|  |  |
| --- | --- |
|  | **AIR UNIVERSITY**  **Multan Campus** |
| **Department of Computer Science and Engineering** |
| **DLD Project Proposal** |

|  |  |
| --- | --- |
| **Project title: Fire Alarm** | |
| **Class: BSCS-A**  **Semester(2nd)** | **Department: BS(CS)** |
| **Project Participants** : | |
| Student 1:Abdul-Hanan (183204)  Student 2:Abdul-Rehman(213028)  Student 3:M.Zeeshan(213028) | |
| **Project Description :** | |
| In this project, we will make a simple fire detector alarm circuit using BC547 transistor and IR detector LED on Breadboard. This circuit can easily detect any fire nearby and accordingly start the buzzer.  **Components :**   * BC547 transistor * Breadboard * Buzzer * Jumper Wires   **Project Principle :**   * The fire alarm working principle is based on thermistor used in the fire alarm circuit. This fire alarm circuit is used to identify and indicate an increase in temperature beyond certain value (temperature of an enclosed area). | |

|  |
| --- |
|  |
| **Project Submission Date:** 09/June/2022 |
| **Additional Information:**  The Fire Alarm is a device that alerts the user if any fire is detected. Further, it sounds a ‘siren’ if the fire is within a certain distance of the device. The distance of the fire can be estimated using the LED lights with green being safe, yellow being close by and finally red representing danger.   * 220 ohm resistors (4) * [LEDs](https://www.robotshop.com/ca/en/5mm-colored-led-pack-50pk.html) * [5V Buzzer](https://elmwoodelectronics.ca/products/buzzer-5v-breadboard-friendly?variant=7679515971%C2%A4cy=CAD&gclid=CjwKCAjwiLGGBhAqEiwAgq3q_mGbbSFt5UIEYhwBSDj3P3qMnS_hBG5jNwRF_6mF4BuA3eih4Xp44RoCbCkQAvD_BwE) or [Piezo Buzzer](https://www.amazon.ca/Buzzer-Electronic-Continuous-Sounder-Length/dp/B07DSC38VK/ref=sr_1_3_sspa?dchild=1&keywords=piezo+buzzer&qid=1618006199&sr=8-3-spons&psc=1&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUEzRjNIUUpCTlA4NjBaJmVuY3J5cHRlZElkPUEwODY0NzU4M1FJN1RZMUFaQjk3TiZlbmNyeXB0ZWRBZElkPUEwOTE1NDI4MkZRRFFLNTg0T1RRJndpZGdldE5hbWU9c3BfYXRmJmFjdGlvbj1jbGlja1JlZGlyZWN0JmRvTm90TG9nQ2xpY2s9dHJ1ZQ==) (1) * [Gas Sensor](https://www.robotshop.com/ca/en/mq-5-gas-sensor.html) (1) * [Small Breadboard](https://www.robotshop.com/ca/en/400-tie-point-solderless-interlocking-breadboard.html) (1) * [Jumper Wires](https://www.robotshop.com/ca/en/65-22-gauge-assorted-jumper-wires.html) |
| **Instructor Signature: Date:16/May/2022** |