SOFTWARE ENGINEER - TeCHNICAL Test

Thank you for your application. We’re excited at the potential of new talent joining us aboard our magic bus! We are looking for individuals whose energy and skills will help us move faster, think bigger and dream brighter.

Let’s get started!

**ABOUT US:** Resonate’s key product is an enterprise SaaS Customer Experience Management (CEM) platform that allows companies to measure and systematically increase their CX measurement scores.

Customer feedback is at the base of a CEM platform. Without this data, we cannot enable the frontline teams with actionable insights or allow our clients to improve customer experience at a strategic level. It is essential that both the quantity and quality of feedback data remains high.

*To learn more about our product range and clients, please visit our website:* [*www.resonatesolutions.com.au*](http://www.resonatesolutions.com.au)

**OUR CUSTOMERS:** Looking at our current client list you will get a better understanding of the size and type of organisations we work with. We are not domain specific, everyone has a customer, so everyone benefits from a CEM strategy. The market is huge and growing. Our customers are organisations that have a very strong customer focus and want to use it as a strategic lever to gain competitive advantage.

**OUR PRODUCT/OFFERING:** Resonate’s SaaS CEM platform allows organisations to:

1. **Listen** – Collect feedback
2. **Act** – Action this feedback
3. **Discover** – Get insights through analytics
4. **Improve** – Drive organisational culture change through tools that enable customer centricity

Hopefully this gives you a bit more of an idea of what it is we do. Now let’s jump into the technical assessment!

# **Q1: Level 200**

Our national retail client has a 200-store branch network, they want to do a big promotion give-away. To participate, customers must enter their email address with a unique code *(which is printed on their dockets)* into OUR website. No store has more than 10,000 customers/day.

The code must be no more than 9 characters long, and we have to be able to get the following information out:

* Which store does the code belong to?
* Which date was the code issued?
* Which customer (transaction) did the docket belong to (a number starting again at 1 every day)

**Consider how easy it is for the end users to read/copy the code into the website and how we can prevent cheaters.**

Write the methods for generating+decoding this unique code that will be printed on the docket by forking the following Pen: <https://codepen.io/resonatetest/pen/qwGwqj>

# **Q2: Real world problem**

Write a **responsive** “Contacts” application that allows the user to browse their contacts:

* Make use of <https://jsonplaceholder.typicode.com/> (**/users** are the contacts)
* Use either VueJS, Angular or React
* Make it visually appealing
* No need to implement Create/Update/Delete
* Provide instructions on how to run the code