



# How we scale and manage the UI in your React apps to keep it simple and consistent,

*Alexandre Magno Teles Zimerer*

Sencha Community Days 2019  
European Sencha ExtJS Conference

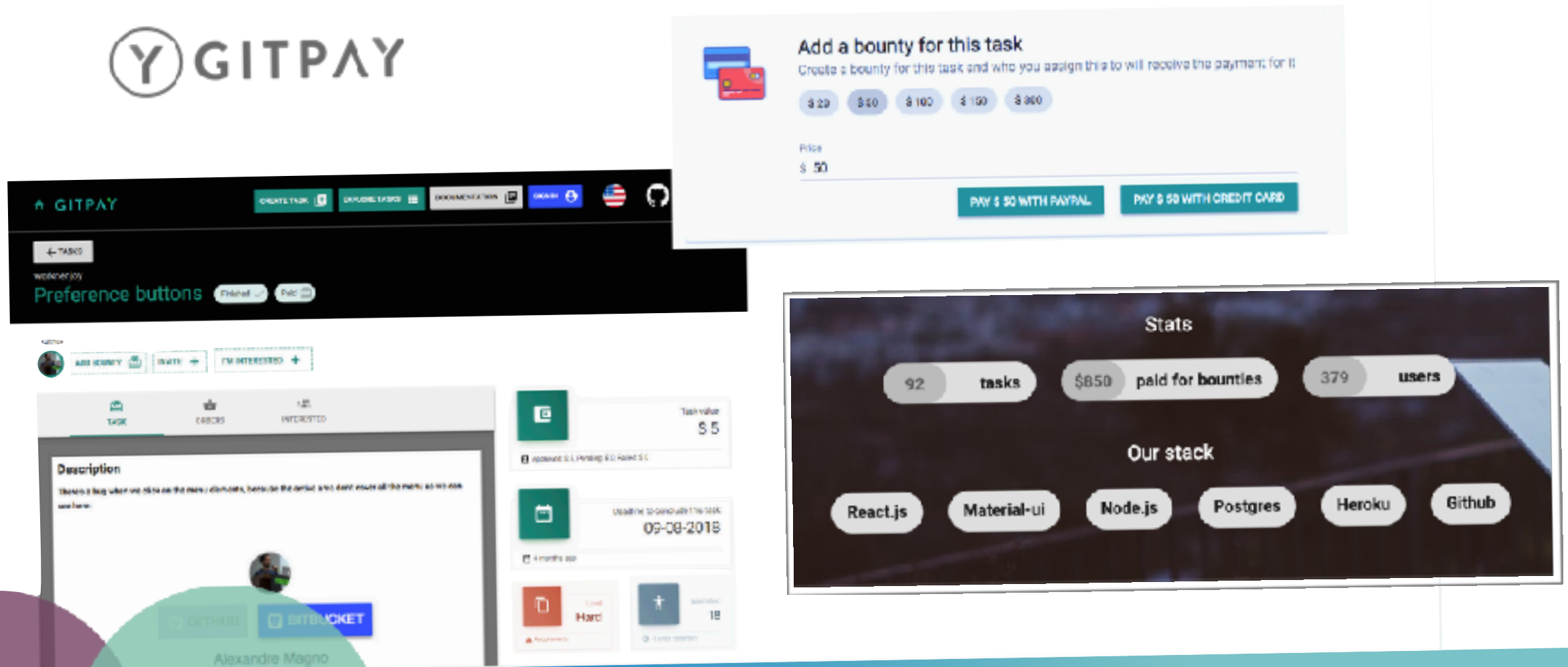
# About me

- Senior Software Engineer at **Danske Bank** (**front-end team**)
- Author of **Mobile First Bootstrap**
- **Open source** enthusiast
- Almost **20 years** experience  
*jQuery, Python, Ruby, Node.js, React Native, Angular and React*



