

BUILDING



STATIC CODE ANALYSIS

Bernat Casañas Masip



HOW MUCH TIME DO YOU
SPEND LOOKING FOR
MEMORY LEAKS?

HOW MANY TIMES DO
YOU DO A CODE REVIEW?

WHAT IS IT?



ANALYZE

Scan the code for alerts and errors.

IDENTIFY

Each program, according to its capacity, identifies different types of errors.

CLASSIFIES

It classifies according to the type of error and its importance.

What can you do?

- Variable not initialized in the constructor
- Variable used after element has been erased.
- Memory Leaks
- Variable never used
- Useless code

What can you do?

- Duplicated code
- Commented TODO
- Buffer Overflow

```
int divide(void)
{
    int x;
    if(foo())
    {
        x = 0;
    }
    else
    {
        x = 5;
    }
    return (10/x);
}
```

Limitation

The result cannot be known. This means that the tools may not report actual defects.

```
int calculateArea(int length, int width)
{
    return (length + width);
}
```

Limitation

We can't know the developer's intentions



Offline



VCG

File Edit View Scan Settings Help

D:\Agenda_Automatica\Project2\Mythology_Parade_Engine

Target Files Results Summary Table

SUSPICIOUS COMMENT: Comment Indicates Potentially Unfinished Code -
Line: 6 - D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\CombatUnit.cpp
TODO 10: Change textures

SUSPICIOUS COMMENT: Comment Indicates Potentially Unfinished Code -
Line: 129 - D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\CombatUnit.cpp
TODO: Convert to a get funtions

SUSPICIOUS COMMENT: Comment Indicates Potentially Unfinished Code -
Line: 70 - D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\EntityManager.cpp
TODO: NO HARDCODE BOY

SUSPICIOUS COMMENT: Comment Indicates Potentially Unfinished Code -
Line: 142 - D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\EntityManager.cpp
TODO: Move this logic to the player

SUSPICIOUS COMMENT: Comment Indicates Potentially Unfinished Code -
Line: 511 - D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\EntityManager.cpp
TODO load spritesheet when needed only? first call of constructor of entity?

SUSPICIOUS COMMENT: Comment Indicates Potentially Unfinished Code -
Line: 513 - D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\EntityManager.cpp
TODO: sort elements only inside the screen (QuadTree)

SUSPICIOUS COMMENT: Comment Indicates Potentially Unfinished Code -
Line: 606 - D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\EntityManager.cpp
TODO: Find a wat to mesure this with the tileLenght

STANDARD: Potential Memory Mis-management. Variable Name: ref
new without delete.
Line: 486 FileName: D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\EntityManager.cpp

STANDARD: Potential Memory Mis-management. Variable Name: input
new without delete.
Line: 31 FileName: D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1App.cpp

- # Visual Code Grepper
- ## Offline Program
- List of errors
 - Severity
 - Title
 - Description
 - File
 - Line
 - Graphic

