

React Native

Desenvolvimento de Software e Sistemas Móveis (DSSMV)

Licenciatura em Engenharia de Telecomunicações e Informática

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Paulo Baltarejo Sousa

`pbs@isep.ipp.pt`

Disclaimer

Material and Slides

Some of the material/slides are adapted from various:

- Presentations found on the internet;
- Books;
- Web sites;
- ...

Outline

- 1 To run XXX app
- 2 Conditional Rendering
- 3 Interacting with REST Web Services
- 4 ToDos REST Client App
- 5 Navigation
- 6 Bibliography

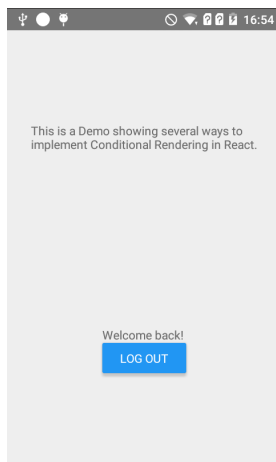
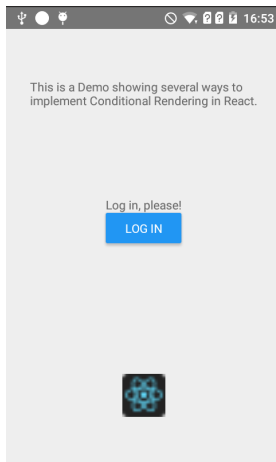
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Running

- Unzip project file(creating the TP13 folder)
`unzip xxx.zip`
- Create a new folder named TP13_projects
- `cd TP13_projects`
- For each <project_name> into TP13 folder
 - Create a new project
`npx @react-native-community/cli@latest init
<project_name>`
 - Copy the following files and folders from TP13/<project_name> to TP3_projects/<project_name>
 - App.js and index.js files as well as other .js source code files.
 - screens/, components/, service/, and context/ folders.
 - Launch Metro
`npm start`
 - Launch app in Android device (in another terminal)
`npm run android`

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Several approaches



Check: TP13.zip (ConditionalRendering)

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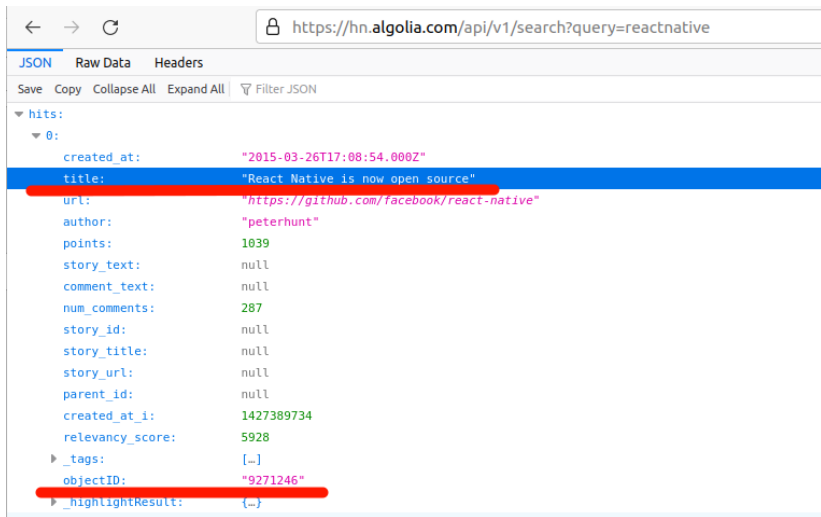
Fetching data (I)

- Fetching news from Hacker News (<https://hn.algolia.com/api/v1/search?query=reactnative>)

The screenshot shows a web browser window with the URL `https://hn.algolia.com/api/v1/search?query=reactnative`. The browser's developer tools are open, displaying the JSON response. The response is a JSON object with the following fields:

