



UFRPE

Relatório do código RevCare

Feito pelo grupo SoResenha / Entrega – 08/11

Introdução

Com uso de ferramentas de análise de código tivemos o resultado do sonar pelo código do revcare, as ferramentas utilizadas foram SonarQube, SonarLint e CheckStyles para uma busca mais profunda por problemas no código.

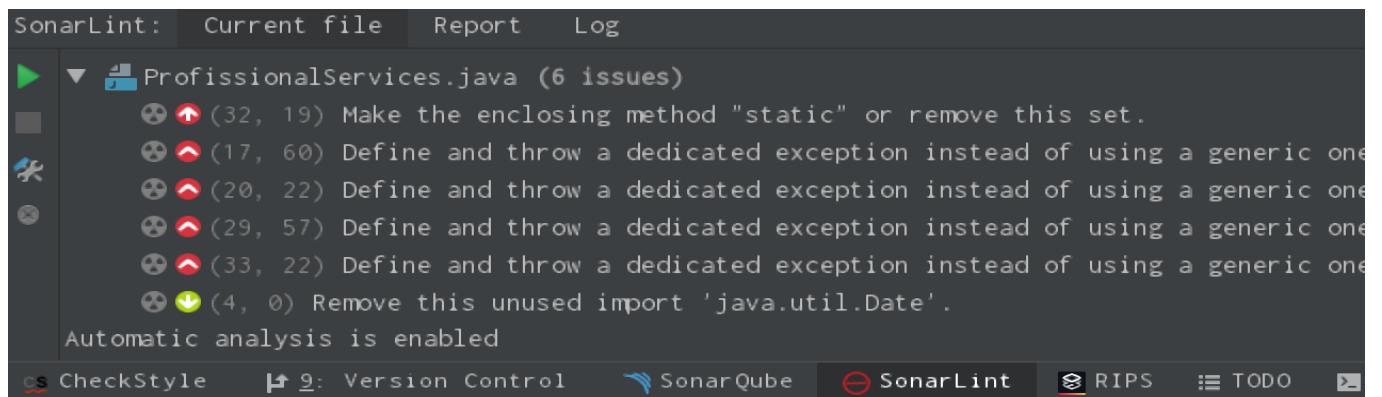


1 - Resultados Gerais da Busca

1.1 - Busca pelo SonarQube

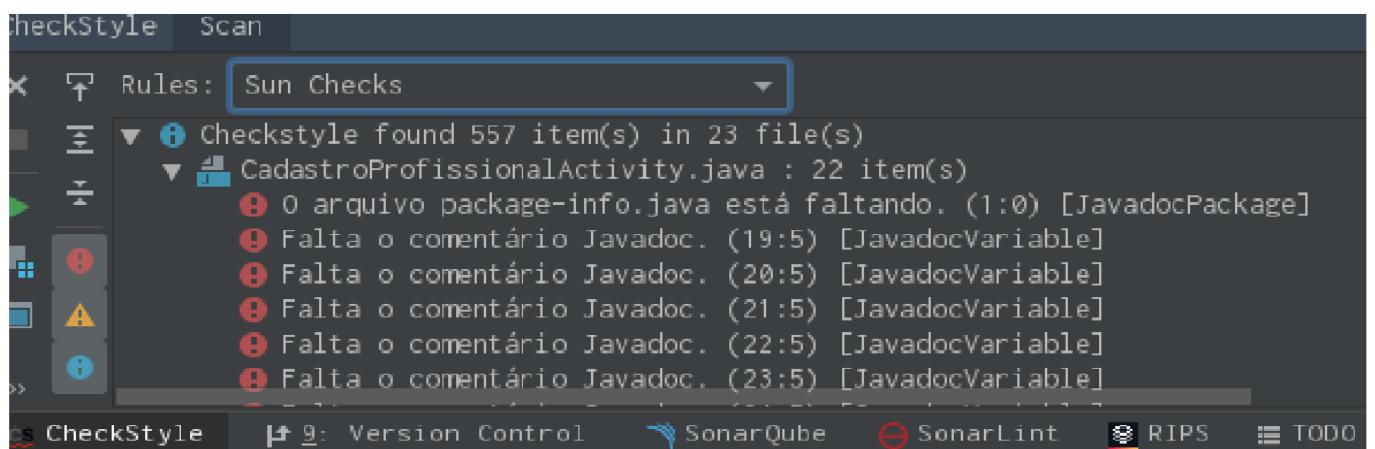


1.2 - Busca pelo SonarLint

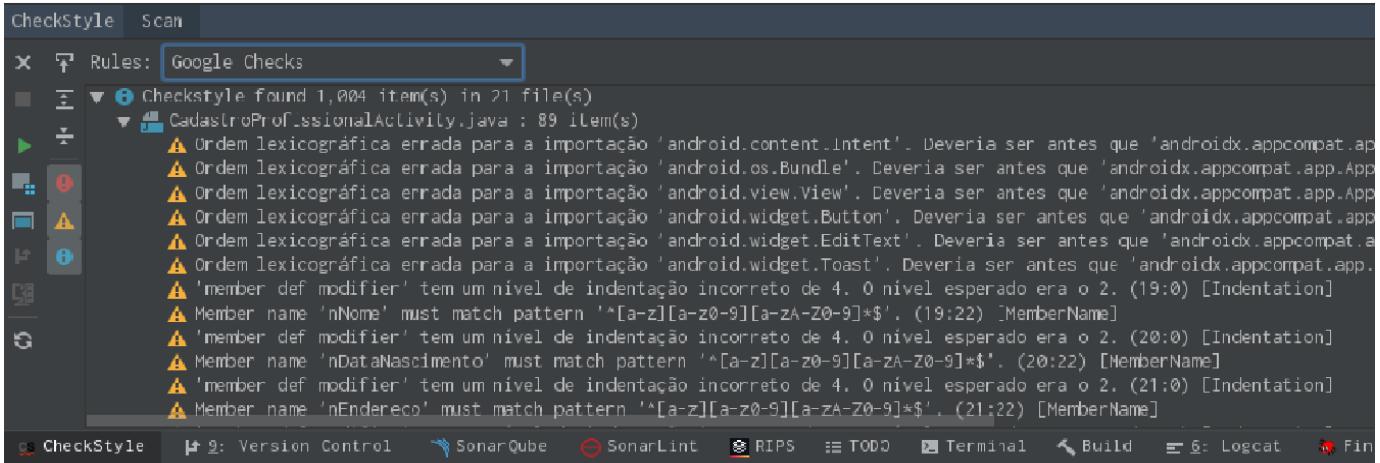


Obs : De forma geral apresentou uma média de 5 erros por Activity

1.3 – Busca pelo CheckStyles (Sun Checks)



1.3.1 – Busca pelo CheckStyles (Googles Checks)



The screenshot shows the CheckStyle interface with the 'Scan' tab selected. The 'Rules' dropdown is set to 'Google Checks'. A message indicates 'Checkstyle found 1,004 item(s) in 21 file(s)'. Below this, a tree view shows 'CadastroProfessionalActivity.java' containing 89 items, with several error icons (red triangles) indicating violations. The errors listed include issues with import order and member name patterns.

