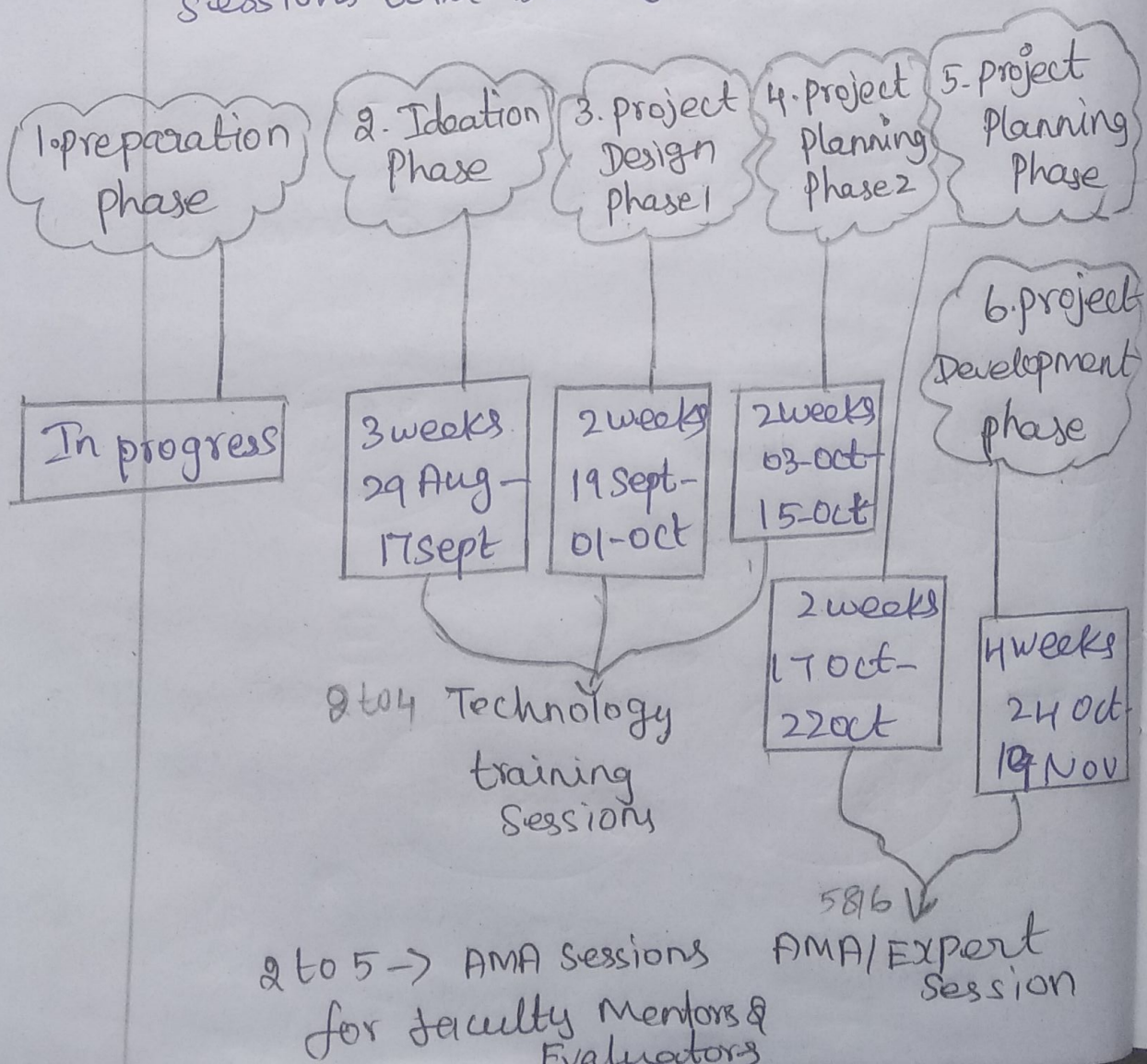
29.5.22 Training calendar & Agenda Session:

Agenda:.

- Training & project calendar
- Execution process
- Role of Faculty mentor
- Role of Faculty Evaluator
- Zoom links for sessions
- Q & A

Training & project calendar:

* Training & project development sessions will be organized as below



05.09.22

IOT:

Internet of Things

Applications in different sectors..

Internet of Things :-

1) Health & life style
2) Smart cities
3) Industries
4) Logistics
5) Home Automation
6) Energy
7) Environment
8) Agriculture

Health & Life style:

- wearable Electronics
- Health & Fitness Monitoring

Smart cities

- Smart parking
- Smart Roads
- Emergency Response

Industries :-

- Machine Diagnosis
- Indoor Air Quality Monitoring.

