

# ***Approaching a New Codebase***

with confidence and comfort 

Ramón Huidobro

@hola\_soy\_milk

**We've all been  
there:**



@hola\_soy\_milk





***“Ok, go do the  
thing!”***

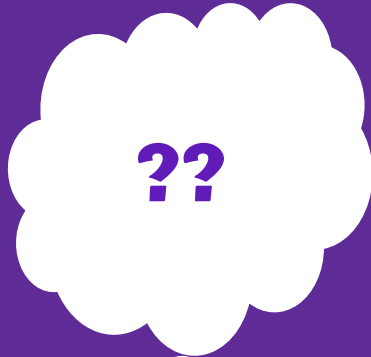
***“Ok, go do the  
thing!”***

***“Ok, go add that  
function!”***

**“Ok, go fix that bug”**

**“Ok, go do the thing!”**

**“Ok, go add that function!”**





***Right, but where  
to begin?***

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I'm Ramón.

(he/him)

Developer Relations @ Suborbital

DevRel Consultant

Developer Educator

Ruby, JS, Rust

Mozilla tech speaker

Tech Career Mentor

Live Streamer

Template Strings in JavaScript

# Te

## Strings

5 exercises

### About Template Strings

In JavaScript, *template strings* allows for embedding expressions in strings, also referred to as string interpolation. This functionality extends the functionality of the built in `String` global object.

You can create template strings in JavaScript by wrapping text in backticks. They not only allow the text to include new lines and other special characters, you can also embed variables and other expressions.

```
const num1 = 1;
const num2 = 2;

`Adding ${num1} and ${num2} gives 3.`
// => Adding 1 and 2 gives 3.
```

0/1 exercise completed

### Learn Template Strings

#### Custom Signs

Recommended Learning Exercise

Learn about template strings and the ternary operator ...

Chatterino 2.3.4 hola\_soy\_milk\_

hola\_soy\_milk\_

hola\_soy\_milk\_ (live) none

9:58 PretzelRocks: now playing: wake up by Livi Needle -> <https://prtzl.io/X1HKm4y8GXdl3btA>

10:01 PretzelRocks: Now Playing: Eastern Sunrise by Harris Heller -> <https://prtzl.io/jDHaAVbJAogjN2F1>


10:02 vallukas: morning 🐼

10:02 casi257: Good morning, Ramón!

10:02 casi257: I'll just make myself a quick coffee ... ☺

10:03 PretzelRocks: Now Playing: At Our Core by fantompower -> <https://prtzl.io/1kHAB2BzZjow2bhY>

Send message as hola\_soy\_milk\_...



[twitch.tv/hola\\_soy\\_milk\\_](https://twitch.tv/hola_soy_milk_)



Ramón (he/him) | @hola\_soy\_...



Thamara (she/her) @thamyk

```
js > JS calendar.js > $0 callback > then() callback
111   }
112 }
113
114 // On page load, create the calendar and setup notification
115 $(() =>
116 {
117   // Wait until translation is complete
118   i18n.changeLanguage(lang)
119   .then(() =>
120     {
121       const preferences = getUserPreferences();
122       calendar = CalendarFactory.getInstance(preferences);
123       setInterval(notifyTimeToLeave, 60000);
124       applyTheme(preferences.theme);
125     }
126   );
127 }
128 );
129
130 </pre></div>


https://www.youtube.com/watch?v=RhU83qimXcA