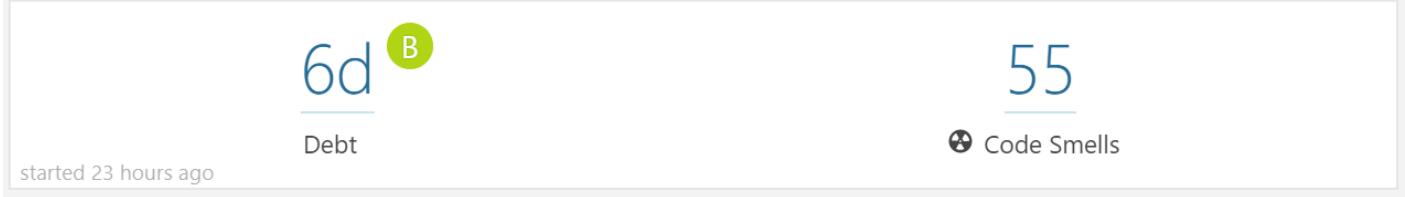
2 – Vulnerabilidades encontradas

<input type="checkbox"/> Make this "public static usuarioLogado" field final ...	23 hours ago	L8		
Vulnerability Minor Open Not assigned 20min effort				
<input type="checkbox"/> Make usuarioLogado a static final constant or non-public and provide accessors if needed. ...	23 hours ago	L8		
Vulnerability Minor Open Not assigned 10min effort				
<input type="checkbox"/> Make this member "protected". ...	23 hours ago	L9		
Vulnerability Minor Open Not assigned 15min effort				
<input type="checkbox"/> Make this "public static horaLogin" field final ...	23 hours ago	L9		
Vulnerability Minor Open Not assigned 20min effort				
<input type="checkbox"/> Make horaLogin a static final constant or non-public and provide accessors if needed. ...	23 hours ago	L9		
Vulnerability Minor Open Not assigned 10min effort				

As Vulnerabilidades encontradas foram de menor risco mas apesar de apresentarem um menor risco devem ser tratadas imediatamente para não trazerem problemas futuros .