HOW DOES IT WORK?

```
package com.ds.ucd.be.before.solr;

import ...

public final class LocationUtils {

    /**
     * Parses Point from it's String representation.
     * @param locationString - String that represents location, as 2 double values split with coma. Accepts space after/before comma.
     * @return org.springframework.data.solr.core.geo.Point instance
     */
    public static Point parseLocation(String locationString) {
        Preconditions.checkNotNull(locationString, "Location String should not be null");
        Preconditions.checkArgument(locationString.contains(","), "Location must be split with coma");
        locationString = locationString.trim();

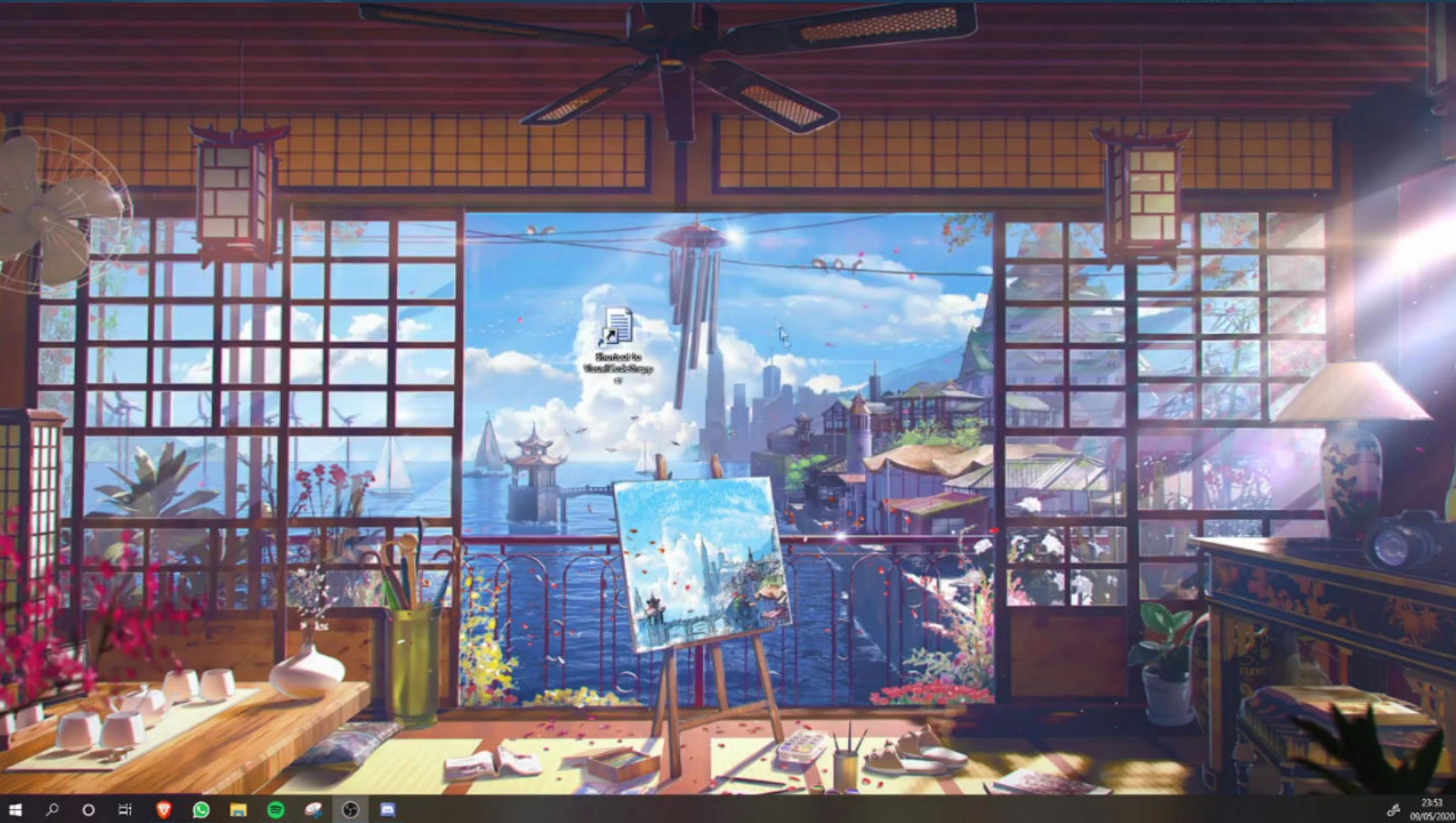
        if (locationString.contains(" ,")) {
            String[] location = locationString.replaceAll(", ", ",").split(",");
            location[0] = location[0].trim();
            location[1] = location[1].trim();
        }

        location = locationString.split(",");
        Preconditions.checkArgument(location.length > 2, "Location should consist at least 2 Double parameters");
        double lat = Double.parseDouble(location[0]);
        double lon = Double.parseDouble(location[1]);

        return new Point(lat, lon);
    }
}
```