# Open source projects

# Open source projects



# Open source projects

## • Material Sense

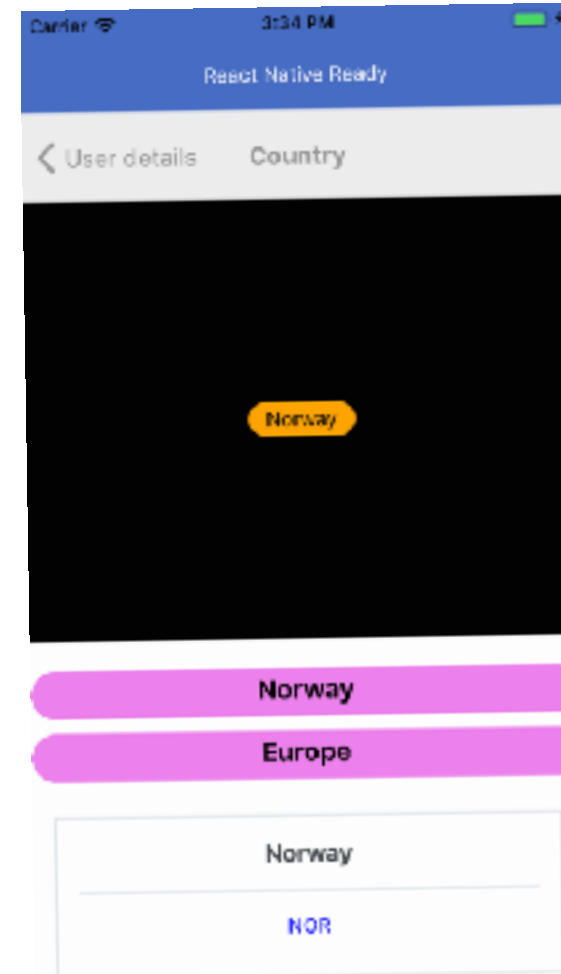
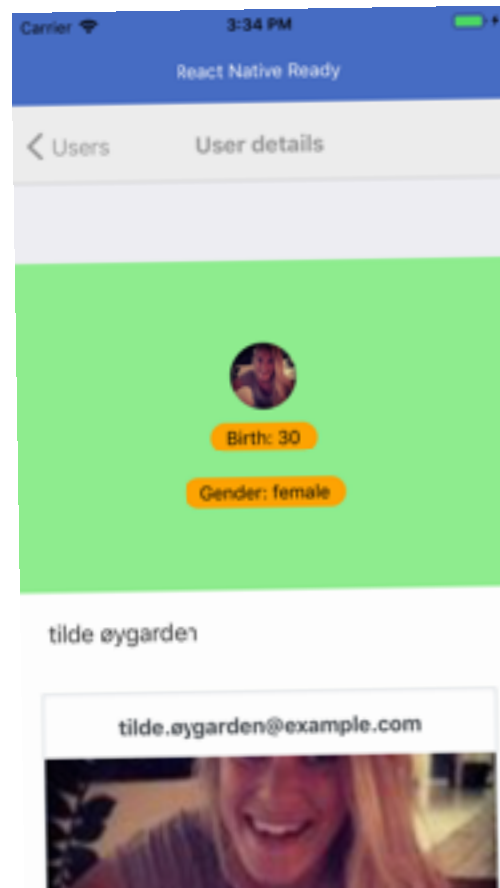
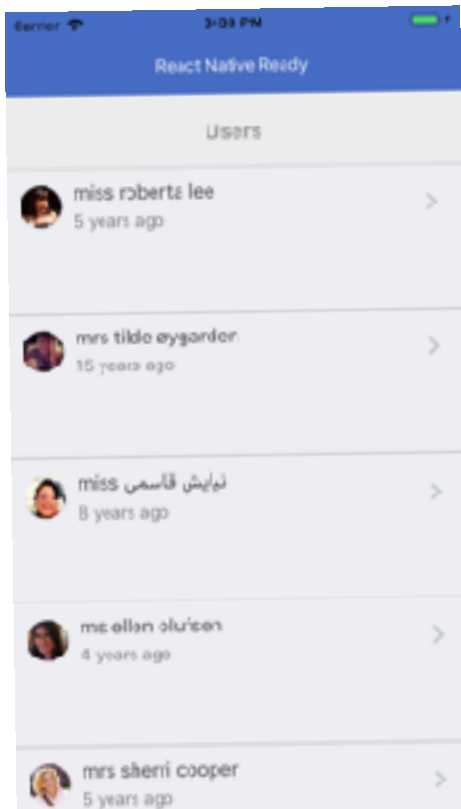
The screenshot shows the 'Material Sense' dashboard. At the top, there's a navigation bar with links: HOME, DASHBOARD (active), SIGNUP, WIZARD, and CARDS. Below the navigation bar, the dashboard title 'Dashboard' is followed by the instruction 'Adjust and play with our sliders.' and a 'GET HELP' button. The dashboard is divided into several sections:

- Transfer Amount:** A slider titled 'How much you want to transfer' with the instruction 'Use slider to set the amount you need.' The value is set to 75,000 USD, with a range from 25,000 USD to 150,000 USD.
- Period:** A slider titled 'Period' with the instruction 'A sample period.' The value is set to 5 months, with a range from 1 month to 6 months.
- Start date:** A date picker titled 'Start date' with the instruction 'Set your preferred start date.' The date is set to 01 January 2019, with a range from Dec 2018 to May 2019.
- Sense details:** A section titled 'Sense details' with the instruction 'Details about the graph.' It shows two data series: 'Type' with 19932 units and 'othertype' with 700 units. Below this is a bar chart showing data for 01 January 2019, 01 March 2019, 01 April 2019, and 01 May 2019.
- Costs Summary:** A section showing a table of costs: 'Costs' (79730 USD), 'Number' (75000 USD), 'Extra' (0 USD), and 'Other' (4730 USD). Below the table are 'SAVE' and 'APPLY' buttons.

The screenshot shows the 'Material Sense' wizard. At the top, there's a progress bar with steps: Info, Buy, Loan details, Term, Order, and Done. The 'Info' step is currently active. Below the progress bar, there's a section titled 'Information' with the instruction 'Go on to get more about the service.' and a 'NEXT' button. The form contains two input fields: 'USC' (John Doe) and 'City' (Tokyo). Below the form are 'BACK' and 'NEXT' buttons.

