INNOVATION HUB

Appleton (Tech.) Road, University of Ibadan

LPI STEM EDUCATION

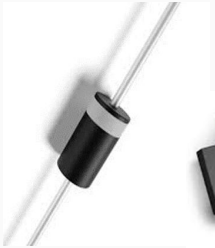
PRESENTED BY:
ADENUSI CECILIA
STEM CORDINATOR

CONTENTS

- Basic Eletronics
- Soldering & Desoldering
- STEMSEL & Arduino Microcontroller
- Coding
- Internet of Things
- Robotics
- Drone Technology
- Success Stories

Basic Electronics

- Printed Circult Board (PCB)
- Diodes
- Resistors
- Jumpers
- Capacitors
- Terminals
- Transistors
- Integrated Circult
- Voltage Reguiator
- IC Sockets

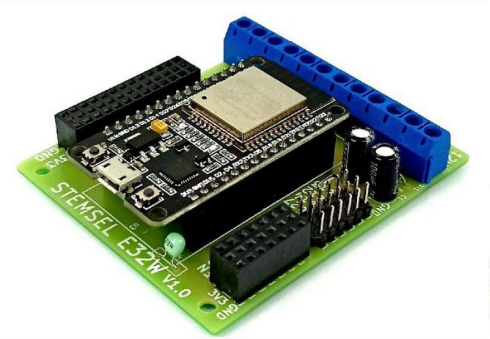


Soldering & Desoldering

- Vero Board
- PCB
- Soldering Iron
- Soldering Led
- Multimeter
- Cutter
- Plier
- Screws

