

# Senior Full Stack Engineer Case Study

We would like to invite you to a small case study. We'd like you to create a full stack web application utilizing the technologies you would use if you were to create a baseline product and order management system.

We don't expect you to deliver an end-to-end, cloud deployed solution here. We mostly care about your code, the decisions you make, and how you explain your thought process.

This case study shouldn't take longer than a couple of hours to complete. But feel free to go the extra mile. Additionally, feel free to make assumptions if you need to. Creativity is encouraged!

The backend should:

- Create and update products with price and stock quantity.
- Create orders with products and quantity.
- Update orders with shipping information, e.g. tracking company, tracking number.
- Update orders with status, e.g. processing, canceled, delivered.

The frontend should:

- Be built with React.
- Have some dynamic styled components (like drop down or popups)

The infrastructure should:

- Be built on AWS.
- Have an architecture diagram of how the AWS services interact with one another.
- Documentation on why you chose these AWS services.
- Running and deploying infrastructure isn't necessary. Terraform or other IaC is acceptable too – but optional.

We care about:

- Scalability. Think of it as if they were millions of users and products.
- How you explain your solution, with its opportunity and its known limitations.
- Your choice of technologies (hosting, caching, language, frameworks, styling).
- Code readability
- Documentation

How to submit:

Please share a link to the public Github repository when completed. The repository should have sufficient documentation on how to clone the project and build and run the environment locally.