

PDR Recipe



PDR Rules

- 20 Minutes of Presentation
- Reviewers May Not Interrupt Presentation
- Evenly Divided Among Team Members

- 20 Minutes of Questions
- Advisor May Be Present for the PDR, But May Not Speak During Presentation or Questions

PDR Questions



Is your project
impressive?



Do your evaluators
have advice?

What will you deliver
for MDR?

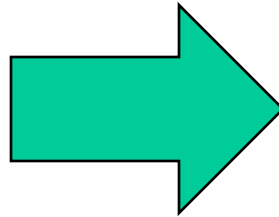
Practice, Practice, Practice



Four speakers is 20 minutes is a lot of handoffs. Practice at least 2 times in front of advisor.

Recipe for a good PDR

Ethel
Hello Dollies
2 cups graham cracker crumbs
1 stick melted oleo
Combine - Press in (8' or 9") pan
Sprinkle on crust
3 1/2 oz coconut
6 oz choc chips
1 C nuts
Drizzle over top
1 can Eagle Brand milk
Bake 30-45 min - 350°



What follows is a recipe for a good presentation. It is a guide, but you should adapt it to your project.

Team Name



Member One
EE



Member Two
CSE



Member Three
CSE



Member Four
EE

What is the Problem?



- Lemonade Stands Teach Entrepreneurship
- It is hard to run a lemonade stand because
 - Lemon Prices
 - Government Regulations
 - Low Price of Lemonade



How significant is the problem?

Small Businesses

- Employee Over Half of US Employees
- Generated 64% of New Jobs in Last 15 Years




Actual Forbes Story
Not Actual Forbes Cover

Police are shutting down
unpermitted Lemonade
Stands

Context: Effect on Individuals



 Give children a chance without hurting small business people.

Context: Effect on Groups



Must produce a safe product.



Requirements Analysis: Specifications

- Learning Experience for Children
- Safe for Children to Operate
- Safe for consumers to Drink Lemonade
- Make Enough Money to Buy Permits