- `hits`: An array of search results (indicated by `[...]`).
- `nbHits`: 14365
- `page`: 0
- `nbPages`: 50
- `hitsPerPage`: 20
- `exhaustiveNbHits`: true
- `exhaustiveTypo`: true
- `query`: "reactnative"
- `params`: "advancedSyntax=true&analytics=true&analyticsTags=backend&query=reactnative"
- `renderingContent`: {}
- `processingTimeMS`: 7

Fetching data (II)



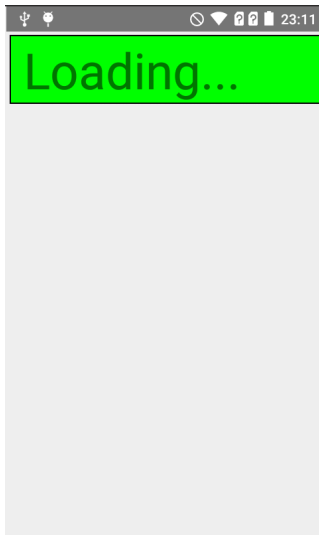
The screenshot shows a web browser window with a REST client interface. The address bar displays the URL: `https://hn.algolia.com/api/v1/search?query=reactnative`. The interface has tabs for "JSON", "Raw Data", and "Headers", with "JSON" selected. Below the tabs are buttons for "Save", "Copy", "Collapse All", "Expand All", and a "Filter JSON" button. The main area displays a JSON response with a collapsed "hits" array. The "hits" array is expanded, showing a single hit at index 0. The hit object contains the following fields:

- `created_at`: "2015-03-26T17:08:54.000Z"
- `title`: "React Native is now open source"
- `url`: "https://github.com/facebook/react-native"
- `author`: "peterhunt"
- `points`: 1039
- `story_text`: null
- `comment_text`: null
- `num_comments`: 287
- `story_id`: null
- `story_title`: null
- `story_url`: null
- `parent_id`: null
- `created_at_i`: 1427389734
- `relevancy_score`: 5928
- `_tags`: [...]
- `objectID`: "9271246"
- `_highlightResult`: {...}

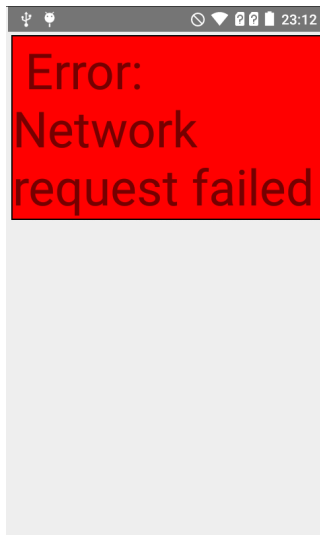
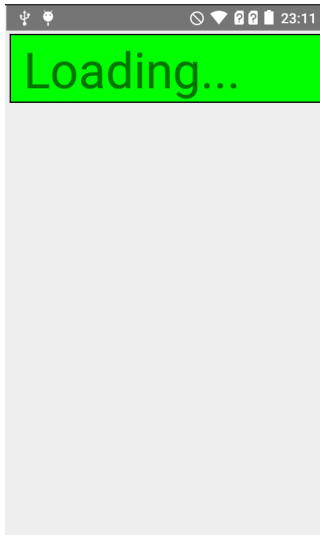
REST Client (I)



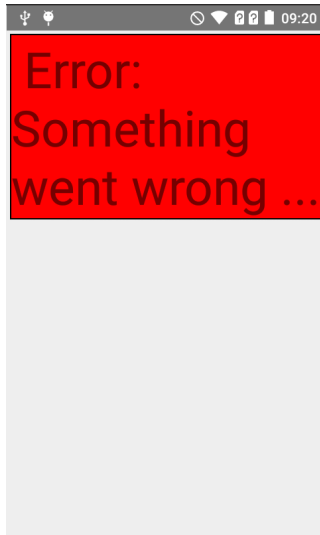
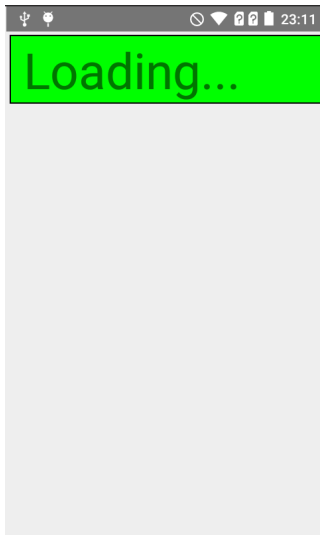
REST Client (II)



