

## 7.1: Project Poster Sample

The students prepare a Poster of size 22.5'' x 34.5'' which is placed on an open display and reviewed by the Supervisory Committee.



### Intelligent Therapeutic

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#### Abstract

We conclude that the project is important for the elderly and people who use treatments and have difficulty remembering when to take treatment, and it is useful for non-treatment users in following up on their patients.



#### Introduction

This report presents the details and workflow of the "Smart Therapeutic Box" graduation project carried out by the Computer Engineering Department at Umm Al-Qura University in Makkah Al-Mukarramah, Kingdom of Saudi Arabia. The project aims to develop an advanced device that facilitates the medication management process, especially for individuals who suffer from chronic diseases or who take multiple medications. The Smart Therapy Box is designed to address these errors associated with medication administration and non-adherence. This project provides an overview of the project objectives and outcomes and also discusses the components of the device ..

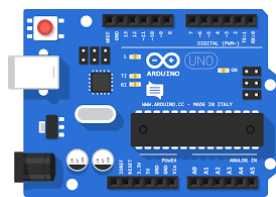
#### Process (Methodology)

This is our way of summarizing the project, and that was by using Harrower tools and applying what was studied by integrating it with life in the form of developing the medicine box by linking it to technology



#### System Analysis & Design

The analysis and design of the system consisted of connecting the Arduino control device, attaching its accessories to a wooden board, connecting the Wi-Fi piece through programming, and defining the device through software codes that help us as engineers know the maintenance of the device and know the internal programming.



#### Technology Utilized & Rationale

The technology used is to exploit the Arduino device to program the smart medicine box and connect it to a bot in the Telegram application, where notifications and alerts are sent to the bot and it alerts the user whether the treatment was taken or not at the specified time. This will be developed in the future via text messages or mobile application..



#### Results

The result is that the smart treatment box is an innovative solution that brings about development in medication management. By addressing challenges such as missed doses, non-adherence and incoming errors, it enhances safety and efficiency. It redefines healthcare by improving medication compliance and results

#### Conclusion

The Therapeutic Smart Box project is a major advance in healthcare, providing an effective solution to medication management challenges. Its innovative design improves medication adherence, reduces errors, and improves patients' quality of life. As an integral part of future healthcare, this technology can significantly improve health outcomes and patient well-being globally.

