

# Software Design and Engineering

## Lab Document

<b>High Level Purpose Statement:</b>	The goal for this lab is to set up Docker containers/images with the SaaS boilerplate project I created for the previous lab.
<b>Experimental Design:</b>	<b>NextJS, Supabase, Stripe, Resend, ShadCN, NextAuth, Docker, Cursor Code Editor (Built upon VSCode)</b> <ul style="list-style-type: none"><li>• I will use Docker desktop to create an image using environment vars.</li><li>• I will use docker composer to mock a simple container</li></ul>
<b>Resources Available:</b>	Primary sources for boilerplate examples. Tech stack inspired from ShipFast. <a href="https://github.com/ixartz/Next-js-Boilerplate">https://github.com/ixartz/Next-js-Boilerplate</a> <a href="https://shipfa.st/">https://shipfa.st/</a>  Docker sources: <a href="https://www.youtube.com/watch?v=gAkwW2tulqE">https://www.youtube.com/watch?v=gAkwW2tulqE</a>
<b>Time Estimate:</b>	The project will take me about 5 hours to learn the basics of docker and to set up the dockerfiles within the saas-boilerplate.
<b>Experiment Notes:</b>	<ul style="list-style-type: none"><li>• Docker is cool in the fact that you can run a project on any machine</li><li>• Running docker and setting up is actually very easy to do.</li></ul>
<b>Results:</b>	The project now properly runs using NPM and Next.js to provide a fully functioning SaaS boilerplate. It also uses Docker to create an image of the site.
<b>Consequences for the Future:</b>	Nothing I can think of, please provide feedback for room in improvement.