# Open source projects

- **React Native Ready**



# Open source contributions

# Open source contributions

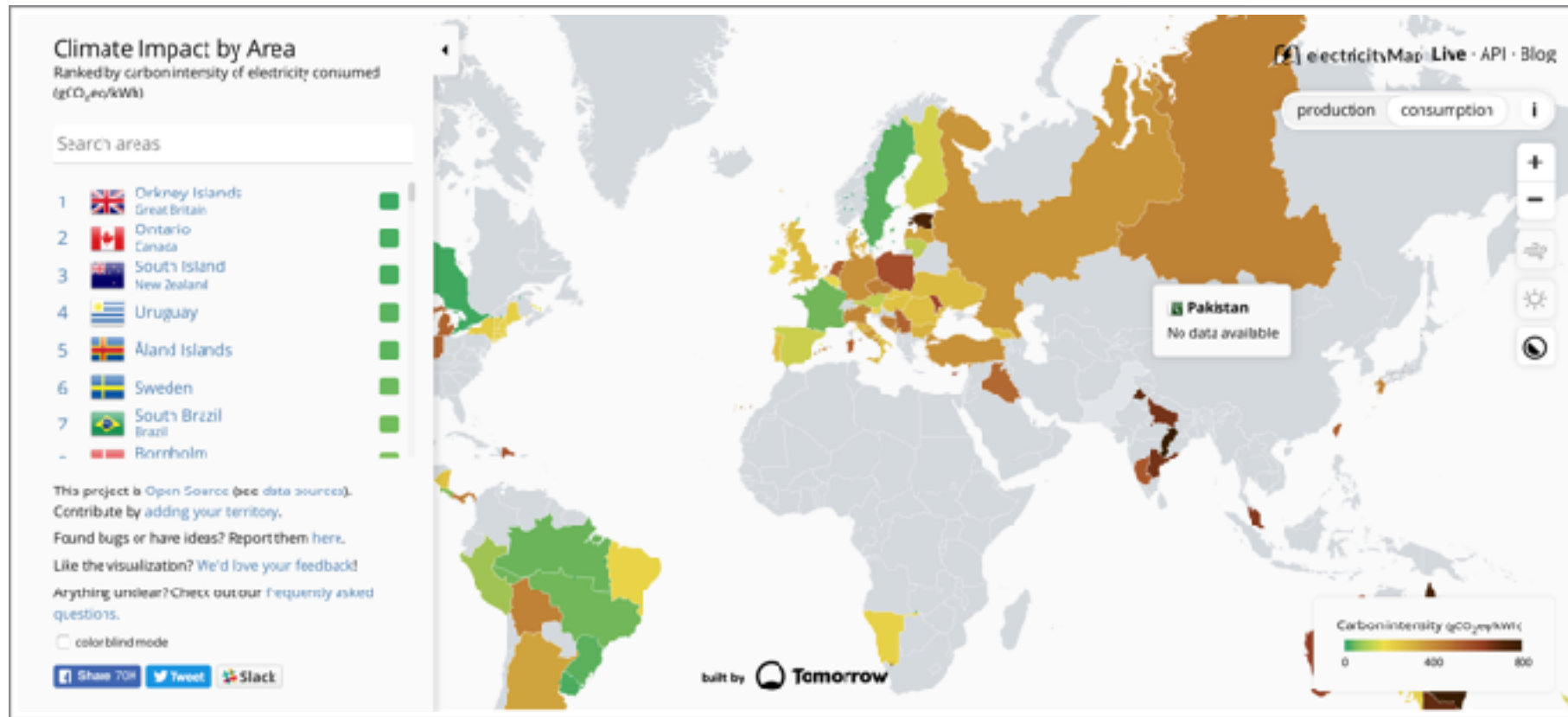
- **Bootstrap**





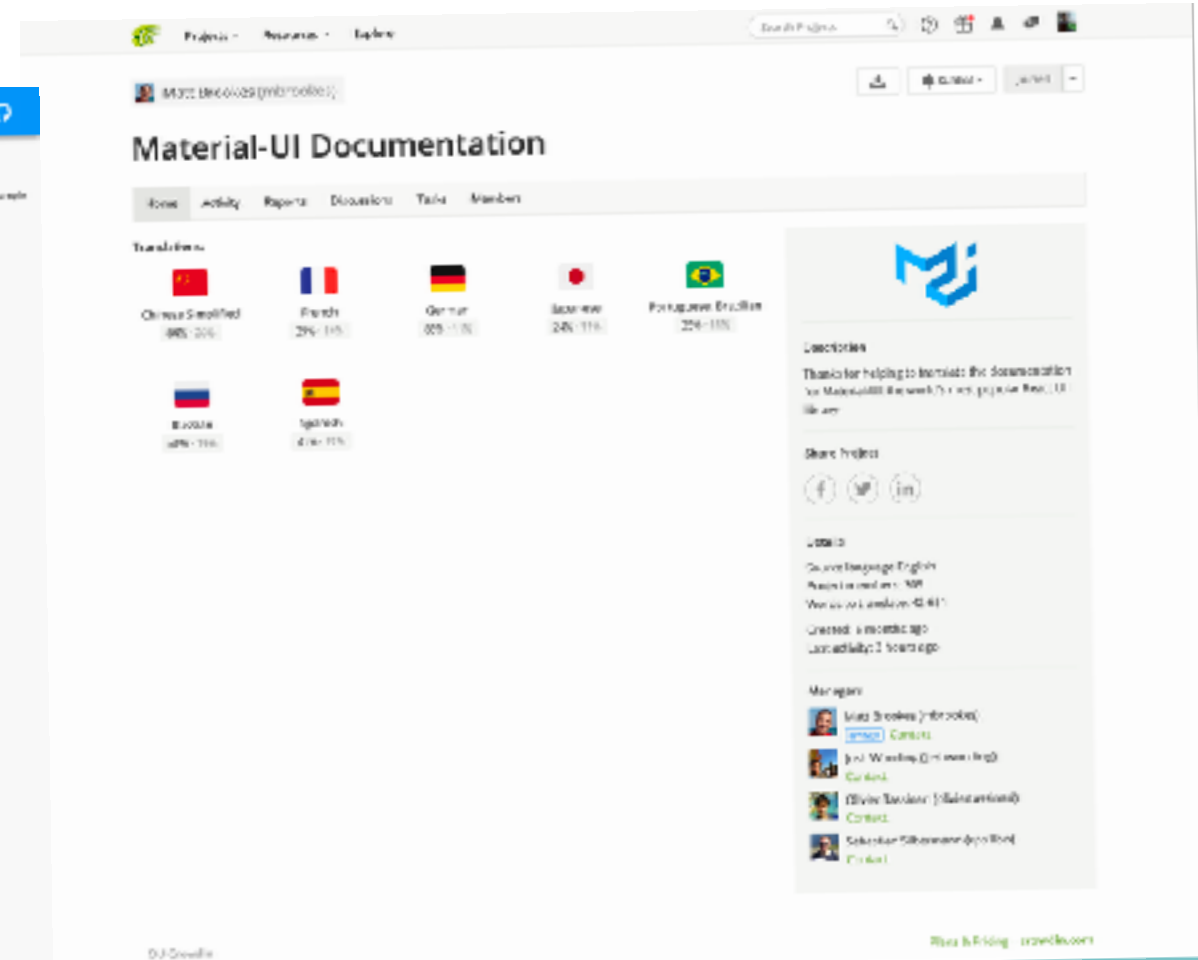
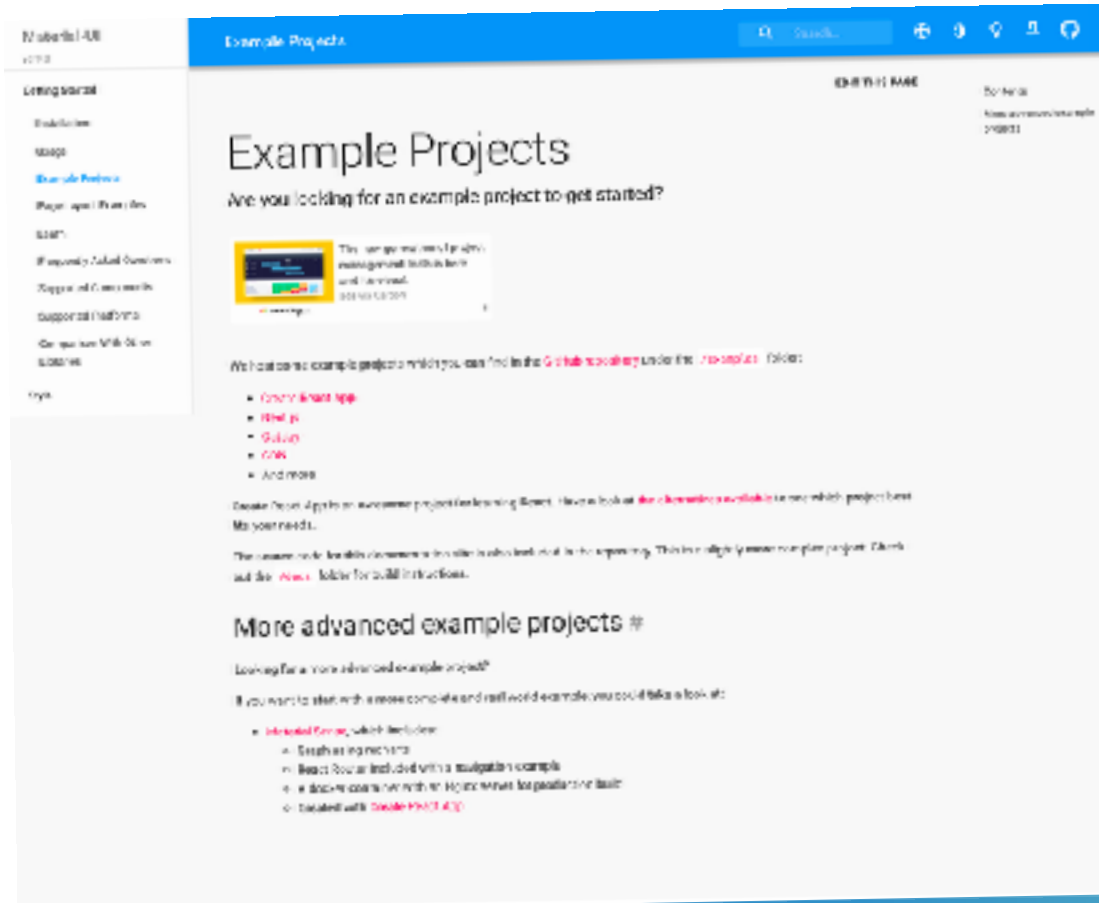
# Open source contributions