```

***I enter new  
codebases a lot,  
and often don't  
know where to  
start***

***Let's navigate an  
example...***



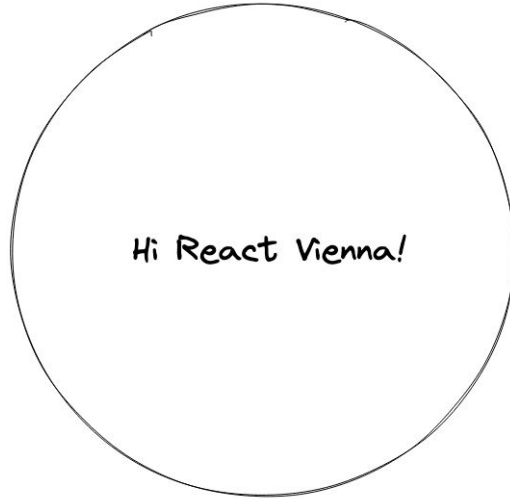
# EXCALIDRAW

Sketch hand-drawn like diagrams



To move canvas, hold mouse wheel or spacebar while dragging

# ffffff





# ***Diving into a complex codebase***

- Getting the code up and running!

📄 LICENSE	Add MIT License (#176)	2 years ago
📄 README.md	docs: Added note on encryption key length (#3995)	7 days ago
📄 crowdin.yml	Locale	2 years ago
📄 docker-compose.yml	chore: Update action versions and docker build (#30...	7 months ago
📄 package.json	feat: improve freedraw shape (#3984)	12 days ago
📄 tsconfig-types.json	feat: export types for package @excalidraw/excalid...	6 months ago
📄 tsconfig.json	refactor: improve types around dataState and library...	6 months ago
📄 vercel.json	chore: Make deploy source and logs public (#3596)	5 months ago
📄 yarn.lock	feat: improve freedraw shape (#3984)	12 days ago

☰ README.md



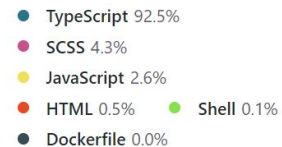
# EXCALIDRAW

Sketch hand-drawn like diagrams

Virtual whiteboard for sketching hand-drawn like diagrams.  
Collaborative and end-to-end encrypted.

Languages

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# ***Get the code up and running!***

- Clone the repo
- README.md
- Install dependencies
- Start up a development environment
- Run the tests



### Inspector

Inspect and refine code to build pixel-perfect layouts.

[Learn more](#)



### Console

Track CSS, JavaScript, security and network issues.

[Learn more](#)



### Debugger

Powerful JavaScript debugger with support for your framework.

[Learn more](#)



### Network

Monitor network requests that can slow or block your site.

[Learn more](#)



### Storage

Add, modify and remove cache, cookies, databases and session data.

[Learn more](#)



### Responsive Design Mode

Test sites on emulated devices in your browser.

[Learn more](#)



### Visual Editing

Fine-tune animations, alignment and padding.

[Learn more](#)



### Performance

Unblock bottlenecks, streamline processes, optimize assets.

[Learn more](#)

