Introduction
Last semester the team worked with J&L Machine and Fabrication to identify the key areas to improve in order to increase factory efficiency. These areas were determined to be Material Handling, Press Brake, and Welding. The team followed a DMAIC structure to define, measure and analyse time series data taken from observations on the factory floor in order to identify these areas. This semester the team focused on developing and suggesting improvements to help improve these areas.

Materials
Based on data analysis gave improvements to improve materials flow:
1. Initial Storage system
2. Color coding materials
3. Inventory Handling
4. Future Scalability

Materials
- Replications: 100
- Time Units: Hours
- Average: 322

Press Brake
- Mapped out the Current Operator's Abilities to determine areas of improvement and possible training opportunities.
- Developed a Standard Operating Procedure to guide the Press Brake Operators through the process.
- Created an Arena Simulation model to represent the process and show the improvements after the implementation.

Welding
- Proposed New Welding Layouts

Conclusion
Overall, the team was able to accomplish the goal of identifying and correcting inefficiencies on the J&L factory floor. The next steps of this project would have been to monitor these changes as they're implemented and re-test to compare productivity rates.