Logistics :-

- Shipment Monitoring
- Remote Vehicle Diagnostics
- Fleet Tracking

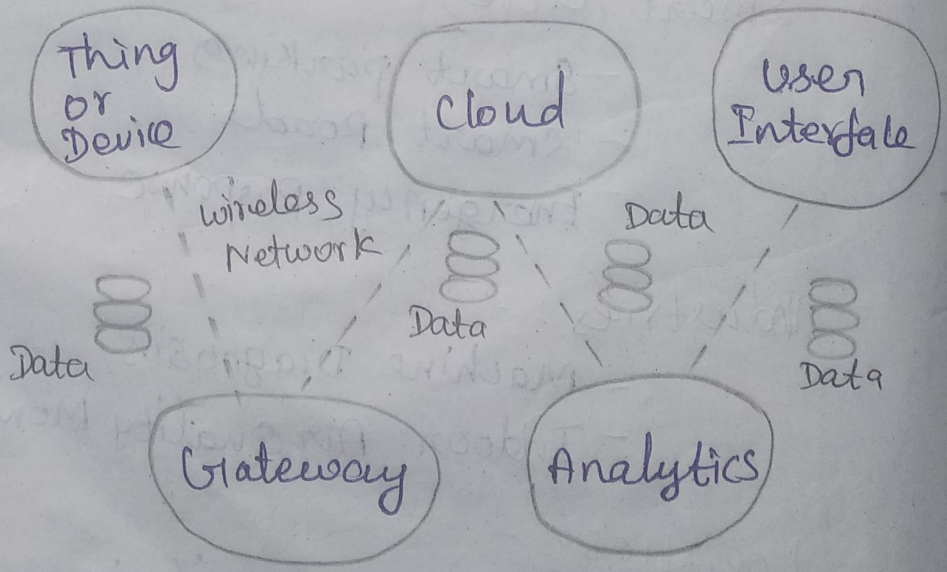
Home automation:
- Smart Lighting
- Smart Appliance
- Smart Security Systems.

Energy:-
- Smart Grids
- Renewable Energy systems
- prognostics.

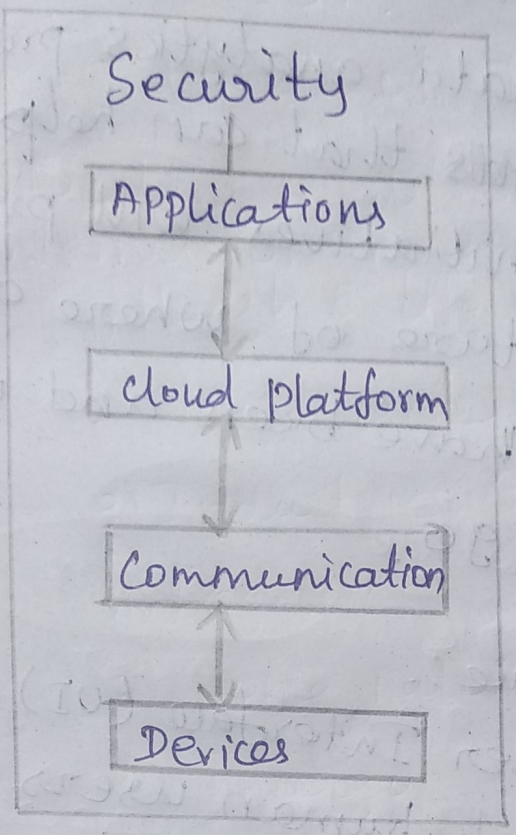
Environment:-
- Weather Monitoring
- Forest Fire Detection
- Air pollution.

Agriculture:-
- Smart Irrigation
- Green House.

Building Blocks of IOT:-



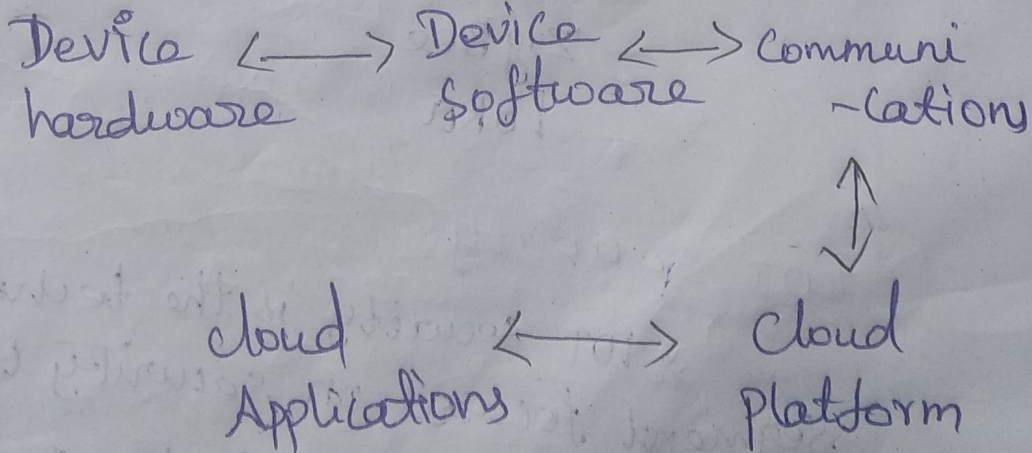
IoT Architecture:



Things (End Devices / Nodes):-

"Things" - devices and systems that are embedded with sensors, software, and other technologies in order to communicate and exchange data with other Things of

IOT Technology stack:



Data Analytics:

* The data analytics process has Some components that can help a variety of initiatives. will provide a clear picture of where are you where you have been and where you should go.

User Interface:-

* The user Interface (UI) is the point at which human users interact with a computer or applications.

Network Connectivity:-

- Ethernet
- WiFi
- RFID
- NFC
- Bluetooth
- ZigBee
- LoRa

IOT security:-

* IOT security is the technology segment focused on security linked devices and network in the IOT.

Types of Arduino:

- Entry level Boards
- Wearable Boards
- Enhanced Boards
- IoT Board

Features Arduino:

- Operating voltages 5v and 3.3v
- Analog input pins 6
- SRAM 2KB (ATmega 328)
- Clock speed 16 MHz
- Microcontroller ATmega 328

Software:-

- Launch the Arduino IDE
- Select your serial port
- Select your board
- open the example
- Upload the program