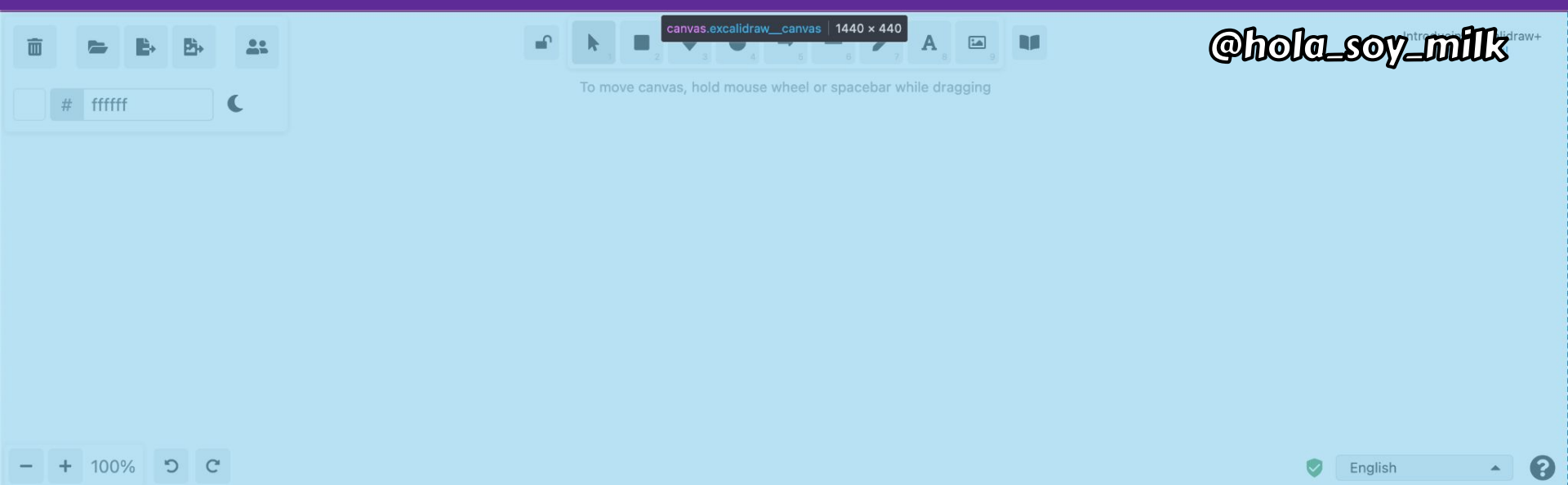


### Memory

Find memory leaks and make your application zippy.

[Learn more](#)

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Inspector

Consola

Depurador

Red

Editor de estilo

Rendimiento

Memoria

Almacenamiento

Accesibilidad

Aplicación

1

Buscar HTML

```
<div class="excalidraw excalidraw-container" tabindex="0"> flex
  > <div class="layer-ui_wrapper">
    <div class="excalidraw-textEditorContainer">
    <div class="excalidraw-contextMenuContainer">
  <main>
    <canvas class="excalidraw__canvas" style="width: 1440px; height: 440px;"
      width="2880" height="880">Drawing canvas</canvas> event
  </main>
</div>
```

html > body > div#root > div.excalidraw.excalidraw-container > main > canvas.excalidraw\_\_canvas

Filtrar estilos

elemento {

```
width: 1440px;
height: 440px;
}
```

.excalidraw canvas {

```
touch-action: none;
image-rendering: pixelated;
image-rendering: -moz-crisp-edges;
z-index: 1;
z-index: var(--zIndex-canvas);
}
```

Diseño

Computado

Cambiar

Flexbox

Selecciona un contenedor Flex o un elemento para continuar.

Cuadrícula

Sobreponer cuadrícula

div.App-menu.App-menu\_top

Errores

Advertencias

Registros

Info

Depuración

CSS

XHR

Solicitudes

tag are set correctly.

Version 1.62 is now available! Read about the new features and fixes from October.

Overview

SETUP

GET STARTED

USER GUIDE

Basic Editing

Extension Marketplace

IntelliSense

Code Navigation

Refactoring

Debugging

Version Control

Working with GitHub

VS Code for the Web

Integrated Terminal

Tasks

Settings Sync

Snippets

Emmet

# Debugging

Edit

One of the key features of Visual Studio Code is its great debugging support. VS Code's built-in debugger helps accelerate your edit, compile, and debug loop.

Start debugging

Pause, step over, step in/out, restart, stop

The screenshot displays the Visual Studio Code interface during a debugging session. The top menu bar includes File, Edit, Selection, View, Go, Run, Terminal, and Help. The 'RUN' view on the left shows the 'Launch Program' button highlighted with a red box. The code editor in the center shows the following JavaScript code:

```
1 var createError = require('http-errors');
2 var express = require('express');
3 var path = require('path');
4 var cookieParser = require('cookie-parser');
5 var logger = require('morgan');
6
7 var indexRouter = require('./routes/index');
8 var usersRouter = require('./routes/users');
9
10 var app = express();
11
12 // view engine setup
13 app.set('views', path.join(__dirname, 'views'));
14 app.set('view engine', ' pug');
```

The 'DEBUG CONSOLE' panel at the bottom is also highlighted with a red box and contains the command: `C:\Program Files\nodejs\node.exe .\bin\www`. A white box labeled 'Debug console panel' is overlaid on the bottom right of the console area.