REST Client (III)



REST Client (IV)

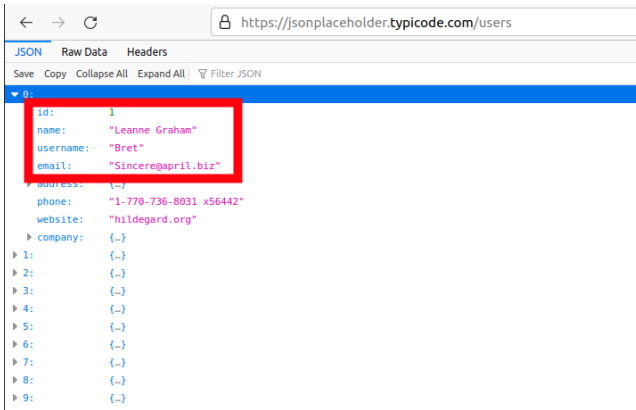


Apps

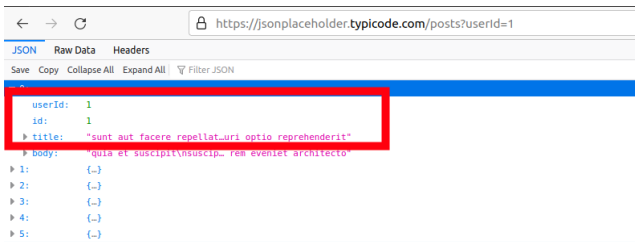
- `fetch` : **Check:**TP13.zip(`Fetch`)
- `fetch, async, await` : **Check:**TP13.zip(`AsyncFetch`)
- `axios` : **Check:**TP13.zip(`Axios`)
- `axios, async, await` : **Check:**TP13.zip(`AsyncAxios`)

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Fetching Data (I)



Fetching Data (II)

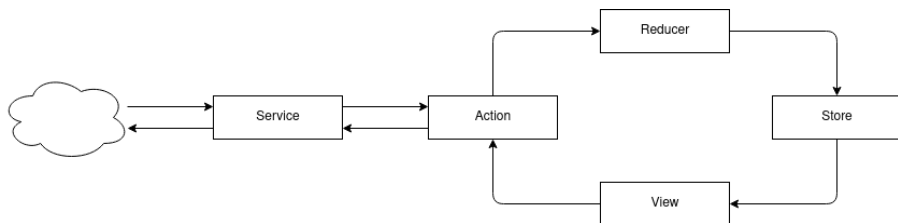


Output

10:24				
ID : 1				
Name : Leanne Graham				
User Name: Bret				
Email : Sincere@april.biz				
ID : 2				
Name : Ervin Howell				
User Name: Antonette				
Email : Shanna@melissa.tv				
ID : 3				
Name : Clementine Bauch				
User Name: Samantha				
Email : Nathan@yesenia.net				
ID : 4				
Name : Patricia Lebsack				
User Name: Karianne				
Email : Julianne.OConner@kory.org				
ID : 5				
Name : Chelsey Dietrich				
User Name: Kamren				
Email : Lucio_Hettinger@annie.ca				
ID : 6				
Name : Mrs. Dennis Schulist				
User Name: Leopoldo_Corkery				
Email : Karley_Dach@jasper.info				

10:25				
ID : 1				
Name : Leanne Graham				
User Name: Bret				
Email : Sincere@april.biz				
ID : 2				
Name : Ervin Howell				
User Name: Antonette				
Email : Shanna@melissa.tv				
et ea vero quia laudantium autem				
in quibusdam tempore odit est dolore				
dolorum ut in voluptas mollitia et saepe quo				
animi				
voluptatem eligendi optio				
eveniet quod temporibus				
sint suscipit perspiciatis velit dolorum rerum				
ipsa laboriosam odio				
fugit voluptas sed molestias voluptatem				
provident				
voluptate et itaque vero tempora molestiae				
adipisci placeat illum aut reiciendis qui				
doloribus ad provident suscipit at				
ID : 3				
Name : Clementine Bauch				