TUTORIAL



<https://www.youtube.com/watch?v=HYohI3VthUA>

VCG

File Edit View Scan Settings Help

\Agenda_Automatica\Project2\Mythology_Parade_Engine

Target Files Results Summary Table

```
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\Animation.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\Animation.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\Building.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\Building.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\CombatUnit.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\CombatUnit.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\Console.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\Console.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\CurrencySystem.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\CurrencySystem.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\Entity.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\EntityManager.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\EntityManager.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\HealthSystem.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\HealthSystem.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1App.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1App.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Audio.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Audio.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1FadeToBlack.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1FadeToBlack.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Fonts.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Fonts.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Gui.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Gui.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Input.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Input.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1LogoScene.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1LogoScene.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Main.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Map.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Map.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Minimap.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Minimap.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Module.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Pathfinding.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Pathfinding.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1PerfTimer.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1PerfTimer.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Render.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Render.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Scene.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Scene.h
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Textures.cpp
0:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Textures.h
```

Language: C/C++ File Suffixes: .cpp|.hpp|.c|.h [142 Files]

VCG

File Edit View Scan Settings Help

D:\Agenda_Automatica\Project2\Mythology_Parade_Engine

Target Files Results Summary Table

SUSPICIOUS COMMENT: Comment Indicates Potentially Unfinished Code -
Line: 6 - D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\CombatUnit.cpp
TODO 10: Change textures

SUSPICIOUS COMMENT: Comment Indicates Potentially Unfinished Code -
Line: 129 - D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\CombatUnit.cpp
TODO: Convert to a get funtions

SUSPICIOUS COMMENT: Comment Indicates Potentially Unfinished Code -
Line: 70 - D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\EntityManager.cpp
TODO: NO HARDCODE BOY

SUSPICIOUS COMMENT: Comment Indicates Potentially Unfinished Code -
Line: 142 - D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\EntityManager.cpp
TODO: Move this logic to the player

SUSPICIOUS COMMENT: Comment Indicates Potentially Unfinished Code -
Line: 511 - D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\EntityManager.cpp
TODO load spritesheet when needed only? first call of constructor of entity?

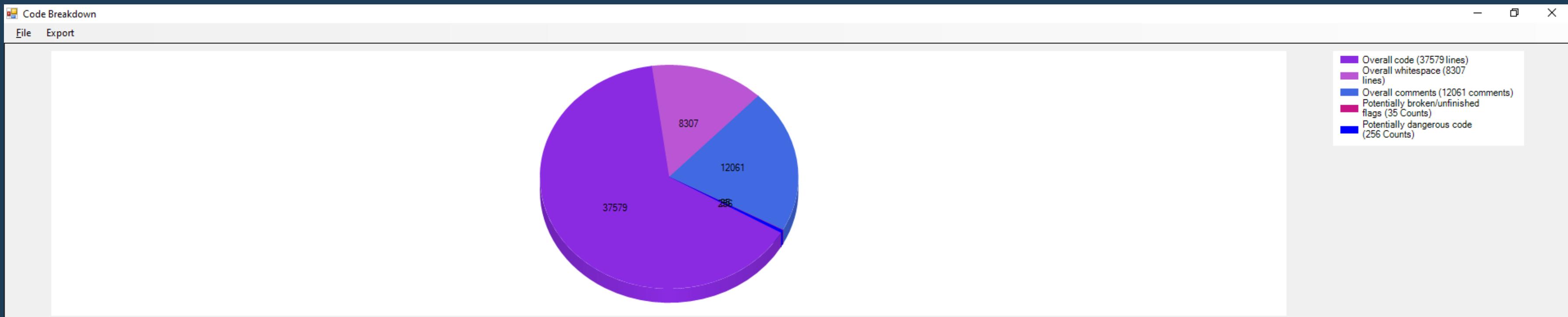
SUSPICIOUS COMMENT: Comment Indicates Potentially Unfinished Code -
Line: 513 - D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\EntityManager.cpp
TODO: sort elements only inside the screen (QuadTree)