Requirements Analysis: Inputs and Outputs

Inputs

- Child Labor
- Lemons
- Water
- Sugar
- \$500

Outputs

- Happy Kids
- Happy Customers
- Money



Design Alternatives



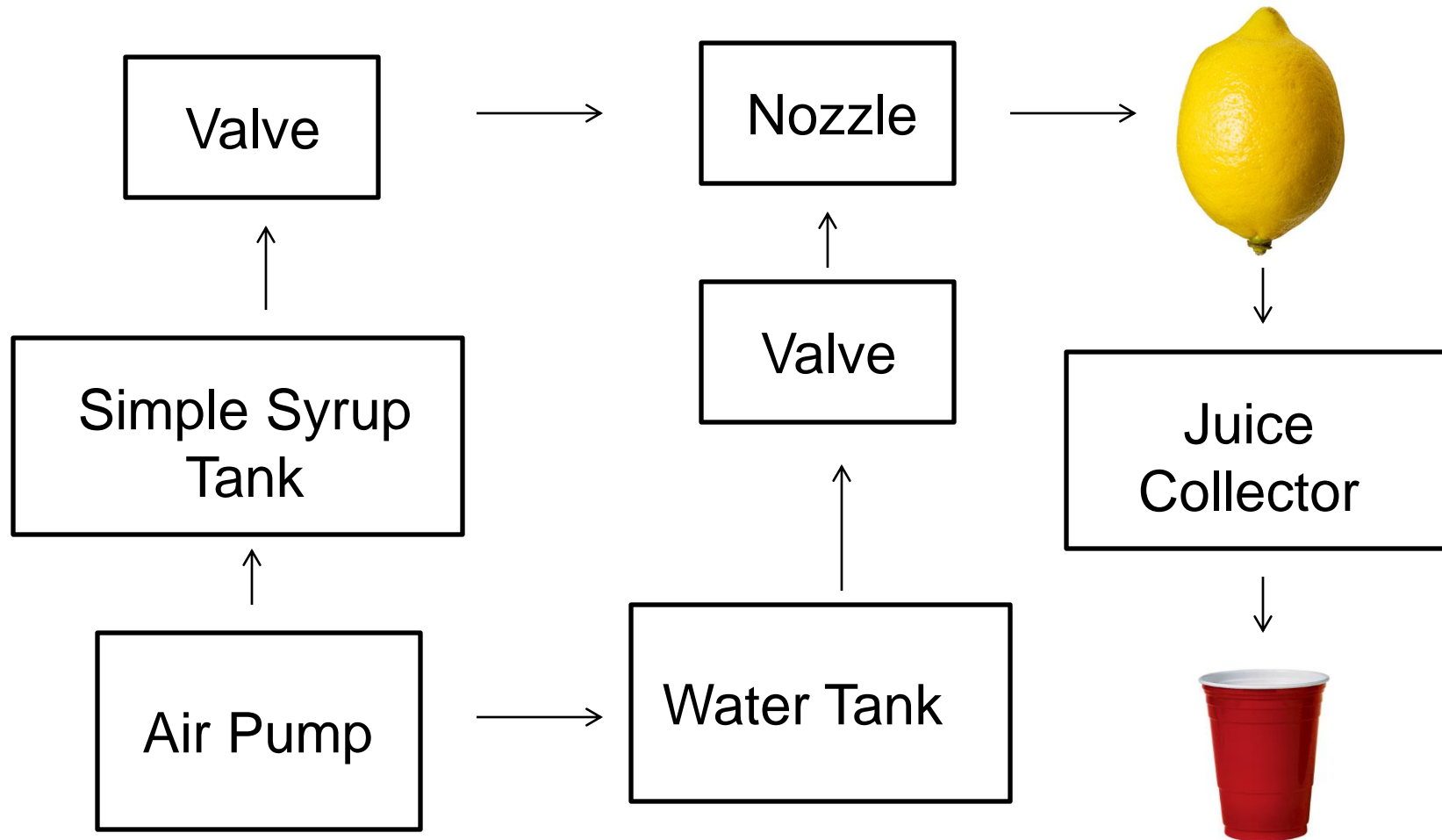
Our Solution: The Exploding Lemon



Increase Value
by Making
Lemonade an
Experience.



Our Solution: Block Diagram



Block 1: Nozzle

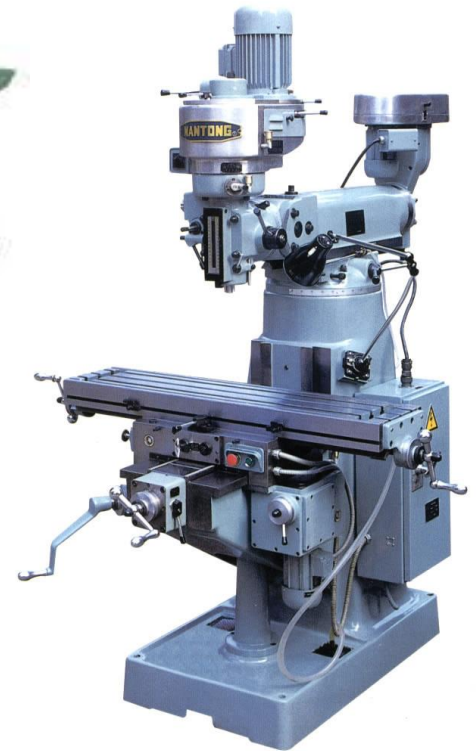
Team Member Four

Requirements:

- Holds Lemon
- Injects Liquid
- Food Safe



Block 1: Nozzle Work Plan



Block 2: Juice Collector



Team Member Two

Requirements:

- Collects Juice
- Protects Spectators
- Enables Viewing of Explosion
- Food Safe

Block 2: Juice Collector Work Plan



Plexiglass
Globe



80/20 Framing

Block 3: Pump and Tanks



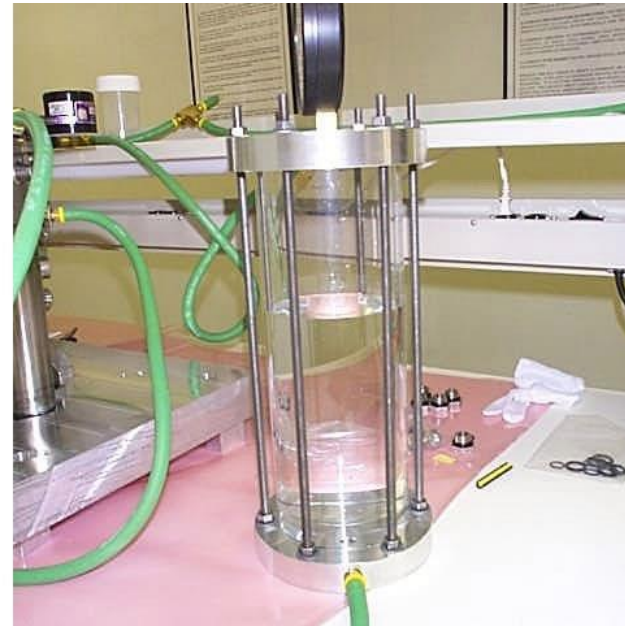
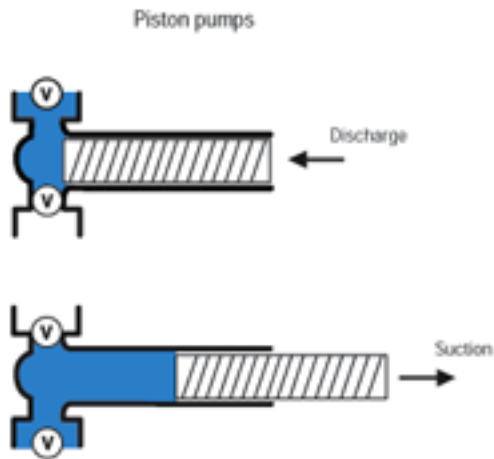
Team Member Three

