

## **ABSTRACT**

Mixers have become an important tool in supporting pastry production, making a significant contribution in mixing ingredients efficiently and producing perfect textures. Mixer is used to mix pastry dough, beat ingredients, and produce the right consistency in making pastry. The tools in this final project have several sensors that can help anyone who wants to make pastry dough. This tool has a rotary encoder sensor to count the number of turns that have been made by the mixer, a flying fish MQ135 gas sensor to detect gas released by the yeast, an infrared sensor to detect if the dough has risen in the bowl, a DS18B20 temperature sensor to calculate the temperature of the beaten eggs and a timer that has been coded into Arduino IDE. Results and info from all sensors in the mixer tool will be displayed on the OLED layer measuring 128x64 pixels.

Keywords: Mixer, DS18B20 temperature sensor, Rotary Encoder Sensor, Flying Fish Gas Sensor, Pastry