SUSPICIOUS COMMENT: Comment Indicates Potentially Unfinished Code -
Line: 606 - D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\EntityManager.cpp
TODO: Find a wat to mesure this with the tileLength

STANDARD: Potential Memory Mis-management. Variable Name: ret
new without delete.
Line: 486 File Name: D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\EntityManager.cpp

STANDARD: Potential Memory Mis-management. Variable Name: input
new without delete.
Line: 31 File Name: D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1App.cpp

Language: C/C++ File Suffixes: .cpp|.hpp|.c|.h [142 Files]



59165 Lines:
12061 Comments (~20.4%)
8307 Lines of Whitespace (~14%)
38797 Lines of Code (including comment-appended code) (~65.6%)

Double click on an item below to view an individual code breakdown.

Filter....

Apply Filter

Name	Total Lines	Percentage of Total	Lines Of Code	Commented Lines	Whitespace	Potentially Unsafe Flags	Potentially Unsafe Code	Full Path
pugixml.cpp	11554	19,528	8247	805	2500	4	207	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\PugiXml\src\pugixml.cpp
SDL_opengl_glest.h	11177	18,891	10123	541	508	0	0	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\SDL\include\SDL_opengl_glest.h
SDL_opengl.h	2176	3,678	1512	170	438	0	0	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\SDL\include\SDL_opengl.h
SDL_opengles2_gl2ext.h	2050	3,465	1422	353	272	0	0	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\SDL\include\SDL_opengles2_gl2ext.h
SDL_egl.h	1673	2,828	1052	388	185	0	0	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\SDL\include\SDL_egl.h
j1Scene.cpp	1603	2,709	1419	67	117	1	0	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Scene.cpp
pugixml.hpp	1366	2,309	699	349	316	3	0	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\PugiXml\src\pugixml.hpp
SDL_haptic.h	1223	2,067	100	942	114	1	0	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\SDL\include\SDL_haptic.h
SDL_video.h	1103	1,864	206	701	106	0	0	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\SDL\include\SDL_video.h
j1Gui.cpp	941	1,59	817	14	110	0	2	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Gui.cpp
SDL_render.h	880	1,487	149	589	78	0	0	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\SDL\include\SDL_render.h
SDL_events.h	750	1,268	215	393	86	0	0	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\SDL\include\SDL_events.h
SDL_hints.h	711	1,202	74	514	70	0	0	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\SDL\include\SDL_hints.h
EntityManager.cpp	663	1,121	453	118	91	5	1	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\EntityManager.cpp
j1Map.cpp	639	1,08	485	31	123	0	5	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\j1Map.cpp
SDL_mixer.h	631	1,067	155	348	87	0	0	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\SDL_mixer\include\SDL_mixer.h
SDL_opengles2_gl2.h	621	1,05	468	86	65	0	0	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\SDL\include\SDL_opengles2_gl2.h
SDL_audio.h	605	1,023	128	388	53	0	0	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\SDL\include\SDL_audio.h
SDL_stdinc.h	527	0.891	374	84	52	3	15	D:\Agenda_Automatica\Project2\Mythology_Parade_Engine\Core\SDL\include\SDL_stdinc.h

Activar Windows
Visita Configuración para activar Windows.

