

THE DEVELOPMENT OF A HELP QUIT SMOKING
WRISTBAND FOR SMOKER IN SMOKING
CESSATION CENTER WITH THE
APPLICATION OF PIC

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**THE DEVELOPMENT OF A HELP QUIT SMOKING WRISTBAND
FOR SMOKER IN SMOKING CESSATION CENTER
WITH THE APPLICATION OF PIC**

By
GAN WOON KEONG

A thesis submitted in partil fulfilment of
the requirement for the award of the degree of
Bachelor of Applied Science (Physics, Electronics and Instrumentation)

**FACULTY OF SCIENCE AND TECHNOLOGY
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Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk **THE DEVELOPMENT OF A HELP QUIT SMOKING WRISTBAND FOR SMOKER IN SMOKING CESSATION CENTER WITH THE APPLICATION OF PIC** oleh **GAN WOON KEONG**, no.matrik: **UK 14688** telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Fizik sebagai memenuhi sebahagian daripada keperluan memperoleh Ijazah Sarjana Muda Sains Gunaan (Fizik, Elektronik & Instrumentasi), Fakulti Sains dan Teknologi, UMT.

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DECLARATION

I hereby declare that this thesis entitled The Development of a Help Quit Smoking Wristband for Smoker in Smoking Cessation Center with the Application of PIC is the result of my own research except as cited in the references.

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THE DEVELOPMENT OF A HELP QUIT SMOKING WRISTBAND FOR SMOKER IN SMOKING CESSATION CENTER WITH THE APPLICATION OF PIC

ABSTRACT

Nowadays a lot of people are addicted to cigarettes and it has brought a lot of health problem to the smokers like lung cancer and so on. In order to help those smokers to quit from smoking, the Help Quit Smoking Wristband is built as a device to remind the smoker to stop smoking whenever they try to smoke. With the application of PIC and the use of infrared sensor, this wristband is able to show the number of cigarettes that the user has taken so far. Besides that, it can also display an encourage message in the LCD and the buzzer is on whenever a cigarette smoke is being detected. At the same time, this wristband able to differentiate different type of smoke so that others smoke will not affect to this smoke detector. A void button is build to help the user to void the counter if the cigarette that being detected is not from the user himself. Therefore, by using the Help Quit Smoking Wristband, smokers will be able to quit from smoking.

**PEMBANGUNAN JALUR PERGELANGAN MEMBANTU BERHENTI
MEROKOK UNTUK PEROKOK DI PUSAT PERNAMATAN
MEROKOK DENGAN MENGGUNAKAN
APLIKASI PIC**

ABSTRAK

Kebelakangan ini ramai orang ketagih terhadap rokok. Fenomena ini telah membawa banyak masalah kesihatan seperti penyakit barah paru-paru dan sebagainya. Untuk membantu perokok menghentikan ketagihan merokok, Jalur Pergelangan Membantu Berhenti Merokok telah pun dibina sebagai sebuah alat untuk mengingatkan perokok untuk berhenti merokok apabila mereka merokok. Dengan penggunaan PIC dan penderia inframerah, jalur pergelangan ini dapat menunjukkan bilangan rokok yang telah dihisap oleh pengguna setakat ini. Selain itu, jalur ini juga dapat memaparkan pesanan di atas paparan hablur cecair (LCD) untuk menggalakkan pengguna berhenti merokok setiap kali asap rokok dikesan oleh penderia inframerah. Selain itu, penggera akan berbunyi setiap kali asap rokok dikesan. Pada masa yang sama, jalur pergelangan ini juga dapat membezakan jenis asap yang berlainan supaya asap yang lain tidak mempengaruhi operasi projek ini. Satu butang khas untuk mengurangkan pembilangan asap rokok yang dikesan juga disediakan untuk kegunaan pengguna untuk mengurangkan bilangan tersebut jikalau asap yang dikesan bukan daripada pengguna tersebut. Oleh itu, dengan menggunakan Jalur Pergelangan Membantu Berhenti Merokok, perokok akan dapat berhenti daripada merokok.