3 - Code Smells

Code Smells 



O código precisa receber uma manutenção pois está com um debito tecnicamente

Maintainability rating is B when the technical debt ratio is greater than 5.0%

Durante a busca foram encontrados 13 Codes Smells do tipo critico podendo ser perigosos para o andamento do código

Define a constant instead of duplicating this literal " %3\$s TEXT NOT NULL, " 3 times.	yesterday ▾ L65	3	  
<input type="checkbox"/> ...  Code Smell ▾  Critical ▾  Open ▾ Not assigned ▾ 8min effort Comment	 design ▾		
Define a constant instead of duplicating this literal " %4\$s TEXT NOT NULL, " 6 times.	yesterday ▾ L66	6	  
<input type="checkbox"/> ...  Code Smell ▾  Critical ▾  Open ▾ Not assigned ▾ 14min effort Comment	 design ▾		
Define a constant instead of duplicating this literal " %5\$s TEXT NOT NULL, " 3 times.	yesterday ▾ L67	3	  
<input type="checkbox"/> ...  Code Smell ▾  Critical ▾  Open ▾ Not assigned ▾ 8min effort Comment	 design ▾		

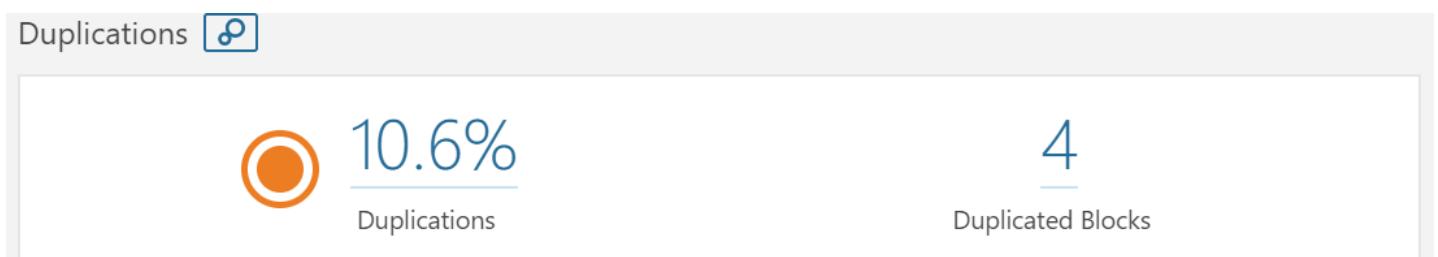
Codes Smells do tipo “Major” foram encontrados 26 e a maioria desses erros foram problemas com quantidades de parâmetros .

src/.../java/br/ufrpe/revcare/infra/Sessao.java			
<input type="checkbox"/> Add a private constructor to hide the implicit public one. ...  Code Smell ▾  Major ▾  Open ▾ Not assigned ▾ 30min effort Comment	 L7	6	    design ▾
src/.../br/ufrpe/revcare/infra/gui/MainActivity.java			
<input type="checkbox"/> This class has 9 parents which is greater than 5 authorized. ...  Code Smell ▾  Major ▾  Open ▾ Not assigned ▾ 6h effort Comment	 L21	6	    design ▾
src/.../br/ufrpe/revcare/infra/gui/Validacao.java			
<input type="checkbox"/> Method has 8 parameters, which is greater than 7 authorized. ...  Code Smell ▾  Major ▾  Open ▾ Not assigned ▾ 20min effort Comment	 L30	6	    brain-overload ▾
src/.../revcare/profissional/dominio/Profissional.java			
<input type="checkbox"/> 1 duplicated blocks of code must be removed. ...  Code Smell ▾  Major ▾  Open ▾ Not assigned ▾ 20min effort Comment	 L30	6	    pitfall ▾
src/.../ufrpe/revcare/profissional/gui/CadastroProfissionalActivity.java			
<input type="checkbox"/> 1 duplicated blocks of code must be removed. ...  Code Smell ▾  Major ▾  Open ▾ Not assigned ▾ 20min effort Comment	 L18	6	    pitfall ▾
src/.../ufrpe/revcare/profissional/gui/HomeProfissional.java			
<input type="checkbox"/> This class has 9 parents which is greater than 5 authorized. ...  Code Smell ▾  Major ▾  Open ▾ Not assigned ▾ 6h effort Comment	 L9	6	    design ▾

Em relação aos codes smells de menores impactos nos códigos foram encontrados 23 do tipo minor , Alguns desses codes smells estão causando as vulnerabilidades do código.

