

# Survey on code smells in Elixir

## FREE AND ENLIGHTENED CONSENT

## Title: Code Smells specific to systems implemented in the Elixir functional language

Institution: DCC / ICEX / UFMG

### Responsible researchers:

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Doctoral student at the Department of Computer Science at UFMG

- Prof. Marco Túlio Valente ([mtov@dcc.ufmg.br](mailto:mtov@dcc.ufmg.br))

Associate professor at the Department of Computer Science at UFMG

This “Free and Enlightened Consent” contains information about our research. If you have any questions, do not hesitate to ask the responsible researchers.

**Evaluation goals:** This study aims to understand the main code smells that can occur in Elixir systems.

**Survey information:** We will ask you questions about your demographics, positions held, experience with Elixir, and your perception of code smells in Elixir.

**Data collection and use:** The data will be collected through this Google Form. It is estimated that each participant will need a maximum of 25 minutes to complete the answers. This data will be used to promote good practices to improve the quality of code implemented in Elixir. The identities of all participants, as well as their responses, will be kept confidential. You may choose to receive the preliminary results of the study, with the anonymity of data and participants preserved. The results will be published and presented at conferences and scientific journals without revealing the identity of the participants.

**If you decide not to participate in the research:** You are free to refuse to participate or withdraw your consent at any time. Your decision will not affect any relationship with the evaluators, professors, or the institution responsible for this research.

**Compensation:** Your participation is voluntary and unpaid. In addition, you will not be charged for participating in this research.

**If you have any problems or any other questions about the research:** You can contact Lucas Vegi at any time at [lucasvegi@dcc.ufmg.br](mailto:lucasvegi@dcc.ufmg.br).

**If you have questions about the ethical aspects of this research:** Contact the Research Ethics Committee of the Federal University of Minas Gerais (COEP-UFMG). Address: Av. Antônio Carlos, 6627. Administrative Unit II – 2nd floor - Room 2005. Pampulha Campus. Belo Horizonte – MG, Brazil. CEP: 31270-901. E-mail: [coep@prpq.ufmg.br](mailto:coep@prpq.ufmg.br). Phone: +55 (31) 3409-4592. Opening hours: 09:00 AM to 11:00 AM; 02:00 PM to 04:00 PM (UTC-3).

**Risks and measures to minimize them:** When answering the questions, you may feel uncomfortable with questions that can bring back bad memories, fear of not knowing the answer, or even being identified. If you feel uncomfortable, you can pause completing the questionnaire and withdraw from participation at any time. The guarantee of data confidentiality ensured by the researchers is limited to the privacy policies of the virtual environment used for data collection (Google Forms). According to Brazilian legislation (Art. 9 of Resolution nº 510/16 of the National Health Council), in case of any damages resulting from your participation in this research, you will have the right to be compensated, under the terms of the Law.

**Benefits:** This research aims to promote good practices for improving the quality of systems implemented in Elixir, thus justifying its risks.

This survey will be carried out entirely remotely. In this way, this consent term will be made available in digital copy through this Google Form. A copy of this digital consent will be kept by the responsible researchers and you will receive a digital copy via email after signing the term.



**\*Obrigatório**

E-mail \*

Seu e-mail

**Your full name: \***

Sua resposta

### Free and Enlightened Consent (voluntary agreement) \*

☐ I declare that I have read the document mentioned above and that I agree to participate as a volunteer, authorizing the anonymous use of the data generated by my participation for the academic purposes described above.

Próxima

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Limpapar formulário

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# Survey on code smells in Elixir



\*Obrigatório

## Demographic questions

Select your country: \*

Escolher

Your city: \*

Sua resposta

Elixir experience time: \*

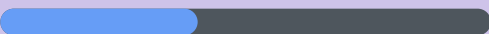
- ☐ Less than 1 year
- ☐ Between 1 and 3 years
- ☐ More than 3 years

How many different projects have you participated in using Elixir? \*

- ☐ Only one project
- ☐ Between 2 and 4 projects
- ☐ More than 4 projects

Voltar

Próxima



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## Survey on code smells in Elixir



### Traditional Code Smells

Traditional code smells are suboptimal code structures cataloged by Fowler and Beck for the object-oriented programming paradigm. Some of them are also discussed in the Elixir context nowadays.

Therefore, based on your experience, answer the questions below.

**Notes:**

- Each smell is accompanied by a link containing an explanation and examples;
- You don't have to answer all questions items if you don't want to.

How often does such smells occur in the Elixir systems you have worked with?

(1 = it is very rare; 5 = it is very common)

	1	2	3	4	5
Speculative Generality ( <a href="#">bit.ly/3Ckahkn</a> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inappropriate Intimacy ( <a href="#">bit.ly/3K6Bljv</a> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Large Class ( <a href="#">bit.ly/3pwdwhc</a> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How relevant are these smells in Elixir systems (evaluated as their potential to have a negative impact on maintainability, comprehensibility, and evolution)?

(1 = very low impact and relevance; 5 = high impact and relevance)

	1	2	3	4	5
Large Class ( <a href="#">bit.ly/3pwdwhc</a> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Speculative Generality ( <a href="#">bit.ly/3Ckahkn</a> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inappropriate Intimacy ( <a href="#">bit.ly/3K6Bljv</a> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Voltar

Próxima



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## Survey on code smells in Elixir



\*Obrigatório

### Final remarks

Please add here any comment about our work and survey:

Sua resposta

Do you want to receive the preliminary results of this study? \*

☐ Yes

☐ No

Uma cópia das suas respostas será enviada para o endereço de e-mail fornecido

Voltar

Enviar



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