

# D.A.D.D.S. Automated Bartender

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## PROBLEM STATEMENT

DUIs and drunk driving have a negative impact on society. Our team created a device that will make alcohol users more aware of their intoxication levels and reduce drunk driving.



Figure 1: Front of Prototype

## BACKGROUND

For as long as we can remember society has faced the effects of drinking and driving. People tend to lack the awareness of how intoxicated they are or may get when consuming alcohol. Our system will combine the fun of making cocktails with the responsibility of checking your BAC level before you can get in your vehicle. D.A.D.D.S. Automated Bartender combines a cocktail maker, breathalyzer, and locker system to help prevent people from drinking and driving.

## SUMMARY OF WORK

Raspberry Pi is used as our main microcontroller, it is used by the GUI, breathalyzer, drink dispensing pumps, and lockers. The MQ3 is acting as the breathalyzer, it output an analog output into an ADC that converts the analog output to a digital output which is then sent to the Raspberry Pi. The peristaltic pumps and solenoid lockers are connected to a relay board which is connected to the Raspberry Pi. The RFID reader is attached to the top of the Raspberry Pi to read RFID tagging information. The project is coded in the Python programming language.

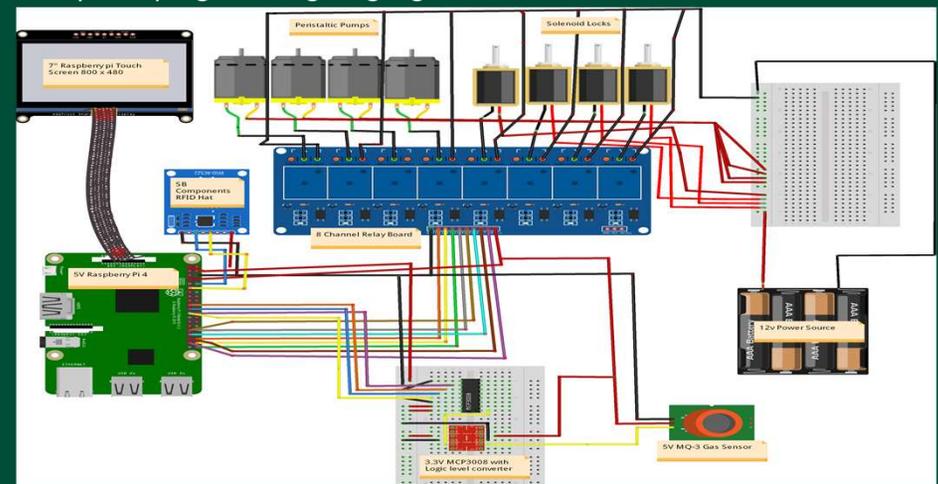


Figure 2: Project Schematic

## IMPACT ON COMMUNITY

- D.A.D.D.S. Automated Bartender can be used to monitor alcohol consumption in bars, restaurants, parties, or anywhere alcoholic beverages are served.
- Limits overconsumption of alcohol with the breathalyzer feature.
- Stores keys in a safe and secure location while drinking.
- Reduce driving under the influence when coming out of a bar