## **Software Design and Engineering**

## **Lab Document**

High Level Purpose Statement:  Experimental Design:	I want to make a To Do list app using Gradle, Spring Boot, Node.js, React, PostgreSQL, and Docker to explore how Docker can containerize everything and make it simple for my peers to run my project.  I have already used all of these technologies in this class, so I will mostly have to reference past lab projects, and the internet to
	troubleshoot any issues with how these services will interact with one another.
Resources Available:	Docker - <a href="https://docs.docker.com">https://docs.gradle.org/current/userguide/userguide.html</a> Java - <a href="https://dev.java/learn/">https://dev.java/learn/</a> PostgreSQL - <a href="https://www.postgresql.org">https://www.postgresql.org</a> Spring Boot - <a href="https://spring.io/projects/spring-boot">https://spring.io/projects/spring-boot</a>
Time Estimate:	I estimate spending around 6-8 hours for this project. I expect that my main issues will be getting react and springboot to communicate with the database without any issues.
Experiment Notes:	I love how simple Docker makes it for me to package everything into a container so that someone else can download my project and run it with minimal effort.
Results:	I was able to create a basic app with CRUD operations that I will use as the foundation of my final project.
Consequences for the Future:	I am getting better and solving issues that arise with trying to integrate multiple technologies into one app.