IN THIS ARTICLE

Debugger extensions

Start debugging

Run view

Run menu

Launch configurations

Debug actions

Breakpoints

Logpoints

Data inspection

Launch.json attributes

Variable substitution

Platform-specific properties

Global launch configuration

Advanced breakpoint topics

Debug Console REPL

Redirect input/output to/from the debug target

Multi-target debugging

Remote debugging

***And hey, these  
experiences  
become  
knowledge and  
tools.***

# ***Diving into a complex codebase***

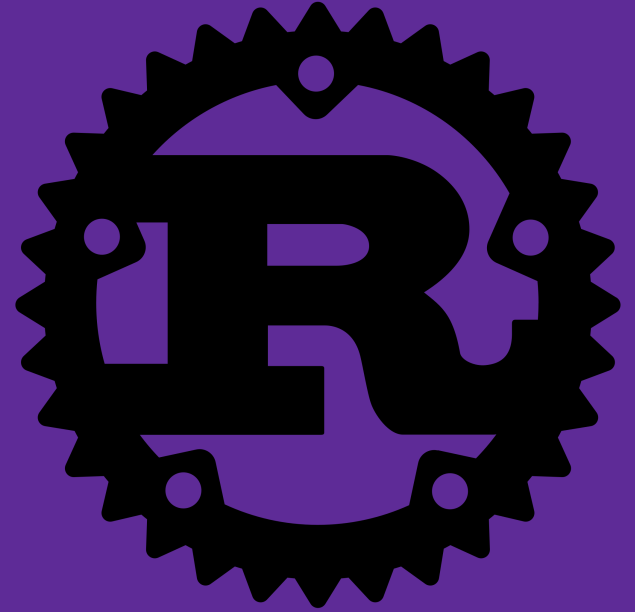
- Getting the code up and running!
- Going through the dependencies



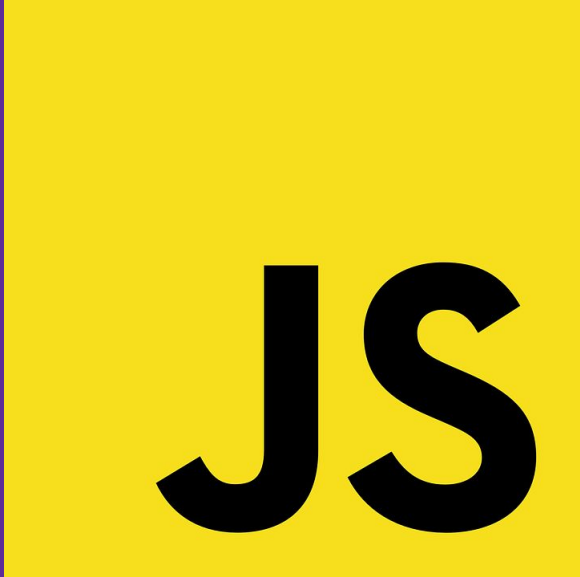
# ***The good ol' Gemfile***



***The good ol'  
Cargo.toml***



***The good ol'  
package.json***

A bright yellow square containing the letters 'JS' in a bold, black, sans-serif font, representing JavaScript.

