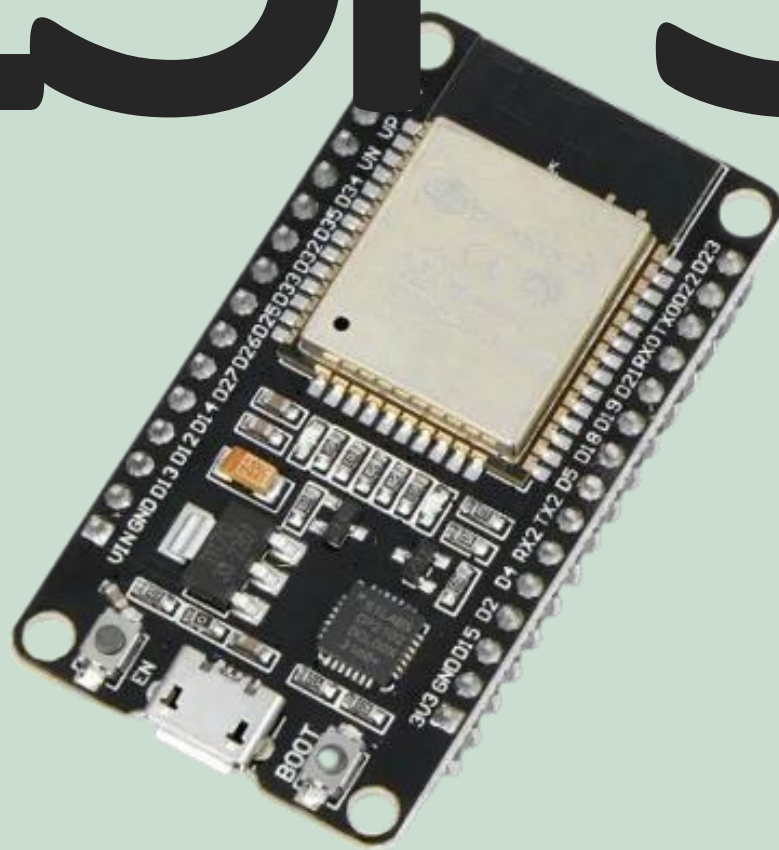



## IMPLEMENTATION OF ESP32 IN THE SECONDARY SCHOOL CURRICULUM

# ESP32



## WHY ESP32?

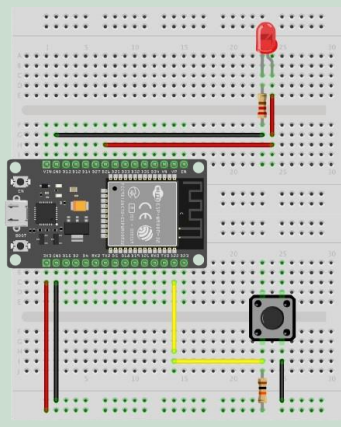
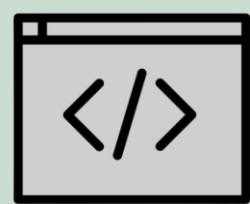
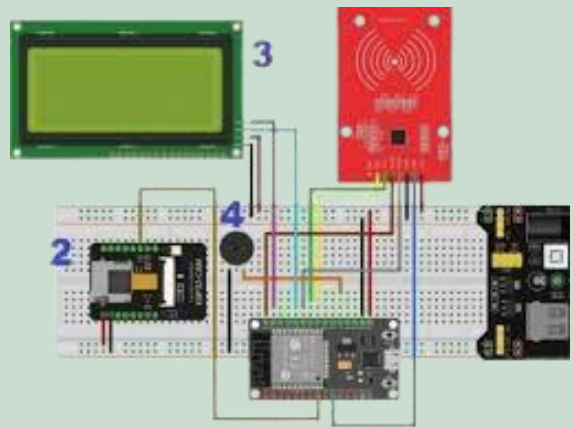
Wi-Fi / Bluetooth 

Arduino IDE 

Dual Core CPU 

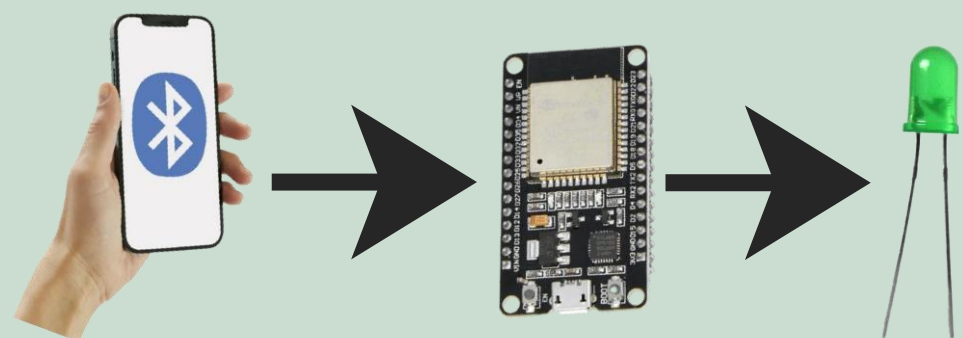
## METHODOLOGY AND COURSE OF WORK

Introduction to hardware → Programming → Project work

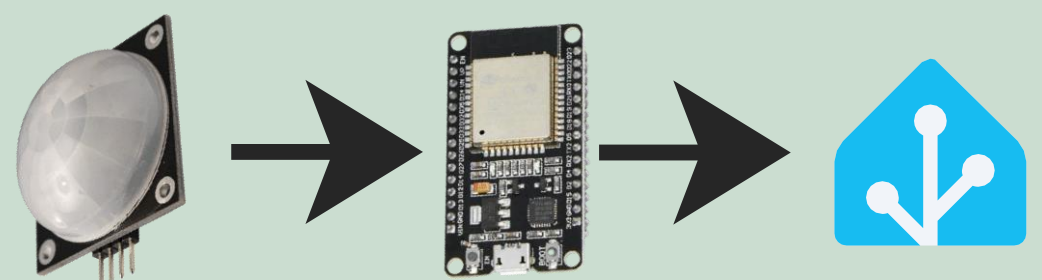


## PROJECT EXAMPLES

LED On/Off Control via Bluetooth from Smartphone



Motion Sensor Reporting to Home Assistant



## RESULTS AND FINDINGS

- Higher student engagement
- Improved technical skills
- Challenges encountered: battery driven designs require more planning

## CONCLUSION

The introduction of the ESP32 into the secondary school curriculum has shown that it is possible to successfully connect theoretical knowledge of electronics with practical IoT projects already at the high school level.