self-Learning)
- Hands-on Lab (Continuous Evaluation)
- Semester Project (Three evaluations: Beginning, Mid, Final)
- Expert Lectures
- Flipped Learning (Two Lectures)
- For doubt (drop an email or message)

Semester Project

Will provide the set of questions for the project idea in a week.

- Team Name
- Team Members (3)
- Project Idea
- Project Novelty
- Society Impact
- Hardware Requirements
- Possible end-Customers

Desired Outcome

- A IoT based Project.
- A video for explaining the project (5 Minutes)
- A novel research paper/report/patent from the project work.

Thank You

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WhatsApp Group link: We will create it.