Lesson 5: Diving Deeper into React Native

Creating a Feed

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React Native Quickstart

Lesson Outline

Exploring JSON, JavaScript Object Notation

We'll be using an online service to convert the New York Times' RSS feed to a JSON object.

It is accessible through the link
`https://newsapi.org/v2/top-headlines?country=us&apiKey=7c185ff7708e44dea7b0f22f482203d5`.

Getting the news (cont.)

Under `items`, we can see that we now have an array of articles. The format of each article is as below:

```
{
  "source": {
      "id": null,
      "name": "sourceName"
  },
  "author": "Author Name",
  "title": "Article Title",
  "description": "Article Description",
  "url": "uri",
  "urlToImage": "uri",
  "publishedAt": "Publish Date",
  "content": null
},
```

Creating an Article thumbnail

Displaying a single Article

In `./src/components/`, create a file called `articleThumbnail.jsx`.

Enter the following code:

```jsx
import React from 'react'
import {View, Text} from 'react-native'

const ArticleThumbnail = ({item}) => {
  return(
    <View>
      <Text>{item.title != null ? item.title : ''}</Text>
      <Text>{item.publishedAt != null ? item.publishedAt : ''}</Text>
      <Text>{item.author != null ? item.author : ''}</Text>
    </View>
  )
}

export default ArticleThumbnail
```

We'll now bring in our Component into
`./src/pages/Home.jsx`.

```jsx
import ArticleThumbnail from '../components/articleThumbnail'

const Home = () => {
  return (
    <View style={globalStyles.container}>
      <Button onPress={()=>{console.log("Button pressed!")}} />
      <ArticleThumbnail />
    </View>
  )
}
```

Next, create an object called `newsItem` with a single article.
You can choose any from the provided link a couple slides
back.

Put the following code above your `Home` const.

```
const newsItem = {
    "source": {
        "id": null,
        "name": "sourceName"
    },
    "author": "Author Name",
    "title": "Article Title",
    "description": "Article Description",
    "url": "uri",
    "urlToImage": "uri",
    "publishedAt": "Publish Date",
    "content": null
}
```

Now, let's give `newsItem` to our `<ArticleThumbnail />`.

```
<ArticleThumbnail item={newsItem} />
```

Displaying multiple Articles

In `./src/pages/Home.jsx`, add 2 more articles to your `newsItem`.

Hint: `newsItem` is now an Array of Objects!

We are able to make as many `<ArticleThumbnail />` instances as needed through a `<Flatlist />`.

Replace your singlular `<ArticleThumbnail />` with a `<FlatList />`.

Make sure to import `FlatList` from `'react-native'`!

```
import {View, FlatList} from 'react-native'

<FlatList
  data={newsItem}
  renderItem={({ item }) => <ArticleThumbnail item={item} />}
/>
```

<FlatList /> has two required components, the `data` and `renderItem`.

`data` must be a list/Array, and the objects of the list would be used for the `renderItem`.

In the `renderItem`, we must create a function that takes in the individual object of the list. The provided code has this named `item`, but can be renamed to better fit the project as required.

<FlatList /> has several other parameters we can provide.

Useful ones include `ListHeaderComponent` and `extradata`.

Refer to documentation for more details: `https://reactnative.dev/docs/flatlist`.

The `<Button />` is blocking our `FlatList` when we attempt to scroll down.

Where should we move our `<Button />` instead?

Now as you can see, we have some white space when scrolling our `FlatList` down.

Find out which of the style properties in `./src/styles/globalStyles` is causing this behaviour.

Making everything look good

Styling our ArticleThumbnail

On your own, find a mobile app that displays Articles and copy their style. (20mins)

Feel free to ask any questions!

End of Lesson

Questions? Reach out at: karlorjalo@gmail.com