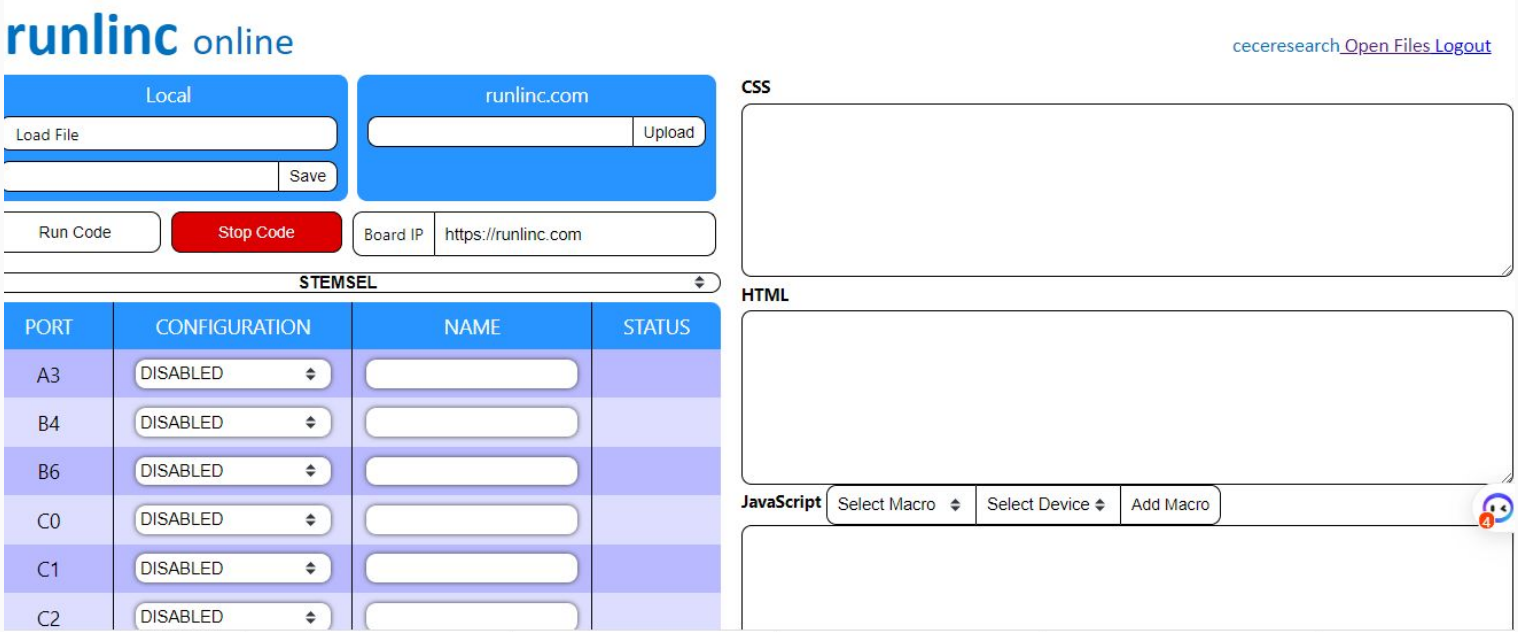
STEMSEL / ARDUINO MICROCONTROLLER

Microcontrollers

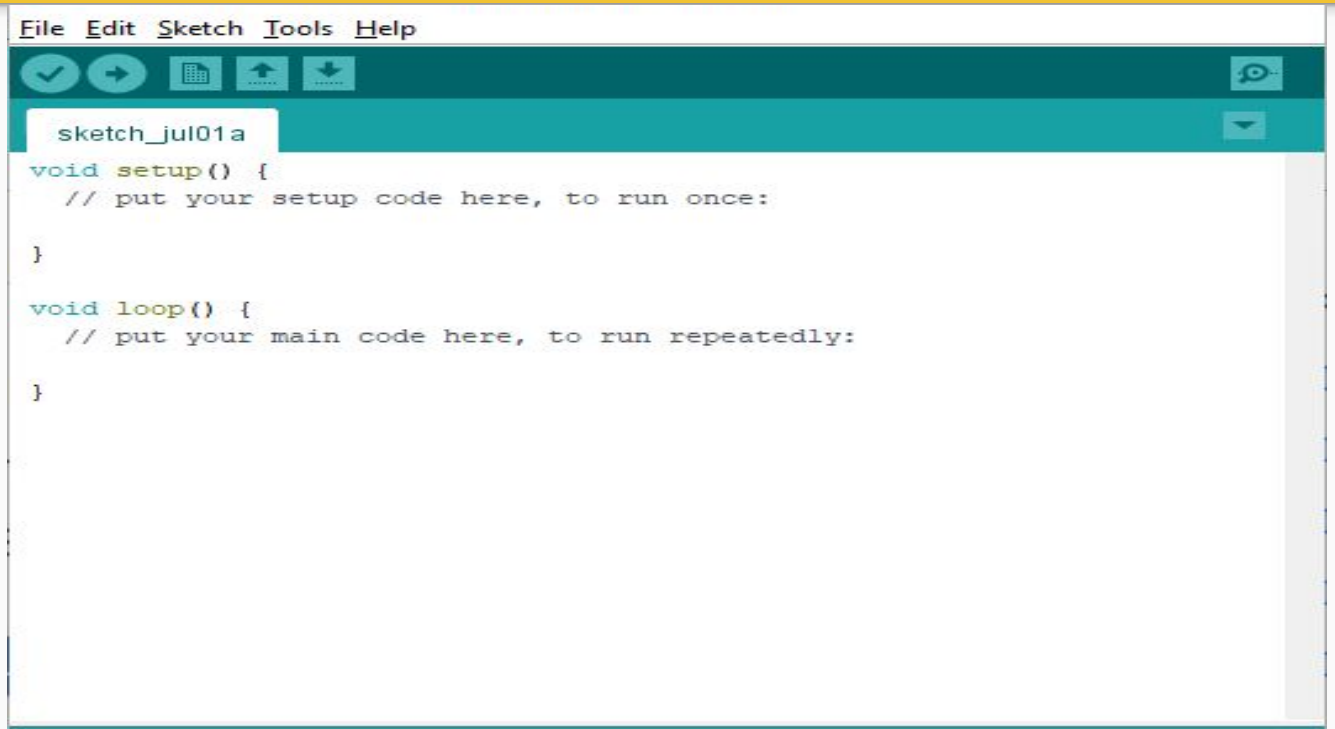


- Microcontrollers are compact integrated circuits (ICs) that consist of a microprocessor core, memory, and peripherals on a single chip
- Microcontroller is a like a brain of a robot