**JS**

```
"dependencies": {
  "@sentry/browser": "5.30.0",
  "@sentry/integrations": "5.30.0",
  "@testing-library/jest-dom": "5.11.9",
  "@testing-library/react": "11.2.3",
  "@types/jest": "26.0.20",
  "@types/react": "17.0.0",
  "@types/react-dom": "17.0.0",
  "@types/socket.io-client": "1.4.35",
  "browser-nativefs": "0.12.0",
  "clsx": "1.1.1",
  "firebase": "8.2.3",
  "i18next-browser-languagedetector": "6.0.1",
  "lodash.throttle": "4.1.1",
  "nanoid": "3.1.20",
  "node-sass": "4.14.1",
  "open-color": "1.8.0",
  "pako": "1.0.11",
  "png-chunk-text": "1.0.0",
  "png-chunks-encode": "1.0.0",
  "png-chunks-extract": "1.0.0",
  "points-on-curve": "0.2.0",
  "pwacompat": "2.0.17",
  "react": "17.0.1",
  "react-dom": "17.0.1",
  "react-scripts": "4.0.1",
  "roughjs": "4.3.1",
  "socket.io-client": "2.3.1",
  "typescript": "4.1.3"
}
```

```
"scripts": {
  "build-node": "node ./scripts/build-node.js",
  "build:app:docker": "REACT_APP_DISABLE_SENTRY=true react-scripts build",
  "build:app": "REACT_APP_GIT_SHA=$VERCEL_GIT_COMMIT_SHA react-scripts build",
  "build:version": "node ./scripts/build-version.js",
  "build": "npm run build:app && npm run build:version",
  "eject": "react-scripts eject",
  "fix:code": "npm run test:code -- --fix",
  "fix:other": "npm run prettier -- --write",
  "fix": "npm run fix:other && npm run fix:code",
  "locales-coverage": "node scripts/build-locales-coverage.js",
  "locales-coverage:description": "node scripts/locales-coverage-description.js",
  "prettier": "prettier \"**/*.{css,scss,json,md,html,yml}\" --ignore-path=.eslintignore",
  "start": "react-app-rewired start",
  "test:all": "npm run test:typecheck && npm run test:code && npm run test:other && npm run test:app -- --watchAll=false",
  "test:app": "react-scripts test --passWithNoTests",
  "test:code": "eslint --max-warnings=0 --ignore-path .gitignore --ext .js,.ts,.tsx .",
  "test:debug": "react-scripts --inspect-brk test --runInBand --no-cache",
  "test:other": "npm run prettier -- --list-different",
  "test:typecheck": "tsc",
  "test:update": "npm run test:app -- --updateSnapshot --watchAll=false",
  "test": "npm run test:app"
},
```

# ***Diving into a complex codebase***

- Getting the code up and running!
  - Going through the dependencies
  - **Piecemeal refactoring**
-

```
import { KEYS } from "../keys";
import { register } from "../register";
import { selectGroupsForSelectedElements } from "../groups";
import { getNonDeletedElements } from "../element";

export const actionSelectAll = register({
  name: "selectAll",
  perform: (elements, appState) => {
    if (appState.editingLinearElement) {
      return false;
    }
    return {
      appState: selectGroupsForSelectedElements(
        {
          ...appState,
          editingGroupId: null,
          selectedElementIds: elements.reduce((map, element) => {
            if (!element.isDeleted) {
              map[element.id] = true;
            }
            return map;
          }, {} as any),
        },
        getNonDeletedElements(elements),
      ),
      commitToHistory: true,
    };
  },
  contextItemLabel: "labels.selectAll",
  keyTest: (event) => event[KEYS.CTRL_OR_CMD] && event.key === KEYS.A,
});
```

./src/actions/actionSelectAll.ts

```
import { KEYS } from "../keys";
import { register } from "../register";
import { selectGroupsForSelectedElements } from "../groups";
import { getNonDeletedElements } from "../element";

export const actionSelectAll = register({
  name: "selectAll",
  perform: (elements, appState) => {
    if (appState.editingLinearElement) {
      return false;
    }
    return {
      appState: selectGroupsForSelectedElements(
        {
          ...appState,
          editingGroupId: null,
          selectedElementIds: elements.reduce((map, element) => {
            if (!element.isDeleted) {
              map[element.id] = true;
            }
            return map;
          }, {} as any),
        },
        getNonDeletedElements(elements),
      ),
      commitToHistory: true,
    };
  },
  contextItemLabel: "labels.selectAll",
  keyTest: (event) => event[KEYS.CTRL_OR_CMD] && event.key === KEYS.A,
});
```

./src/actions/actionSelectAll.ts



@hola\_soy\_milk



Hold up, do you mean refactoring the codebase?