TUTORIAL

```
package com.ds.ucd.be.before.solr;

import ...

public final class LocationUtils {

    /**
     * Parses Point from it's String representation.
     * @param locationString - String that represents location, as 2 double values split with coma. Accepts space after/before comma.
     * @return org.springframework.data.solr.core.geo.Point instance
     */
    public static Point parseLocation(String locationString) {
        Preconditions.checkNotNull(locationString, errorMessage: "Location String should not be null");
        Preconditions.checkArgument(locationString.contains(","), errorMessage: "Location must be split with coma");
        locationString = locationString.trim();

        if (locationString.contains(" ,")) {
            locationString = locationString.replaceAll( regex: " ,", replacement: "," );
        }

        if (locationString.contains( " ") ) {
            locationString = locationString.replaceAll( regex: " ", replacement: "," );
        }

        String[] location = locationString.split( regex: "," );
        Preconditions.checkArgument( location.length >= 2, errorMessage: "Location should consist at least 2 Double parameters");
        double latitude = Double.parseDouble( location[0] );
        double longitude = Double.parseDouble( location[1] );
        return new Point( latitude, longitude );
    }
}
```



```
Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'A
```

```
1564 typedef void (APIENTRYP PFNGLDRAWRANGEELEMENTSPROC) (GLenum mode,
```

```
Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'A
```

```
1565 typedef void (APIENTRYP PFNGLTEXIMAGE3DPROC) (GLenum target, GLint
```

```
Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'A
```

```
1967 typedef void (APIENTRYP PFNGLCOMPRESSEDTEXIMAGE3DPROC) (GLenum ta
```

```
Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'A
```

```
1968 typedef void (APIENTRYP PFNGLCOMPRESSEDTEXIMAGE2DPROC) (GLenum ta
```

```
Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'A
```

```
1972 typedef void (APIENTRYP PFNGLCOMPRESSEDTEXSUBIMAGE1DPROC) (GLenum
```

```
Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'A
```

```
1973 typedef void (APIENTRYP PFNGLGETCOMPRESSEDTEXIMAGEPROC) (GLenum t
```

```
Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'A
```

```
2055 typedef void (APIENTRYP PFNGLCLIENTACTIVETEXTUREARBPROC) (GLenum
```

```
Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'A
```

```
2058 typedef void (APIENTRYP PFNGLMULTITEXCOORD1FARBPROC) (GLenum targ
```

Codacy

Programa Online

- Progression Graphic
- Visual Branches
- Mistakes per Commit
- Visual Errors in Files
- List of Errors
- Pull Request List

HOW DOES IT WORK?

```
package com.ds.ucd.be.before.solr;

import ...

public final class LocationUtils {

    /**
     * Parses Point from it's String representation.
     * @param locationString - String that represents location, as 2 double values split with coma. Accepts space after/before comma.
     * @return org.springframework.data.solr.core.geo.Point instance
     */
    public static Point parseLocation(String locationString) {
        Preconditions.checkNotNull(locationString, "Location String should not be null");
        Preconditions.checkArgument(locationString.contains(","), "Location must be split with coma");
        locationString = locationString.trim();

        if (locationString.contains(" ,")) {
            String[] location = locationString.replaceAll(", ", ",").split(",");
            location[0] = location[0].trim();
            location[1] = location[1].trim();
        }

        location = locationString.split(",");
        Preconditions.checkArgument(location.length > 2, "Location should consist at least 2 Double parameters");
        double lat = Double.parseDouble(location[0]);
        double lon = Double.parseDouble(location[1]);

        return new Point(lat, lon);
    }
}
```



TUTORIAL

The screenshot shows the Codacy website interface. At the top, there's a navigation bar with links for Product, Pricing, Self-hosted, Blog, Log in, and a prominent green "Get started" button. Below the navigation, the main heading "Automate your code quality" is displayed, followed by a description of the service's features: "Automatically identify issues through static code review analysis. Get notified on security issues, code coverage, code duplication, and code complexity in every commit and pull request, directly from your current workflow." To the right of the text is a visual representation of the platform's interface, showing a dashboard with various metrics and a code editor window with a tooltip indicating a found issue. Below this section, there's a banner stating "More than 30 supported languages" with icons for Scala, Kotlin, Java, JS, and others. At the bottom of the page, there's a footer area featuring a user profile icon and a message about a recent review, along with a cookie consent notice.

<https://www.youtube.com/watch?v=9kh8DA-To6w>

A Repository certification

Quality evolution

[Last 7 days](#)[Last 31 days](#)

Issues breakdown

147 total issues

Category

Category	Total
Security	1
Error Prone	9
Code Style	122
Compatibility	0
Unused Code	0
Performance	15

[See all issues](#)

Coverage



Make sure your code is all tested. Set up your coverage here.