- **Electricitymap**



# Open source contributions

## • Material UI



# Timeline

UI frameworks

## jQuery / ExtJS

Ajax  
Data tables  
jQuery UI



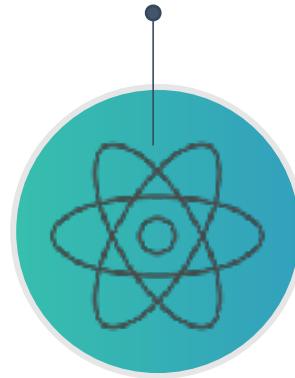
## Bootstrap

Data attributes  
Themes  
Mobile First



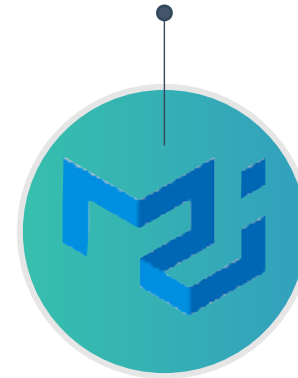
## React / Angular

Virtual Dom  
Presentational  
Components



## Material UI

Design  
language  
JSS



# Frameworks

Become independents

## Twitter

Lorem Ipsum is simply dummy text of the printing and typesetting industry.



## Twitter Bootstrap

Lorem Ipsum is simply dummy text of the printing and typesetting industry.



## Bootstrap

Lorem Ipsum is simply dummy text of the printing and typesetting industry.



## Bootstrap 4

Lorem Ipsum is simply dummy text of the printing and typesetting industry.

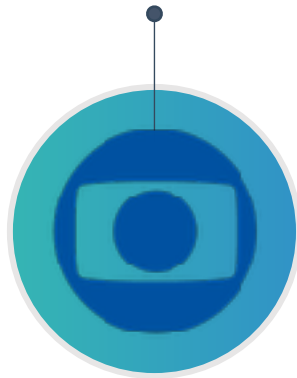


# Frameworks

Become independents

[globo.com](#)

Biggest news  
portal in latin  
america



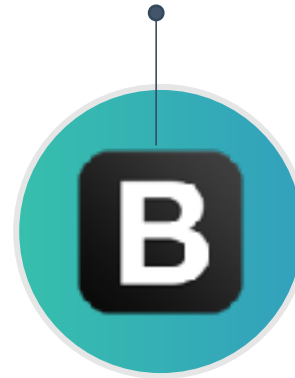
Twitter Bootstrap

Release a UI  
library



Globo Bootstrap

Fork from  
Bootstrap



Globo UI

Own library  
part of other  
initiatives



# GOOD UI

## Library features



### Atomic Design

Split UI in atomic level



### UI as a service

Own infrastructure,  
packages, customized  
downloads and different  
libraries



### Collaboration

As you need components,  
you can create to reuse in  
a common design  
language



