root

Simulation Day: Software Engineer

Nathan Floor

6 November 2019

OVERVIEW

We're super excited about your Sim Day coming up on 6 November! We have a specific challenge we'd like you to help us solve which will help us optimize our work processes. At the same time, the Sim Day will give you an opportunity to do your best work, show us what you've got and experience what it is like working with us.

Teamwork is a fundamental part of how we operate at Root, so ask questions and be open to feedback. If you're unclear about any aspect of the simulation challenge, please ask.

TASK DETAILS

Once a month, our engineering team have to manually send out invoices for group policies on the Root platform. Group policies are policies that cover a whole list of people. For example, as an employee benefit, a company might have a group funeral policy for all their employees.

The problem
At the moment, the invoice generation is very tedious. It requires the team to extract data from the platform, manually edit the relevant details on the invoice template in Sketch, then save it to PDF and send off to the relevant customer.

The challenge
Your task for the day is to automate this work. You will be using the Root Insurance API to extract the required data, and build a tool (within our existing codebases) that allows our operations team to navigate to a specific policy, and click a button to generate and send the invoice. The operations team should be able to input a date range for the invoice, and an email address to send the invoice.

Resources
The task will require a bit of context on our code base, but our team will be working with you throughout the day as required.

You may find it useful to recap and/or research the following before the day:

- Node + Express
- React
- TypeScript (this doesn't need to be extensive, but will help in understanding and working with the existing code)
- [ReactStrap](we base the majority of our UI components off of this library)

SCHEDULE FOR THE DAY

Time	What	Who's involved	Notes
Before the day	Pre-sim day preparation	Nathan	Read through the briefing and come up with solutions to the problem statement to present in the first session of the day.
08:00 - 08:30	Intro & coffee briefing	Nathan, Allister & Jason	We'll show you around the office and explain the structure of the day over coffee.
08:30 - 09:30	Demo existing flow & brainstorm solutions	Nathan, Allister, Mia & Jason	Take control of the white-board to present your proposed solutions to the sim day challenge. We'll discuss how to approach a selected solution to ensure you can deliver a workable MVP by the end of the day.
09:30 - 10:00	Setup, plan, and work on challenge	Nathan	
10:00 - 10:20	Standup	Whole team	
10:20 - 12:00	Work on challenge	Nathan	
12:00 - 12:30	Check-in	Nathan & Allister	We will chat through your current approach and progress and provide guidance and ideas if needed.
12:30 - 13:15	Lunch	Whole team	
13:15 - 16:00	Work on challenge	Nathan	
16:00 - 17:00	Show & tell	Nathan, Allister, Jason & Louw	This is your chance to show off your MVP solution and discuss how you approached the challenge
17:00 - 17:30	Unframed 🍦	Whole team	

17:30 - 18:00	Sim day wrap up	Nathan & Louw	We would like to ask you for feedback on the sim day process as we're always trying to improve. We will also have time for any questions you may still have for us.