Commits Develop ▾

STATUS	AUTHOR	COMMIT	MESSAGE	CREATED	ISSUES
✓	Jordi Pardo	16ffbbb	Fonts fixed	36 minutes ago	0 NEW 0 FIXED
✓	Arnaud77	ed73e8b	solve ui bugs in scene in release	about 2 hours ago	0 NEW 0 FIXED
✓	Arnaud77	7ccaaac8	solve title scene ui bugs with release	about 3 hours ago	0 NEW 0 FIXED
✓	Arnaud77	6b7db1c	solve bug exit in debug	about 3 hours ago	0 NEW 0 FIXED
✓	[REDACTED]	f21e954	PreveiwBuildings	about 3 hours ago	1 NEW 0 FIXED
✓	Jordi Pardo	a1504e7 Merge	Merge pull request #51 from Misioneros-Studio/Feature_HUD_Cleaning	about 4 hours ago	0 NEW 0 FIXED
✓	Yuye	5566316	new details map	about 10 hours ago	0 NEW 0 FIXED
✓	Yuye	93ab269	new terrain zones map	about 10 hours ago	0 NEW 0 FIXED
✓	Yuye	32d729d	map update detailing	about 10 hours ago	0 NEW 0 FIXED
✓	Arnaud77	c5ff7bd	scene cleaned	3 days ago	0 NEW 0 FIXED
✗	Arnaud77	d76d3e1	paused implemented in timer	3 days ago	- NEW - FIXED
✓	Jordi Pardo	d65dc98 Merge	Merge branch 'Feature/Pathfinding01' into Develop	4 days ago	0 NEW 0 FIXED
✗	Jordi Pardo	74f18f2	Working Pathfinding, yay!!	4 days ago	- NEW - FIXED
✗	Jordi Pardo	d2432ff	Fixed path	4 days ago	- NEW - FIXED
✗	Jordi Pardo	ca3289d	Diagonals working	4 days ago	- NEW - FIXED
✗	Arnaud77	f4415c9 Merge	Merge branch 'Develop' of https://github.com/Misioneros-Studio/Mythology-Parade into Develop	4 days ago	- NEW - FIXED
✗	Arnaud77	9878cde	Revert "Revert "choose civilization at start of new game""	4 days ago	- NEW - FIXED

GRADE ^	FILENAME ^	ISSUES ^	DUPLICATION ^
F	Mythology_Parade_Engine/Core/HUD.cpp	50	67
A	Mythology_Parade_Engine/Core/SDL/include/SDL_opengl.h	50	0
C	Mythology_Parade_Engine/Core/EntityManager.cpp	11	11
F	README.md	9	-
A	Mythology_Parade_Engine/Core/PugiXml/src/pugixml.hpp	5	2
C	Mythology_Parade_Engine/Core/j1Minimap.cpp	5	2
A	Mythology_Parade_Engine/Core/Building.cpp	4	0
A	Mythology_Parade_Engine/Core/Unit.cpp	3	0
B	Mythology_Parade_Engine/Core/j1FadeToBlack.cpp	3	0
B	Mythology_Parade_Engine/Core/Player.cpp	3	4
A	Mythology_Parade_Engine/Core/SDL/include/SDL_thread.h	1	0
A	Mythology_Parade_Engine/Core/SDL/include/SDL_rwops.h	1	0
A	Mythology_Parade_Engine/Core/QuadTree.cpp	1	0
B	Mythology_Parade_Engine/Core/j1LogoScene.cpp	1	0
A	Mythology_Parade_Engine/Core/SDL/include/SDL_assert.h	0	0
A	Mythology_Parade_Engine/Core/SDL/include/SDL_stdinc.h	0	0
A	Mythology_Parade_Engine/Core/p2Log.cpp	Activar Windows 0 Ve a Configuración para activar	0
A	Mythology_Parade_Engine/Core/SDL/include/SDL_timer.h	0	0

```
217     case 6:  
218         CreateBuildingEntity(spawnPos, BuildingType::TEMPLE, buildingsData[buildingTestIndex], CivilizationType::VIKING);  
219         break;  
220     case 3:  
221         viking = true;  
222     case 7:  
223         CreateBuildingEntity(spawnPos, BuildingType::ENCAMPMENT, buildingsData[buildingTestIndex], CivilizationType::VIKING);  
224         faithToDescrease = 200;  
225         break;  
226     }  
227  
228     //Once you build disable building mode  
229     App->entityManager->getPlayer()->DecreaseFaith(faithToDescrease);  
230     crPreview.active = false;  
231 }  
232  
233 return true;  
234 }
```