STEMSEL Microcontroller



Arduino Microcontroller



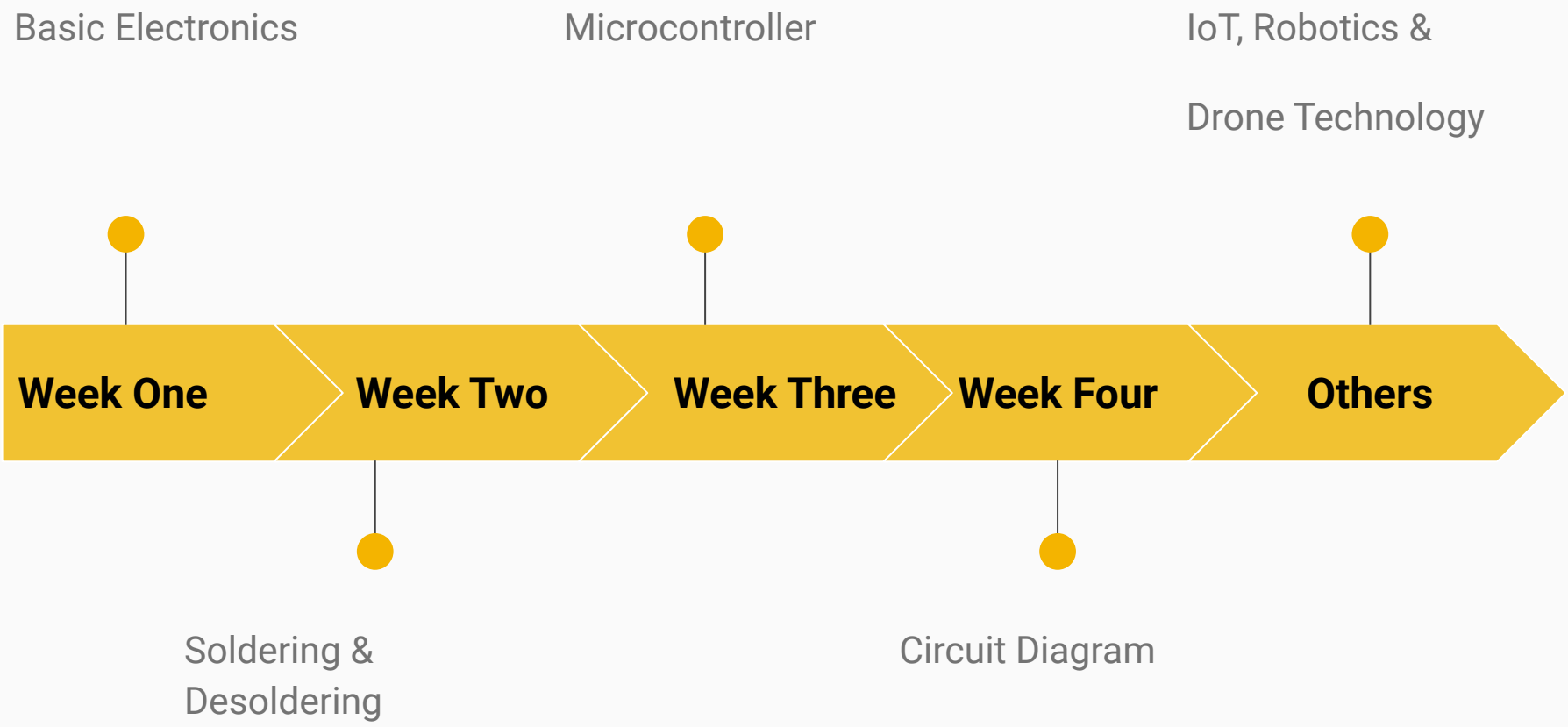
Coding Microcontroller

STEMSEL CODING

- HTML
- CSS
- JAVASCRIPT

ARDUINO CODING

- C++



PROPOSED TEACHING STRUCTURE

Internet of Things

- Smart Light
- Traffic Light
- Home Automation
- Alarm System
- Smart Attendance System
- Temperature Control
- Fluid Level Sensor

Robotics

- Robot Car
- Robot Arm
- Patrol Robot
- Domestics Robot
- Industrial Robot

Drone Technology

- Building & Coupling Drone
- Coding Drone using python or JS
- Flying , Controlling & Landing of Drone
- Educational Robot
- Industrial Robot

Success Stories

- Methodist Grammar School
- Abadina Grammar School
- Abadina College
- Ojoo High School

International Partners & Mentors

Dr Peng Choo
Director
STEMSEL Australia

Dr Miro Koteski
Chief Technician Officer
STEMSEL Australia