### Documentation

Documentation easy to  
use and reference about  
the use cases



### User experience

Improve consistent UI  
and a common design  
and shared  
communication



### Managed library

Package on NPM with  
scope **@lib/name** or  
private repository



### Mobile first

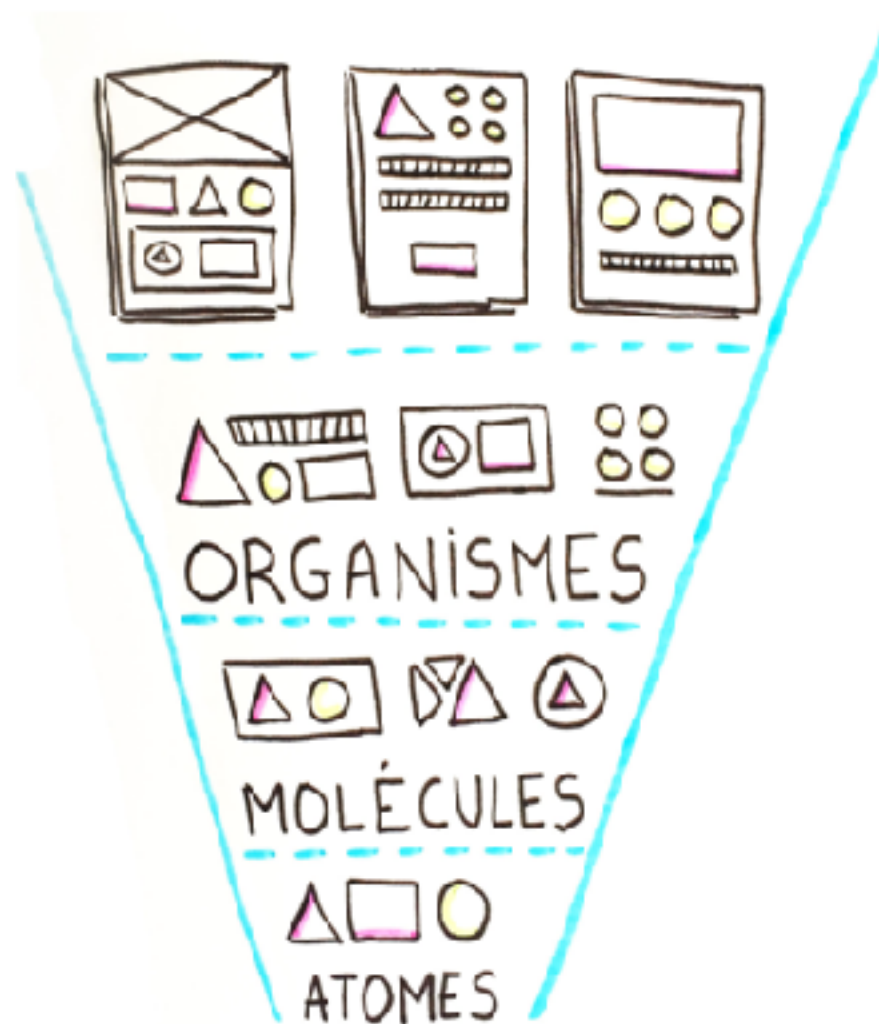
Always think and let your  
component be  
customizable on mobile