# ***Absolutely not.***

Hold up, do you mean refactoring the codebase?



@hola\_soy\_milk



**@hola\_soy\_milk**



# ***Diving into a complex codebase***

- Get the code up and running!
- Go through the dependencies
- Piecemeal refactoring
- **Checking out the test suite**

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Foto de [Denys Nevozhai](#) en [Unsplash](#)

# Software Testing Guide

I grew up in the waterfall era, where testing was seen as a separate activity to programming, done by a different group of people, and carried out after programming was done. The shift towards iterative and agile approaches, particularly the influence of Extreme Programming, has changed the role of testing - raising its importance, and integrating it with the core development work.

At the core of my philosophy to testing is that we want to write self-testing code, meaning we have a suite of automated tests that be easily run against the code base. We should be confident that this suite will catch almost all bugs in the software, so that when this suite “goes green” (passes), we can release that version of the software into production. This kind of environment can both drastically improve the robustness of our software, but also enables us to use refactoring to improve our productivity and responsiveness in the coming months.

A guide to material on martinowler.com about testing software systems.

*Martin Fowler*

2 Dec 2019



```
describe("export", () => {
  beforeEach(async () => {
    await render(<ExcalidrawApp />);
  });

  it("export embedded png and reimport", async () => {
    const pngBlob = await API.loadFile("./fixtures/smiley.png");
    const pngBlobEmbedded = await encodePngMetadata({
      blob: pngBlob,
      metadata: serializeAsJSON(testElements, h.state),
    });
    API.drop(pngBlobEmbedded);

    await waitFor(() => {
      expect(h.elements).toEqual([
        expect.objectContaining({ type: "text", text: "😊" }),
      ]);
    });
  });
});
```

***And hey, if tests  
are missing, this is  
a great chance to  
suggest them!***

# ***Diving into a complex codebase***

- Getting the code up and running!
- Going through the dependencies
- Piecemeal refactoring
- Checking out the test suite
- **Looking stuff up**

***Plugging in that  
error message***



yarn error 137



La privacidad, simplificada. ▾



Todo

Imágenes

Videos

Noticias

Mapas

Ajustes ▾



Austria ▾

Búsqueda segura: moderado ▾

En cualquier momento ▾

<https://jcutrer.com> > javascript > yarn-build-exit-code-137

### yarn build error "Command failed with exit code 137 ...

Name \*. Email \*. Website. Save my name, email, and website in this browser for the next time I comment.

<https://github.com> > benweet > stackedit > issues > 1177

### error Command failed with exit code 137 · Issue #1177 ...

With **yarn** instead of **npm** at 512 megs both servers started but if I navigated within the **vue-ui** site the dev server would crash. At 1GB I would see **errors** mentioning memory in the terminal of the dev server but it wouldn't crash. It seems that 2gb is enough for me but I think the switch from **npm** to **yarn** might have something to do with it.

<https://support.infoworks.io> > support > solutions > articles > 14000128220-pipeline-build...

### Pipeline build job fails with Exit code 137 in Yarn logs ...

Exit code is **137**. Container exited with a non-zero exit code **137**. Root cause: This is an issue from the EMR side and this could happen if the **spark.driver.memory** or the **spark.executor.memory** values are very less. When a container (Spark executor) runs out of memory, **YARN** automatically kills it.

<https://www.xspdf.com> > resolution > 53994529.html

### Yarn error command failed with exit code 137 - xspdf.com

The problem is that every time I build the project, I get the following error: **ERROR: Maven JVM terminated unexpectedly with exit code 137** . Exit code **137** openshift. Chapter 41. Application memory sizing OpenShift Container , Last State Terminated at Jan 7, 2018 5:00:15 PM with exit code **137 (Error)**. your pod has been killed with signal 9. If ...