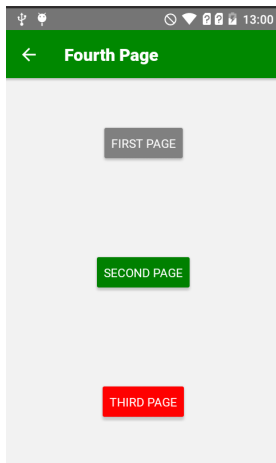
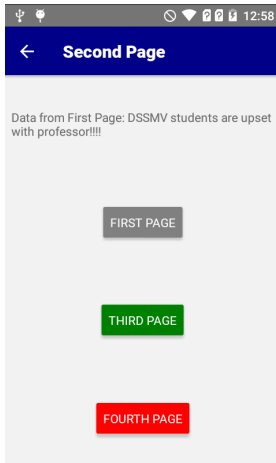
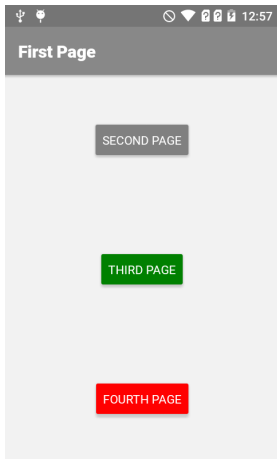
Flux Architecture



Check: TP13.zip (ToDos, ToDosRedux)

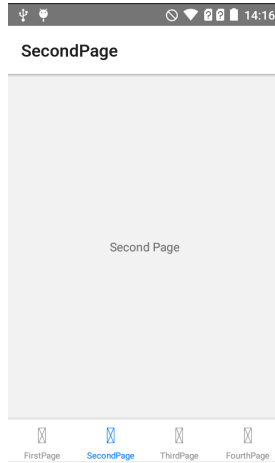
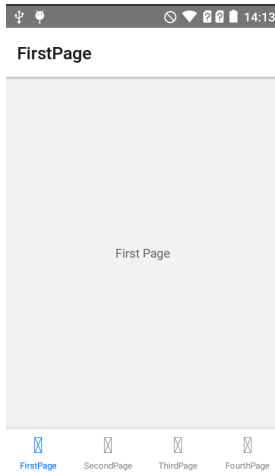
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Stack



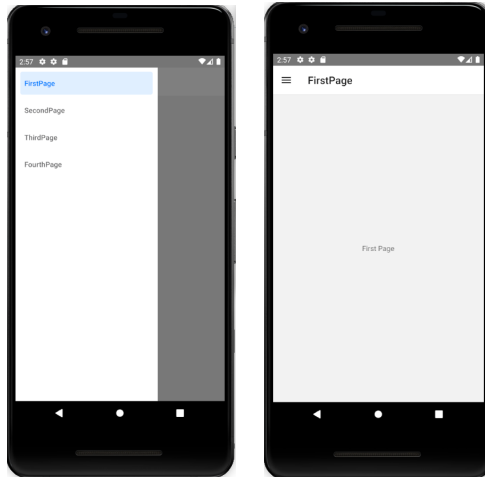
Check: TP13.zip (NavStack)

Tab



Check: TP13.zip (NavTab)

Drawer



Check: TP13.zip (NavDrawer)

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Resources

- David Flanagan, "JavaScript: The Definitive Guide", O'Reilly Media, Inc., 2020
- Adam Boduch and Roy Derks, "React and React Native: A complete hands-on guide to modern web and mobile development with React.js, 3rd Edition", Packt Publishing, 2020
- Dan Ward, "React Native Cookbook Second Edition Step-by-step recipes for solving common React Native development problems", Packt Publishing, 2019
- <https://reactnative.dev/>
- <https://reactjs.org/>
- <https://reactnavigation.org/>