### Ready to use

You should be able to run  
in 5 minutes

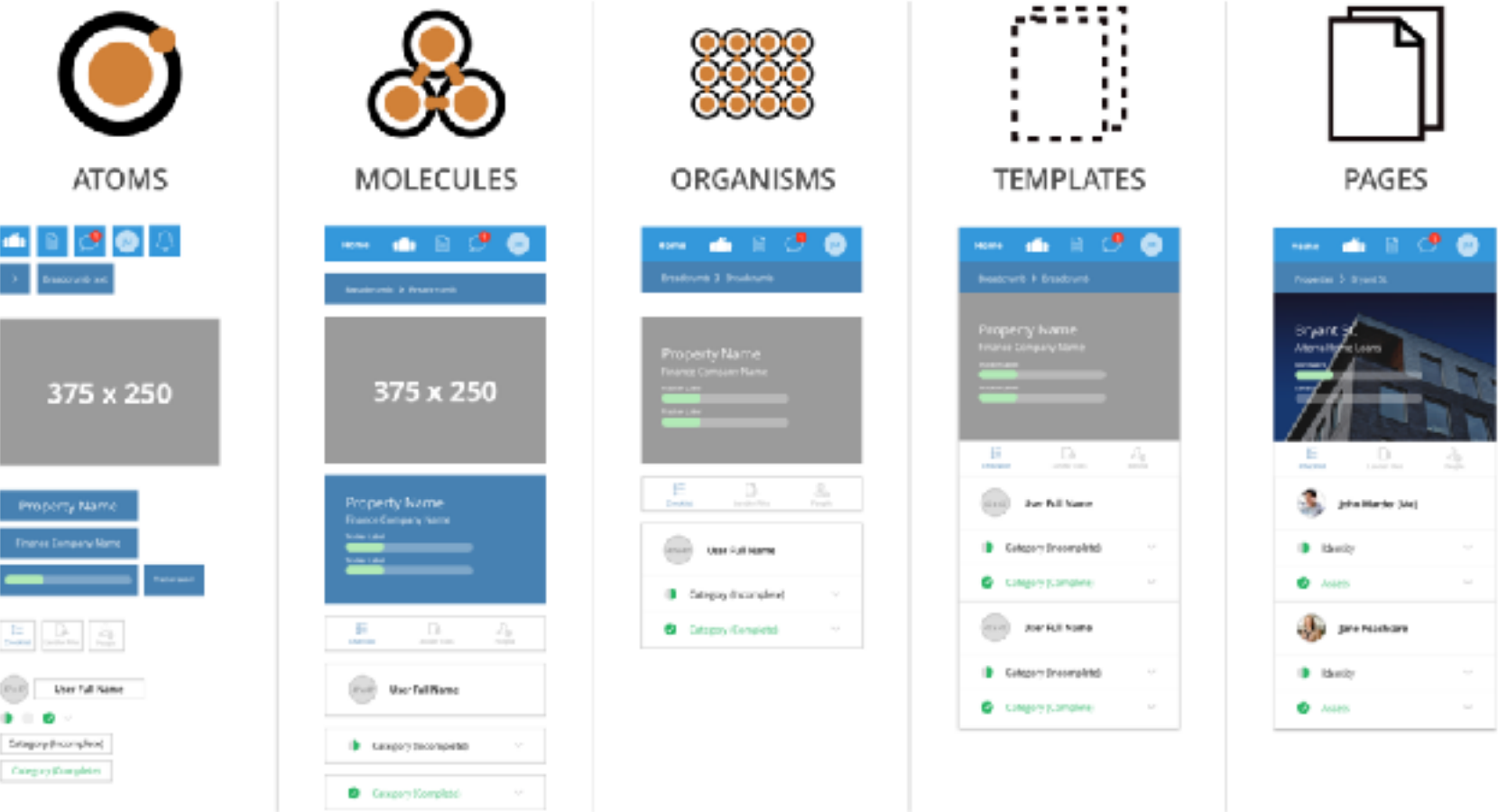
# ATOMIC DESIGN



@audreyhacq

# Atomic design

## Atomic Design for Streamloan



Brad Frost



# UI as a service

# UI as a service

- Please, front-end only!
- If you adopt an open source framework:  
help the project!
- If you want to create yours: provide a team, a backlog  
and their own infrastructure
- Support for different integrations
- Dedicated documentation with live examples



# Libraries out there

- **Material UI**
- React Native Elements
- Ant
- Pinterest

# Material UI

## ***Before***

```
import {  
  
    Dialog,  
  
    DialogContent,  
  
    DialogContentText,  
  
    DialogTitle  
  
} from 'material-ui/Dialog'
```

## ***After***

```
import {  
  
    Dialog,  
  
    DialogContent,  
  
    DialogContentText,  
  
    DialogTitle  
  
} from '@material-ui/core'
```

# Material UI

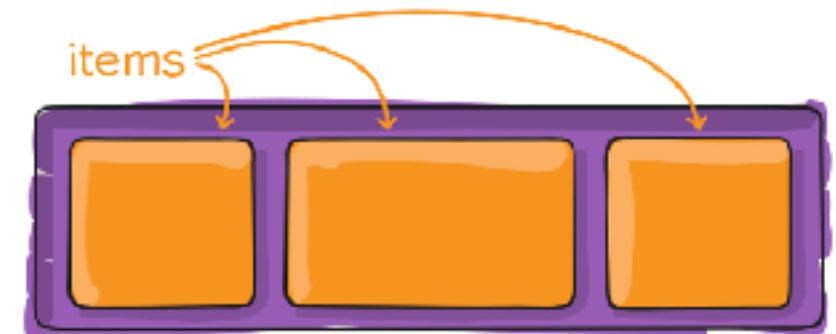
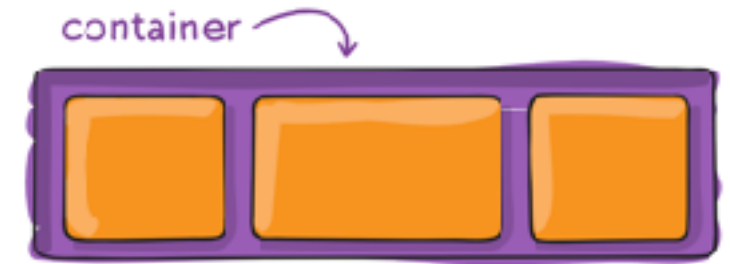
## • Palettes



```
const theme = createMuiTheme({  
  palette: {  
    secondary: {  
      main: blue[900]  
    },  
    primary: {  
      main: indigo[700]  
    }  
  },  
  typography: {  
    // Use the system font instead of the default Roboto  
    font.  
    fontFamily: [  
      "Lato",  
      sans-serif  
    ].join(',')  
  }  
});
```

# Material UI

```
const styles = theme => ({
  appBar: {
    position: 'relative',
    boxShadow: 'none',
    borderBottom: `1px solid ${theme.palette.grey['100']}`,
    backgroundColor: 'white',
  },
  inline: {
    display: 'inline'
  },
  flex: {
    display: 'flex',
    [theme.breakpoints.down('sm')]: {
      display: 'flex',
      justifyContent: 'space-around',
      alignItems: 'center'
    }
  }
})
```



# Material UI - Styled components

```
export const Bar = styled.div`
```

```
  box-sizing: border-box;
```

```
  padding: 10px 20px;
```

```
  background-color: black;
```

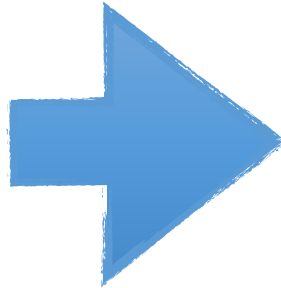
```
  margin: 0;
```

```
  position: relative;
```

```
  ${media.phone`
```

```
    padding: 10px 15px;
```

```
`}
```



```
<Bar>
```

```
<Container>
```

```
<LeftSide></LeftSide>
```

```
<RightSide>
```

```
<StyledButton
```

```
  variant='contained'
```

```
  size='small'
```

```
  color='primary'
```

```
>
```

```
<LabelButton>
```

```
  Label
```

```
</LabelButton>
```