Compartir Opiniones

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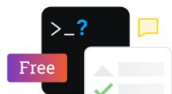
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Asking

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Badges

Our model

Reputation & Moderation

Answering

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**My Account**

I accidentally created two accounts; how do I merge them?

How do I add or remove login credentials from my account?

I lost my password; how do I reset it?

How do I delete my account?

**What is the license for the content I post?**

How do I report a possible security vulnerability?

Why has my post been blocked due to 'spam and abuse from my network'?

Why have I been limited to one question?

# *Digging into the Github repo for packages*





Code	1
Commits	0
Issues	16
Discussions <span>Beta</span>	0
Packages	0
Wikis	0

<b>States</b>	
Closed	16

[Advanced search](#) [Cheat sheet](#)

## 16 issues in zoOr/react-native-push-notification

Sort: Best match ▾

or view all results on GitHub

- 🔴 [Android react-native-push-notification:compileDebugJavaWithJavac FAILED \(#1985\)](#)  
tanodev85 opened on 12 May 4 comments
- 🔴 [unable to run app Task :react-native-push-notification:compileDebugJavaWithJavac FAILED \(#1988\)](#)  
Task :react-native-push-notification:compileDebugJavaWithJavac FAILED error  
raaidkh-tsa opened on 12 May 1 comment
- 🔴 [Task :react-native-push-notification:compileDebugJavaWithJavac FAILED all of a sudden \(#1979\)](#)  
Helen2hang opened on 12 May 74 comments
- 🔴 [Local Notifications only not compiling on Android \(#1980\)](#)  
... -native: Not Found react-native info output: &gt; Task :react-native-push-notification:compileDebugJavaWithJavac FAILED Deprecated Gradle features were used in this build, making it incompatible with ...  
KjellConnelly opened on 12 May 8 comments
- 🔴 [Error for Android Task :react-native-push-notification:compileDebugJavaWithJavac FAILED \(#1578\)](#)  
Getting a build error with android only with version 5.0.0. This works fine on version 4.0.0. Task :react-native-push-notification:compileDebugJavaWithJavac FAILED react-native info output: System ...  
jstodola opened on 3 Aug 2020 7 comments

# ***Diving into a complex codebase***

- Getting the code up and running!
  - Going through the dependencies
  - Piecemeal refactoring
  - Checking out the test suite
  - Looking stuff up
  - **Asking for help**
-

# ***Diving into a complex codebase***

- Getting the code up and running!
  - Going through the dependencies
  - Piecemeal refactoring
  - Checking out the test suite
  - Looking stuff up
  - Asking for help **effectively**
-

***How long should I  
wait before  
asking for help?***

***Asking narrow,  
pointed questions***

**Share what I've  
tried**

# ***Reproducing the problem***

# *Requesting a pairing session*



# ***Requesting an ensemble session***

# ***Diving into a complex codebase***

- Getting the code up and running!
  - Going through the dependencies
  - Piecemeal refactoring
  - Checking out the test suite
  - Looking stuff up
  - Asking for help effectively
  - **Improving overall onboarding**
-

**@hola\_soy\_milk**



***So that's some of  
the things I've  
learned!  
How about you?***

- Getting the code up and running!
  - Going through the dependencies
  - Piecemeal refactoring
  - Checking out the test suite
  - Looking stuff up
  - Asking for help effectively
  - Improving overall onboarding
-

***We've all been  
there.***

# Resources

- <https://stackoverflow.com/help/licensing>
- <https://github.com/excalidraw/excalidraw>
- <https://firefox-dev.tools/>
- <https://code.visualstudio.com/docs/editor/debugging>
- <https://martinfowler.com/testing/>

***Thanks a lot!*** 

Ramón Huidobro

@hola\_soy\_milk

 hola\_soy\_milk\_