

Mister-BITCoin

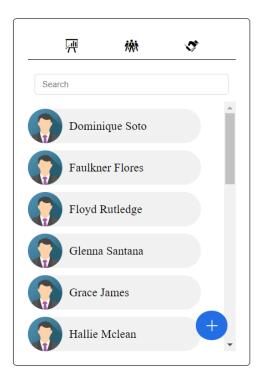
Building stuff with React!

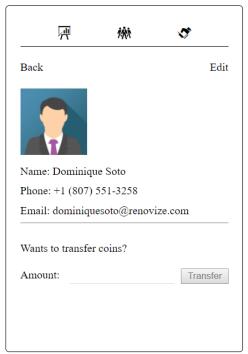
Lets build a digital wallet for holding my bitcoins and sending (paying) them to my contacts.

One step at time, lets start from managing the contacts.

Part 1 Contacts

Implement full CRUD for a **Contact** entity: {_id, name, phone, imgUrl}











Services

Implement a ContactService with the following functions (Promise.resolve() for now):

- getContacts(query = null)
- getContactById(id)
- deleteContact(id)
- saveContact(contact)
- getEmptyContact()

Copy the JSON from here into your service

```
{
  "_id": "5a566402ed1cf349f0b47b4d",
  "imgUrl": "../../assets/image_avatar.png",
  "name": "Rachel Lowe",
  "email": "rachellowe@renovize.com",
  "phone": "+1 (911) 475-2312"
},
```

Pages

<Home> (route: /)

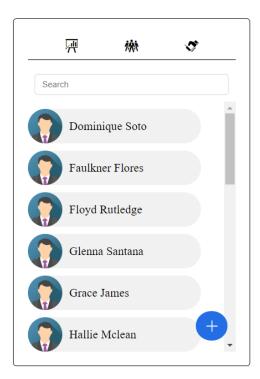
Some intro text for now

<ContactApp> (route: /contact)

Gets contacts from ContactService and renders a <ContactList> component, passing down the contacts.

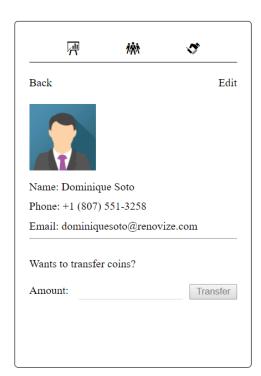


It will later also render the <ContactFilter> and pass down only a filtered list of contacts.



<ContactDetails> (route: /contact/:id)

Receive an id as URL param and gets a contact from the ContactService, display that contact in full



<ContactEdit> (route: /contact/edit/:id?)

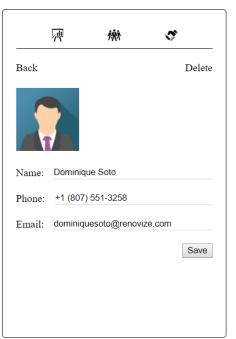
Allows Adding and Editing a contact

• Gets a contact from the service by id or start with a new contact



 Allow editing the name and phone of that contact CREATE MODE: EDIT MODE:





Components

<ContactPreview>

Props: contact

Render a div with an image and a span for preview

<ContactList>

Props: contacts

Render each contact previews inside a Link

<ContactFilter>

Props: onFilter

Allows free text search by name / phone and calls onFilter() on every keypress (onChange), passing a filter object e.g. : {term: 'puk'}

Directory structure

Please follow the following structure and naming conventions:

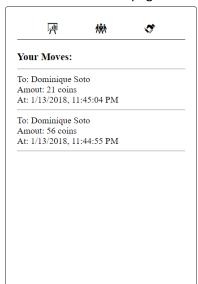


▲ MISTER-BITCOIN ▶ assets components ▶ ContactFilter ▲ ContactList # ContactList.css JS ContactList.js ContactPreview ■ pages ▶ ContactApp ▶ ContactDetails ▲ ContactEdit # ContactEdit.css JS ContactEdit.js ▶ Home ▲ services JS ContactService.js # App.css JS App.js



Part 2 Moving Coins

- Build a <Signup> page, when user is not known we route to this page
- The Signup page just requests a name
- New user gets 100 coins when signup
- On the Home page, show the Bitcoin rate (Use a Bitcoin value API such as this)
- Inside <ContactDetails> show a Transfer Fund form (with an amount field)
- when submitted, we
 - (1) reduce from the user balance (this money goes nowhere!)
 - (2) call MoveService.addMove() to add a move to the user.moves[] array: {at: 2652712571, amount: 2, to: "Moshiko"}
- Build the <MoveList> page that shows a list of moves (transactions)



Services:

<UserService>

This service does NOT work with Promises, its all synchronous here Functions:

- getUser() (returns user synchronously)
- saveUser(user) save to localStorage
- getEmptyUser()

User object should look like:

```
name: 'Puki',
coins: 100,
moves: []
```

Use the local storage to save/ load the user.



<MoveService>

Functions:

- addMove(move)
- getMoves()
- setMoves(moves)

Move Object should contain the props:

```
at: 173989218,
amount: 100,
to: "Popo"
```

<BitcoinService>

Functions:

• getRate(coins) (returns Promise)

Pages

<Signup> (route: '/signup')

Ask for user name and save the new user in local storage and local variable using the UserService

Example:



<Home> (route: '/')

Get the user from UserService and display:

- Name
- Coins
- Bitcoin rate (using the api)

Example:





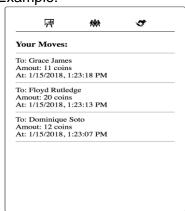
<ContactDetails> (route: '/contact/:id')

The same component that you already created, but now need to add the component Transfer

<UserMoves> (route: '/move')

Should render a list of moves

Example:



Components

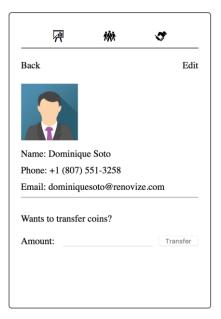
<Transfer>

Props: onTransfer

When clicking on the button the onClick event should invoke the 'onTransfer' and pass into him the coins amount.

Example:





Part 3 Getting serious

• Add a store to your solution and manage the state in there

Part 4 Over the edge

Implement a PWA, or switch to React Native