LAMPIRAN J

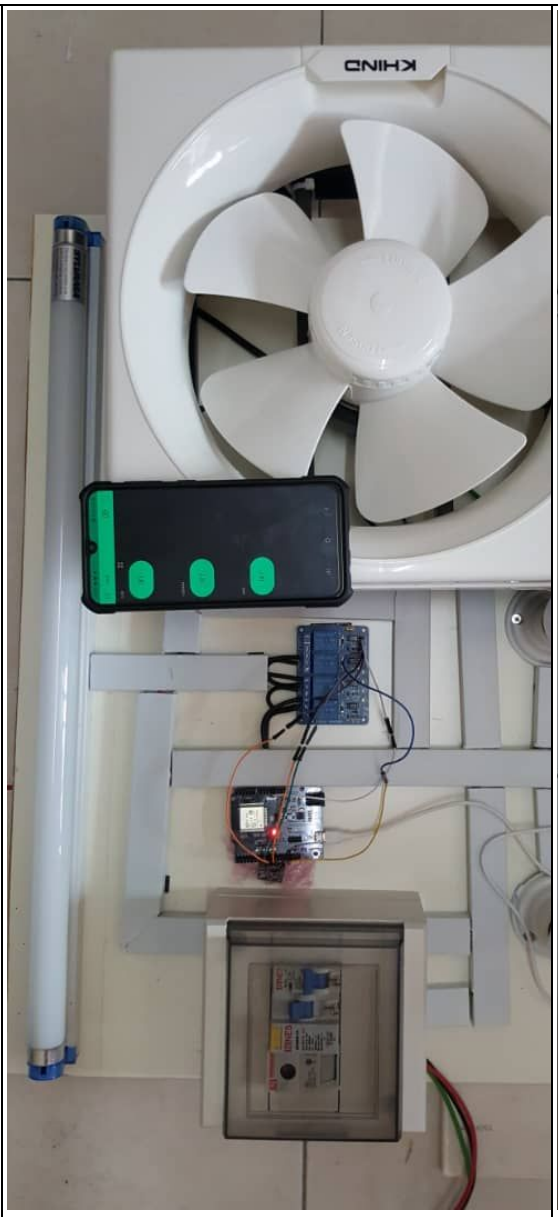
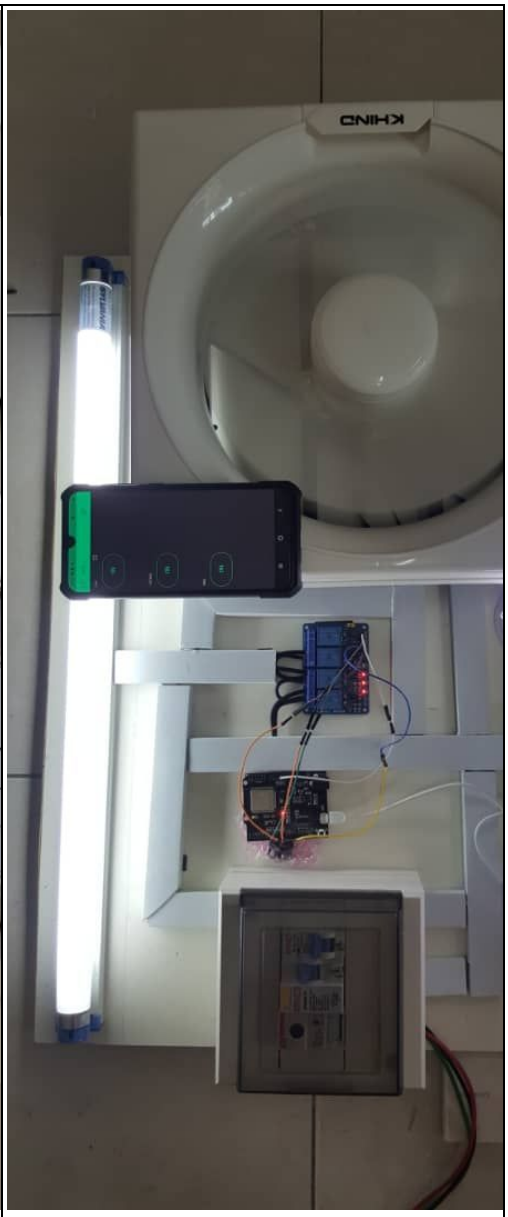
POLITEKNIK MALAYSIA