Make this "public static usuarioLogado" field final ...	yesterday ▾ L8 % 🔍 cert, cwe ▾
Make usuarioLogado a static final constant or non-public and provide accessors if needed. ...	yesterday ▾ L8 % 🔍 cwe ▾
Make this member "protected". ...	yesterday ▾ L9 % 🔍 cert, cwe, unpredictable ▾
Make this "public static horaLogin" field final ...	yesterday ▾ L9 % 🔍 cert, cwe ▾
Make horaLogin a static final constant or non-public and provide accessors if needed. ...	yesterday ▾ L9 % 🔍 cwe ▾
rc/.../br/ufrpe/revcare/infra/gui/Validacao.java	
Replace this if-then-else statement by a single return statement. ...	yesterday ▾ L110 % 🔍 clumsy ▾
rc/.../br/ufrpe/revcare/infra/negocio/Negocio.java	
Remove this empty class, write its code or make it an "interface". ...	yesterday ▾ L3 % 🔍 clumsy ▾
rc/.../revcare/infra/persistencia/GenericDAO.java	
Remove the declaration of thrown exception 'br.ufrpe.revcare.infra.RevCareRunTimeException' which is a runtime exception. ...	yesterday ▾ L10 % 🔍 clumsy, redundant, unused ▾
Remove this empty class, write its code or make it an "interface". ...	yesterday ▾ L26 % 🔍 clumsy ▾

4 - Duplications



	Duplicated Lines (%)	Duplicated Lines
 src/main/java/br/ufrpe/revcare/usuario/dominio/Usuario.java	65.5%	57
 src/main/java/br/ufrpe/revcare/profissional/dominio/Profissional.java	60.0%	57
 src/main/java/br/ufrpe/revcare/usuario/gui/CadastroUsuarioActivity.java	16.1%	15
 src/main/java/br/ufrpe/revcare/profissional/gui/CadastroProfissionalActivity.java	15.7%	17

5 – Complexidade Ciclomática

No total o código apresentou uma complexidade de 165

1 - Método com Elevado Risco

 src/main/java/br/ufrpe/revcare/infra/gui/[Validacao.java](#)

27

2 – Métodos com Moderado Risco

 src/main/java/br/ufrpe/revcare/profissional/dominio/[Profissional.java](#)

20

 src/main/java/br/ufrpe/revcare/usuario/dominio/[Usuario.java](#)

18

 src/main/java/br/ufrpe/revcare/servico/dominio/[Servico.java](#)

16

3 – Métodos com Baixo Risco

 src/main/java/br/ufrpe/revcare/infra/gui/[MainActivity.java](#)

10

 src/main/java/br/ufrpe/revcare/profissional/gui/[CadastroProfissionalActivity.java](#)

9

 src/main/java/br/ufrpe/revcare/usuario/gui/[CadastroUsuarioActivity.java](#)

9

 src/main/java/br/ufrpe/revcare/infra/persistencia/[DBHelper.java](#)

8

 src/main/java/br/ufrpe/revcare/profissional/persistencia/[ProfissionalDAO.java](#)

7

 src/main/java/br/ufrpe/revcare/usuario/persistencia/[UsuarioDAO.java](#)

7

 src/main/java/br/ufrpe/revcare/profissional/negocio/[ProfissionalServices.java](#)

6

 src/main/java/br/ufrpe/revcare/usuario/negocio/[UsuarioServices.java](#)

6

 src/main/java/br/ufrpe/revcare/usuario/gui/[RecyclerViewAdapter.java](#)

5

 src/main/java/br/ufrpe/revcare/usuario/gui/[RecyclerViewUsuario.java](#)

4

 src/main/java/br/ufrpe/revcare/servico/persistencia/[ServicoDAO.java](#)

3

 src/main/java/br/ufrpe/revcare/infra/persistencia/[GenericDAO.java](#)

2

 src/main/java/br/ufrpe/revcare/usuario/gui/[HomeUsuario.java](#)

2

 src/main/java/br/ufrpe/revcare/infra/[RevCareRunTimeException.java](#)

2

 src/main/java/br/ufrpe/revcare/infra/[Sessao.java](#)

2

 src/main/java/br/ufrpe/revcare/servico/gui/[CadastroServicoActivity.java](#)

1

Obs : Os outros métodos não apresentam risco.

6 – Complexidade Cognitiva

 src/main/java/br/ufrpe/revcare/infra/gui/Validacao.java	18
 src/main/java/br/ufrpe/revcare/infra/gui/MainActivity.java	11
 src/main/java/br/ufrpe/revcare/profissional/gui/CadastroProfissionalActivity.java	5
 src/main/java/br/ufrpe/revcare/usuario/gui/CadastroUsuarioActivity.java	5
 src/main/java/br/ufrpe/revcare/infra/persistencia/GenericDAO.java	3
 src/main/java/br/ufrpe/revcare/profissional/persistencia/ProfissionalDAO.java	2
 src/main/java/br/ufrpe/revcare/profissional/negocio/ProfissionalServices.java	2
 src/main/java/br/ufrpe/revcare/usuario/persistencia/UsuarioDAO.java	2
 src/main/java/br/ufrpe/revcare/usuario/negocio/UsuarioServices.java	2
 src/main/java/br/ufrpe/revcare/infra/persistencia/DBHelper.java	1