Variable 'viking' is assigned a value that is never used.

Filter

All languages ▾

All categories ▾

All levels ▾

All patterns ▾

All authors ▾

Mythology_Parade_Engine/Core/SDL/include/SDL_opengl.h

Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'APIENTRY' is unknown. Use -D if you want to check it. You can use -U to skip it explicitly.

```
1564 typedef void (APIENTRYP PFNGLDRAWRANGEELEMENTSPROC) (GLenum mode, GLuint start, GLuint end, GLsizei count, GLenum type, const GLvoid *indices);
```

Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'APIENTRY' is unknown. Use -D if you want to check it. You can use -U to skip it explicitly.

```
1565 typedef void (APIENTRYP PFNGLTEXIMAGE3DPROC) (GLenum target, GLint level, GLint internalformat, GLsizei width, GLsizei height, GLsizei depth, GLint border, GLenum format, GLenum type, const GLvoid *pixels);
```

Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'APIENTRY' is unknown. Use -D if you want to check it. You can use -U to skip it explicitly.

```
1967 typedef void (APIENTRYP PFNGLCOMPRESSEDTEXIMAGE3DPROC) (GLenum target, GLint level, GLenum internalformat, GLsizei width, GLsizei height, GLsizei depth, GLint border, GLsizei imageSize, const GLvoid *data);
```

Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'APIENTRY' is unknown. Use -D if you want to check it. You can use -U to skip it explicitly.

```
1968 typedef void (APIENTRYP PFNGLCOMPRESSEDTEXIMAGE2DPROC) (GLenum target, GLint level, GLenum internalformat, GLsizei width, GLsizei height, GLint border, GLsizei imageSize, const GLvoid *data);
```

Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'APIENTRY' is unknown. Use -D if you want to check it. You can use -U to skip it explicitly.

```
1972 typedef void (APIENTRYP PFNGLCOMPRESSEDTEXSUBIMAGE1DPROC) (GLenum target, GLint level, GLint xoffset, GLsizei width, GLenum format, GLsizei imageSize, const GLvoid *data);
```

Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'APIENTRY' is unknown. Use -D if you want to check it. You can use -U to skip it explicitly.

```
1973 typedef void (APIENTRYP PFNGLGETCOMPRESSEDTEXIMAGEPROC) (GLenum target, GLint level, GLvoid *img);
```

Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'APIENTRY' is unknown. Use -D if you want to check it. You can use -U to skip it explicitly.

```
2055 typedef void (APIENTRYP PFNGLCLIENTACTIVETEXTUREARBPROC) (GLenum texture);
```

Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'APIENTRY' is unknown. Use -D if you want to check it. You can use -U to skip it explicitly.

```
2058 typedef void (APIENTRYP PFNGLMULTITEXCOORD1FARBPROC) (GLenum target, GLfloat s);
```

Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'APIENTRY' is unknown. Use -D if you want to check it. You can use -U to skip it explicitly.

```
2061 typedef void (APIENTRYP PFNGLMULTITEXCOORD1IARBPROC) (GLenum target, const GLint *v);
```

Skipping configuration 'APIENTRY;_WIN32;__CYGWIN__' since the value of 'APIENTRY' is unknown. Use -D if you want to check it. You can use -U to skip it explicitly.

```
2062 typedef void (APIENTRYP PFNGLMULTITEXCOORD1SARBPROC) (GLenum target, GLshort s);
```