BORANG INVENTORI PROJEK PELAJAR

PERKARA	MAKLUMAT *INFORMATION*
Program *Program*	DTK
Jabatan *Department*	KEJURUTERAAN ELEKTRIK
Semester/ Tahun *Semester/ Year*	LIMA
Tajuk Projek *Project Title*	HOME AUTOMATION SYSTEM CONTROL USING ESP-32
Jenis Projek *Type of Project*	INOVASI
Kategori Kluster Penyelidikan *Category/ research Cluster*	TEKNOLOGI DAN KEJURUTERAAN
Ahli Kumpulan *Group member*	1. AZMER BIN AZAILE 991027-10-5751 2. MUHAMMAD AMIRUL SYAZWAN BIN ARSAD 990129-01-5971 3. 4. 5.
Penyelia *Supervisor*	EN ZAHRIM BIN ABDUL RAHMAN 680101018587
Penyelia Bersama *Co-Supervisor*	
Abstrak *Abstract*	The main objective of this project is to develop a home automation system control using Arduino board with ESP-32 Wi-fi module being remotely controlled by any Android OS and Iphone OS smart phone. As technology is advancing so houses are also getting smarter. Modern houses are gradually shifting form conventional switches to centralized control system, involving remote controlled switches. Presently, conventional wall switches located different parts of the house makes is difficult for the elderly or physically handicapped people to do so. Remote controlled home automation system provides a most modern solution with smart phones. In order to achieve this, a Wi-fi module is interfaced to the Arduino board at the receiver end while on this

	transmitter end, a application on the cell phone send ON/OFF commands on the application, the loads can be turned ON/OFF remotely through this technology. The loads are operated by ESP-32.
Keyword *Keyword* (max 5 word)	Home Automation System
Objektif Projek *Project Objectives*	-THIS PROJECT IS TO DEVELOP A HOME AUTOMATION SYSTEM BASED ON ENVIRONMENTAL MONITORING SYSTEM, WHICH CAN BE MONITORED FROM USER SMARTPHONE. -MAKE IT EASY FOR USER TO CONTROL SWITCHES WITHOUT USING SWITCHES AND CAN BE USED WITH FAR DISTANCE IN THE HOME. -CENTERED ON IOT(INTERNET OF THINGS) TECHNOLOGY IN THE CURRENT CIRCULATION. -IMPLEMENT A LOW COST, RELIABLE AND SCALABLE HOME AUTOMATION - SYSTEM THAT CAN USED ANY HOUSEHOLD APPLIANCE. -MAKE IT EASY FOR HANDICAPPED OR OLD PERSON TO CONTROL HOUSEHOLD APPLIANCE.
Skop Projek *Project scope*	THIS PROJECT WORK IS COMPLETE ON IN REMOTELY AND AUTOMATICALLY SWITCHING ON OR OFF OF AN ELECTRICAL APPLIANCE NOT LIMITED TO HOUSEHOLD APPLIANCES.THIS PROJECT WILL CONNECT WITH ANY ANDROID OS OR IPHONE OS. SO WE DECIDE TO USE BLYNK AS OUR PROJECT INTERFACE TO CONTROL THE ON/OFF BUTTON.BEFORE THIS WE DECIDE TO USE TELEGRAM BOTFATHER AS OUR INTERFACE, BUT WE DONT USE IT BECAUSE NOT FRIENDLY USER LIKE THE INTERFACE LAYOUT.THE ADVANTAGE OF BLYNK IS, THIS PROJEK CAN USE MORE THAN 1 SMARTPHONE TO CONTROL THE HOME APPLIANCE, BUT WITH ON CONDITION, USER MUST USE SAME ACCOUNT TO CONTROL THE HOUSE APPLIANCE.SO THE INTERFACE WILL BE SAME LIKE OTHER PHONE BECAUSE USE SAME ACCOUNT FOR BLYNK APPLICATION.FOR FUTURE FOR THIS PROJECT, DECIDE TO ADD OTHER FUNCTION LIKE CONTROL LAMP/BULB BRIGHTNESS, THIS ADDITIONAL IS MAIN TARGET FOR STUDY ROOM AND BEDROOM.

IP No		
Dapatan *Finding* (*500 words max*)	Too many Home Automation Control apps : - Without an understanding of how smart devices communicate, home owners regularly install unit which can only be controlled by the menufacturer's app. This means that after installing several devices, the home owner's smartphone can be swamped with multiple apps, all controlling different devices and all dedicated to controlling the home under normal living conditions. Are not friendly with the old people : - The old people who does not know the latest technological advances will not understand how to use Home Automation. Because it's difficult to teach them to use this apps about Home Automation. Limited distance : - The distance problem here is this project using Bluetooth instead of internet. However the Bluetooth distance is only 3 meters away. If used outside the home, it will not be active.	
Cadangan untuk kerja-kerja akan datang *Suggestion for future work* (*500words*)	IN FUTURE WE DECIDE TO MAKE LIKE ALL HOME AUTOMATION SYSTEM LIKE AUTOMATIC DOOR LOOK, LAMP AND BULB TURN ON WITH MOTION SENSOR (NOT FOR ALL ROOM SUITABLE), SWITCH ON/OFF AIRCOND	
Gambar berkaitan projek *Picture related to project* (700kb)		

		
Rating/Level	POLITEKNIK	

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Borang ini perlu diisi oleh pelajar dan dihantar kepada penyelia/ penyelaras projek dalam bentuk hardcopy dan softcopy (borang LAMPIRAN J) dan gambar hasil projek dalam format jpeg/bitmap) bersama laporan akhir dan hasil projek.