Requirements:

- Food Safe
- Easy to Clean
- Constant Pressure
- Battery Powered
- Makes 200 Lemonades



Block 3: Pump and Tanks



Block 4: Valves and Control



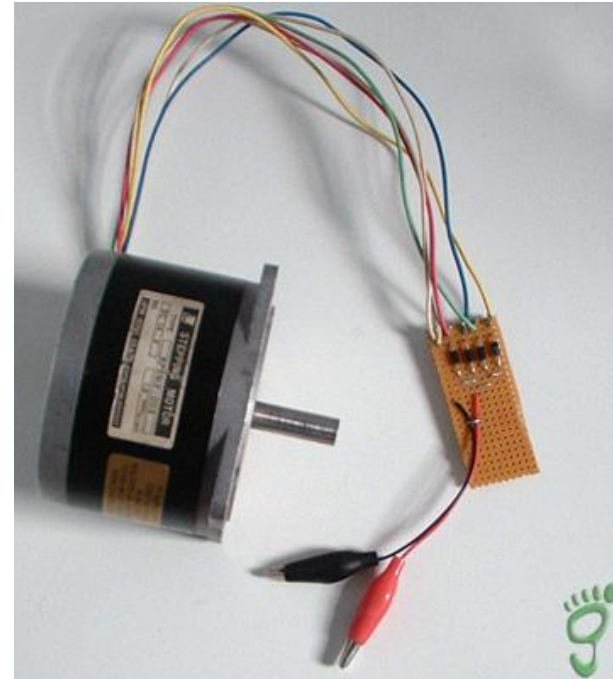
Team Member One

Requirements:

- Food Safe
- Push Button Control
- Easy to Clean

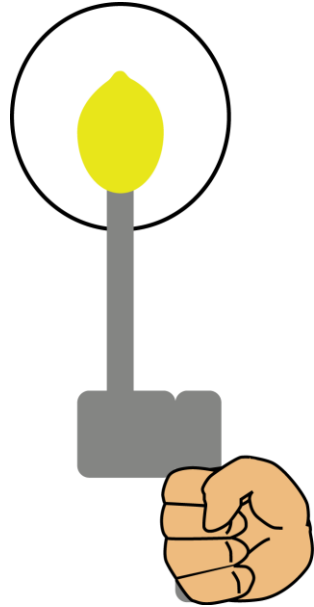


Block 4: Valves and Control



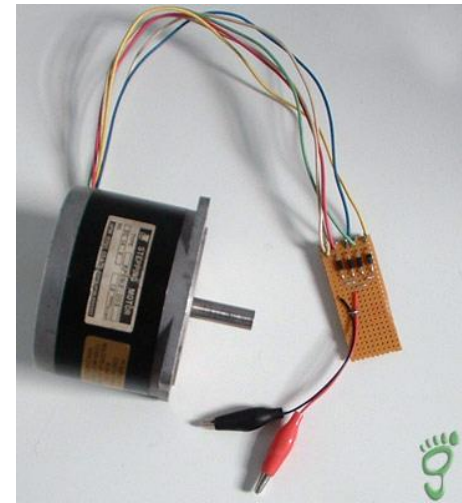
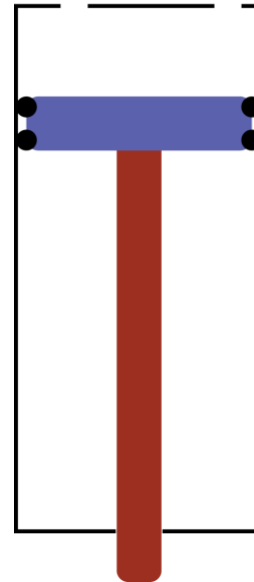
MDR Deliverables

Safety Globe



Exploding Lemon
Manual Demo

Food Grade Pump



Stepper Motor
Control