Open Pull Requests ▾							
STATUS	AUTHOR	TITLE	ORIGIN	TARGET	UPDATED	ISSUES	
	BernatCasanas	#52: New units	new-units	Develop	about 8 hours ago	0 NEW	0 FIXED
	daskza19	#53: Feature/win lose animation	Feature/WinLoseA...	Develop	2 days ago	0 NEW	0 FIXED

[◀ Previous](#) [Next ▶](#)

Warnings

[All !\[\]\(72b4cf351241b08691672e806c1604b7_img.jpg\)](#)[More !\[\]\(befdcdf329f4bc1566e8bd49d7971740_img.jpg\)](#)

-  **Android** 
-  Auth 
-  CSRF 
-  CommandInjection found in 1 file 
-  Cryptography 
-  DoS 
-  InputValidation 
-  InsecureModulesLibraries 
-  InsecureStorage 
-  MaliciousCode 
-  Routes 
-  SQLInjection 
-  UnexpectedBehaviour 
-  Visibility 
-  XSS 

Android

Android specific issues.

 You need to enable the following patterns for this category to be verified

 Android cloexec open

A common source of security bugs is code that opens a file without using the `O_CLOEXEC` flag

[Clang-tidy](#) **Android cloexec epoll create1**

`epoll_create1()` should include `EPOLL_CLOEXEC` in its type argument to avoid the file descriptor leakage

[Clang-tidy](#) **Android comparison in temp failure retry**

Diagnoses comparisons that appear to be incorrectly placed in the argument to the `TEMP_FAILURE_RETRY` macro

[Clang-tidy](#) **Android cloexec socket**

`socket()` should include `SOCK_CLOEXEC` in its type argument to avoid the file descriptor leakage

[Clang-tidy](#) **Android cloexec inotify init**

The usage of `inotify_init()` is not recommended, it's better to use `inotify_init1()`

[Clang-tidy](#) **Android cloexec accept4**

`accept4()` should include `SOCK_CLOEXEC` in its type argument to avoid the file descriptor leakage

[Clang-tidy](#)

TUTORIAL

```
package com.ds.ucd.be.before.solr;

import ...

public final class LocationUtils {

    /**
     * Parses Point from it's String representation.
     * @param locationString - String that represents location, as 2 double values split with coma. Accepts space after/before comma.
     * @return org.springframework.data.solr.core.geo.Point instance
     */
    public static Point parseLocation(String locationString) {
        Preconditions.checkNotNull(locationString, errorMessage: "Location String should not be null");
        Preconditions.checkArgument(locationString.contains(","), errorMessage: "Location must be split with coma");
        locationString = locationString.trim();

        if (locationString.contains(" ,")) {
            locationString = locationString.replaceAll( regex: " ,", replacement: "," );
        }

        if (locationString.contains( " ") ) {
            locationString = locationString.replaceAll( regex: " ", replacement: "," );
        }

        String[] location = locationString.split( regex: "," );
        Preconditions.checkArgument( location.length >= 2, errorMessage: "Location should consist at least 2 Double parameters");
        double latitude = Double.parseDouble( location[0] );
        double longitude = Double.parseDouble( location[1] );
        return new Point( latitude, longitude );
    }
}
```





HOMEWORK

WHICH ONE DO YOU
PREFER?

CHOOSE YOUR PREFER TOOL AND START POLISHING YOUR PROJECT



Sources

<https://www.perforce.com/blog/sca/what-static-analysis>

https://en.wikipedia.org/wiki/List_of_tools_for_static_code_analysis

https://en.wikipedia.org/wiki/Static_program_analysis

<https://www.codegrip.tech/productivity/guide-to-static-code-analysis/>

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

<https://www.youtube.com/watch?v=Heor8BVa4A0>

<https://app.codacy.com/>

<https://sourceforge.net/projects/visualcodegrepp/files/>