**Describe your project.**

our idea is to create a specialty Point of Sale (POS) system that could be sold and marketed to any food truck owner.

**What problem or need does it solve?**

The software will track sales, inventory, *(EXPAND THIS)* & it would offer the potential to cut labor by at least one person per truck.  This would be the main advantage our POS would have over existing restaurant POS.

**What perceived tangible or intangible benefit can you foresee once this project is implemented?**

We could initially sell it as a software and hardware packaged combo, like all modern restaurant POS. This is called a SaaS or software as a service. We would sell the package for almost no profit, but then charge a monthly fee based on sales. Something like 0.5% of total sales, or maybe 2% of sales though the smart features.

Most food trucks staff 2-4 people, so the software would potentially cut labor anywhere from 25-50%.

We could then invest a portion of the proceeds from the sale of the package into starting our own food truck business. If we became the users of the POS would would envision adding more ideas and features to the POS system.

Increased operational efficiency

More customer engagement

Lower labor costs

Real-time inventory analytics

** What technologies do you plan to use to complete this project?**

We would do most of the programming though Python & Tkinter. SQL for database

We want to attempt to run the entire software package on a raspberry pi, running a linux distro.

None of us have RaspberryPi 5’s, but we do have a spare Pi4.  At worst we would be looking for a more powerful SBC.

*(EXPLAIN the capabilities of a Pi3, the upgrades with the pi4, and maybe some info on a pi5, just to fill time)*

A smaller device like this should be able to be powered by the food truck's battery/alternator.

We may add touch screen displays. (I would say “may” so when we DO, it looks better)

*(WE SHOULD ADD A PICTURE OF A RASPBERRY PI TO THE SLIDES)*

** Provide a vision of the finished application.**

Our software aims to give food truck businesses a POS system to help speed up the process of order taking and drive efficient operations.

QR codes linking to the ordering website,

Increased operational efficiency

Allows for food truck businesses opportunities a larger digital footprint

We would also like to add order ahead with estimated pickup times and voting for tomorrow's daily special.  These are not common features with a food truck.

A food truck business will setup the POS running on the trucks power supply, customers will then be able to place their orders speeding up the order-taking process. During the completion of their order they will be given the optional choice to vote for the next special provided by the business.

The order will be sent to a display inside the truck so the employees can begin preparation in a timely fashion. Inventory counts will be tracked and updated as the orders are completed allowing for employees to monitor their needs.

** How and who will you gather requirement.**

We can interview food truck operators and restaurant operators about the features they use the most, and would request.

We could also survey food truck customers for their input. The customer is always right (most of the time).

** What risks do you see in pursuing this project?**

Restaurant POS systems are constantly evolving and adding new features. We could spend years working on this without catching up to some of their modern features.

Reliance upon prefabricated hardware

Maintaining software would require the business to send back the hardware for software updates and bug fixes

Initial cost of hardware falls upon us. Buying in bulk always make sense, but investing too much in the startup could leave us with excess hardware that will soon slower than the newest offering.

**Additional Considerations:**

Building a solid prototype and being able to test it is a large part of this project. We would need to figure out correct displays for connecting to the Raspberry Pi.

Understanding what current systems food trucks use will greatly help our design.

Software will need to be applicable to all types of food trucks.