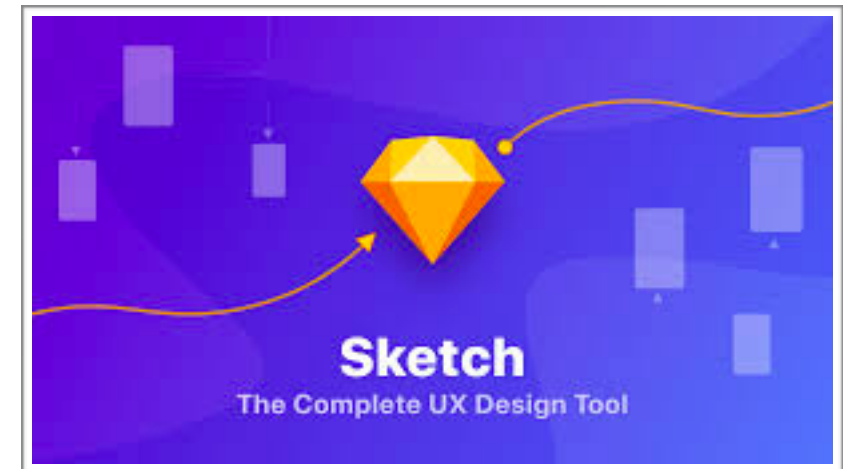
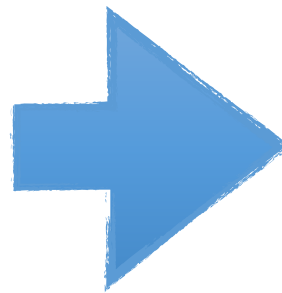
```
<AddBox />
```

```
</StyledButton>
```

```
</Container>
```

```
</Bar>
```

# Material UI - common language

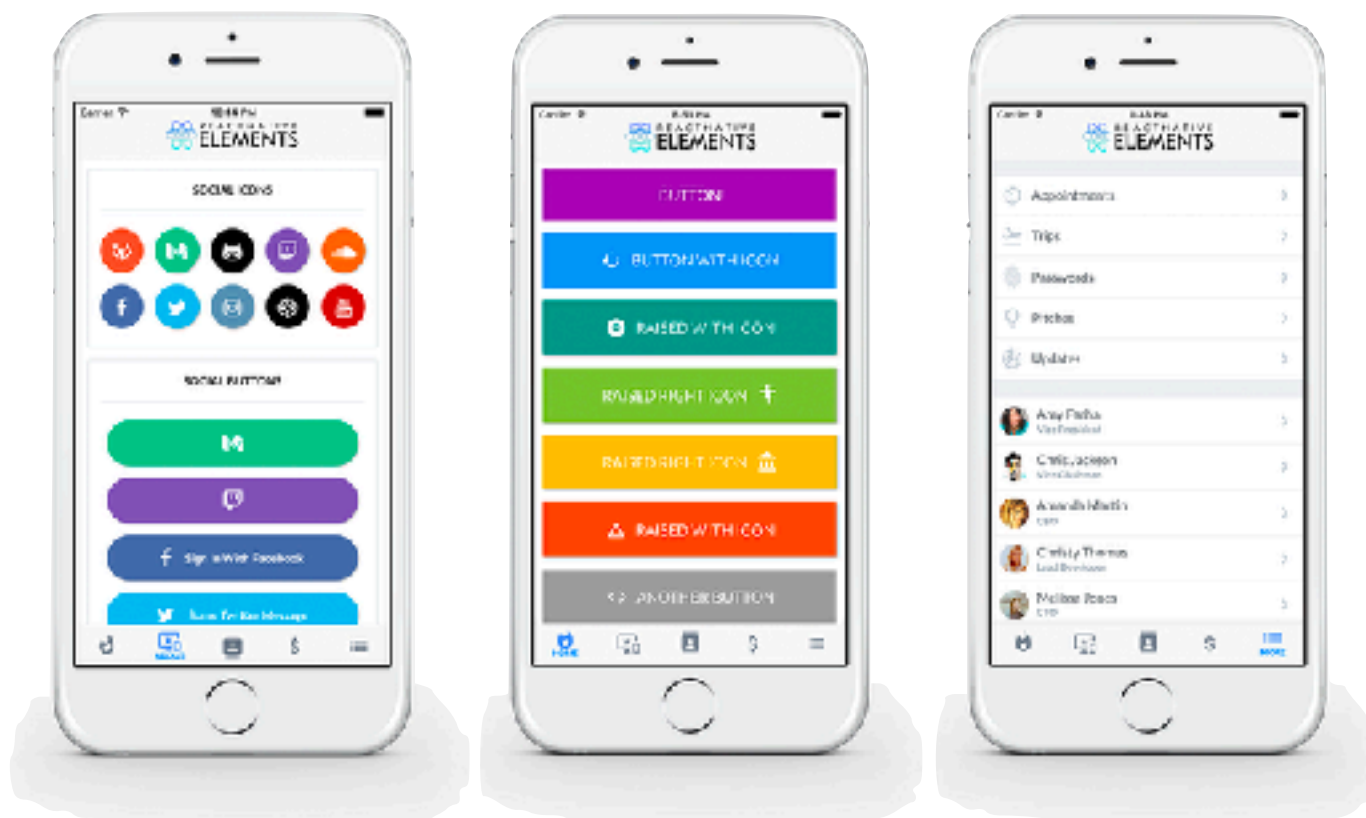




# Libraries out there

- Material UI
- **React Native Elements**
- Ant
- Pinterest

# REACTNATIVE ELEMENTS



# React native elements

```
import { ListItem } from 'react-native-elements';
```

```
<ListItem  
  key={i}  
  leftAvatar={{ source: { uri: avatar_url } }}  
  title={l.name}  
  subtitle={l.subtitle}  
/>
```

