

Engineering Challenge - Web Front-End

Scenario

You are a new hire for a small startup, and as you ramp up they'd like you to build the web front-end for the "Address Book" portion of their SaaS offering. Users are 70% mobile and 30% desktop. Requirements are thin, but that means implementation flexibility is large!

Your web client should display a list of people from the address book. The user should be able to select a person from the list in order to see more details about that person.

Please use the API endpoints from <https://randomuser.me/> to request lists of users. Documentation can be found at <https://randomuser.me/documentation>, and please use the seed 'nuvalence'.

The application should do the following:

- Display a list of ten people from the address book
- Able to select a person from the list and navigate to the details page
- The detail page should display at least the first name, last name, and phone number

We will be reviewing your creative solution and looking at the following areas:

- Clean, readable, documented code
- Angular/React best-practices
 - Appropriate use of Components and Component hierarchy
 - Use of higher-order functions, function composition
 - Correct use of basic data structures and abstractions
 - Unit test coverage
 - TypeScript Types, small functions, good use of base types
- Page load optimizations (package size, minimizing requests, optimized images if any)
- Appropriate use of semantic HTML
- Considerations for accessibility
- Responsive page flows with multiple breakpoints

Bonus points for:

- Pagination
- Management of asynchronous/concurrent execution through high-level abstractions
- Use of more advanced manipulations (map, reduce, apply, etc.)
- Very high lighthouse scores for performance and accessibility
- Deployments to any cloud infrastructure
- More elaborate layout and use of images
- CSS Animations

Deliverables

Please take your time to deliver a quality solution that shows your ability. Include:

- A **README** file that contains:
 - Deployment / running instructions. If possible, assume that we're running this on a Mac
 - A summary of the assignment
 - Your overall approach
 - What features you've implemented
 - Given more time, what else would you have liked to complete and how long would it have taken you? Or, what would be the next steps to improve this implementation?
- Production-ready code that:
 - Is checked into a git repository and shared with us (Github, Gitlab, Bitbucket, etc.). We should be able to run the code.
 - Has no debug logging
 - Implemented standard NPM controls (run, test, etc)