

## **Learning Phase:**

I started learning React Native on the 16<sup>th</sup> of October this year. I took a 16-hour course on React Native and Redux (<u>link</u>) in exactly 33 hours. The extra hours were for applying the learned concepts and doing more research on the difficult topics.

## **Knowledge Application Phase:**

Since I weren't given any tasks, I decided to develop a simple mobile app to put the knowledge I have gained in practice. It took me exactly 25 hours to develop the basic features of the app.

# **Application Details:**

App Name	Trouvé ('found' in French) – couldn't think of a better name
Current Number of Screens	7
State Container	Redux
Database	Firebase's real-time database
Authentication	Firebase's authentication
Navigation Tool	React Native Router Flux

### **Application Idea:**

Trouvé is a lost and found application on a corporate level. Since corporates are huge, an automated system for the lost and found items will make it much easier for employees to find their lost items or report any items they find.

#### **Current Features:**

- 1. Simple splash screen
- 2. Login
- 3. View the items a user reported lost or found
- 4. View all lost items in the organization
- 5. View all found items in the organization
- 6. Report a lost item
- 7. Report a found item

### **Challenges:**

- 1. I had very little knowledge in React so it took me some time to understand the component's life cycle and state management concept
- 2. I find styling very boring so I stuck to a very simple interface layout
- 3. It is my first time to use a JSON-based database as I find it a bit intriguing
- 4. It took me a while to get used to some features of ES6
- 5. Sometimes I fail to determine the best file structure to keep my code readable and clean
- 6. I find Redux hard but quite useful

#### **Future Work:**

- 1. Improve the styling of the whole app
- 2. As a user, I want to be able to call the reporter of a lost or found item
- 3. As a user, I want to be able to change my phone number
- 4. As a user who lost or found an item, I want to be able to edit or delete the report I created
- 5. As a user, I want to be able to search for lost or found items by description, category, location or reporting date
- 6. As a user who found an item, I want to be able to attach a photo of it in the report
- 7. As a user who found an item, I want to be able to add a secret question about it (something unseen in the uploaded photo of the item) to verify whoever claims it
- 8. As a user who lost an item, I want to be able to claim a found item by answering the secret question posed by the finder of the item
- 9. As a user who found an item, I want to get notified whenever it is claimed
- 10. As a manager of the organization, I want to be able to create new accounts for my employees and edit or delete existing ones
- 11. As a user who reported a lost item, I want to be able to mark it as Trouvé once it is found
- 12. As a user who reported a found item, I want to be able to mark it as Trouvé once it is returned to its owner
- 13. As a user who lost an item, I want to get notified whenever a matching found item is reported