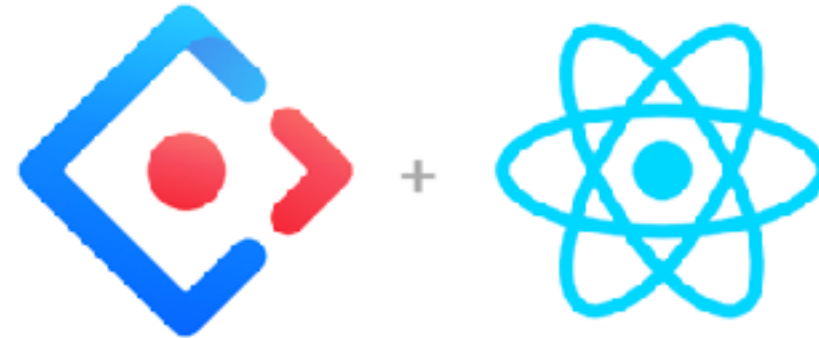


# Libraries out there

- Material UI
- React Native Elements
- **Ant**
- Pinterest

# Ant

- Ant Design PRO
- Ant Design for Angular
- Ant Design of Vue.js



**Ant Design Resources**

Ant Design Resources Download



**Axure Library**

Beautifully visual Axure library



**Kitchen** **HOT**

A Sketch tools for designers

# Libraries out there

- Material UI
- React Native Elements
- Ant
- **Pinterest**



```
npm i --save @types/gestalt
```

or

```
yarn add @types/gestalt
```



Search and explore



# To create a library



# To create a library

- NPM Packages
- Semver
- Public packages
- Private packages
- Documentation



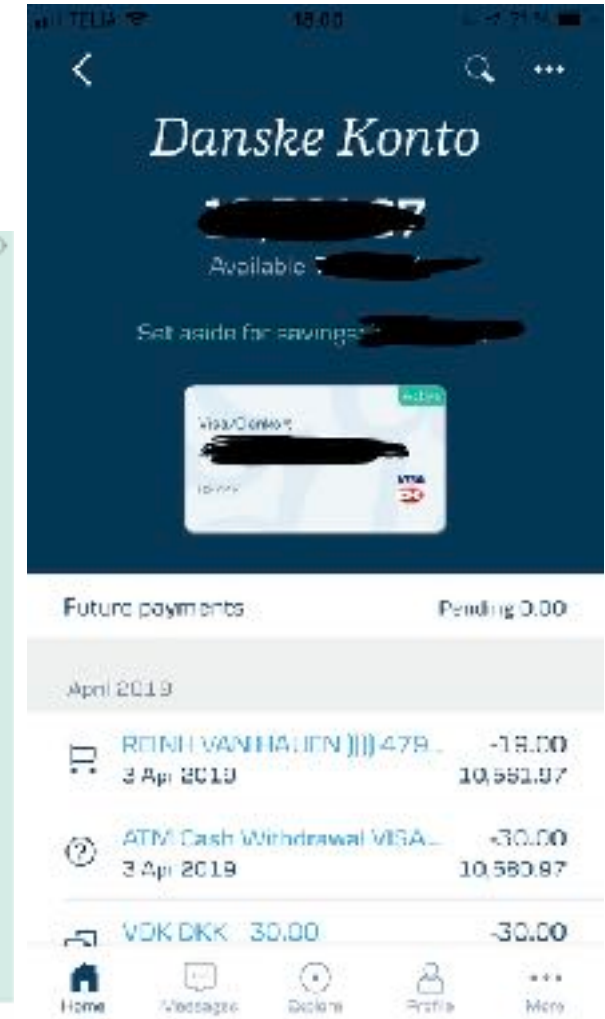
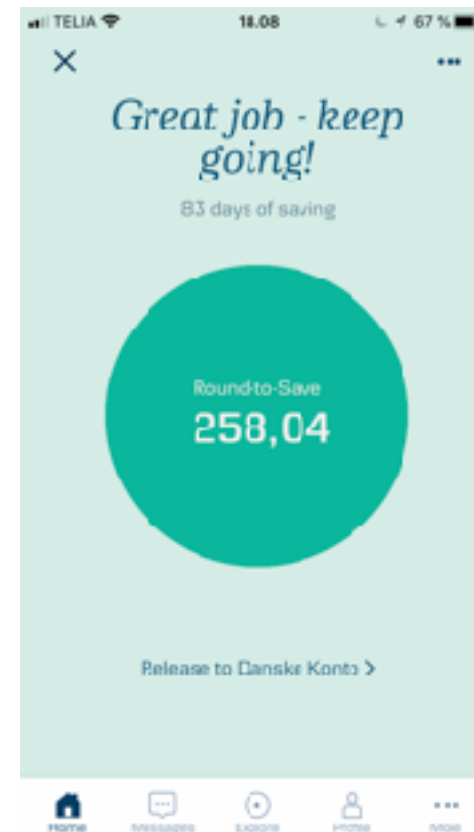
1.0.0-beta

Major Minor Patch Optional pre-release label



# Danske Bank (DB-UI)

- General library for UI for React Native
- Private repo using Artifactory
- Theme based
- Explorer app as documentation
- Dedicated team



# Thanks

For for watching!



<https://github.com/alexanmtz>



<https://www.linkedin.com/in/alexandremagnoteleszimerer/>

## Contact

[alexanmtz@gmail.com](mailto:alexanmtz@gmail.com)

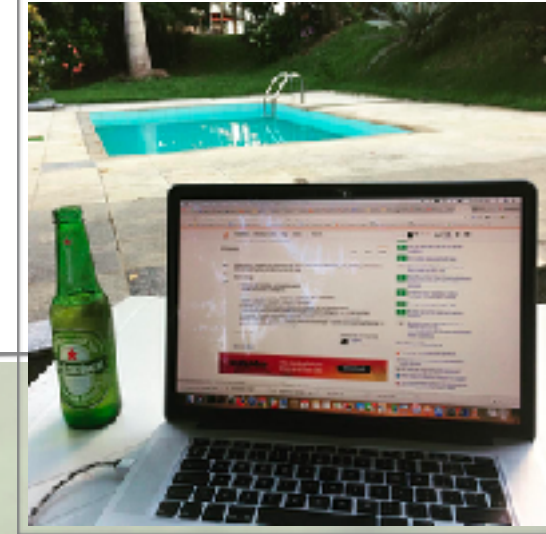
<http://alexandremagno.net>

## Social Media

[facebook.com/alexandre.zimerer](https://facebook.com/alexandre.zimerer)

[twitter.com/alexanmtz](https://twitter.com/alexanmtz)

[youtube.com/alexanmtz](https://youtube.com/alexanmtz)



Copenhagen, Denmark



Rio de Janeiro, Brazil