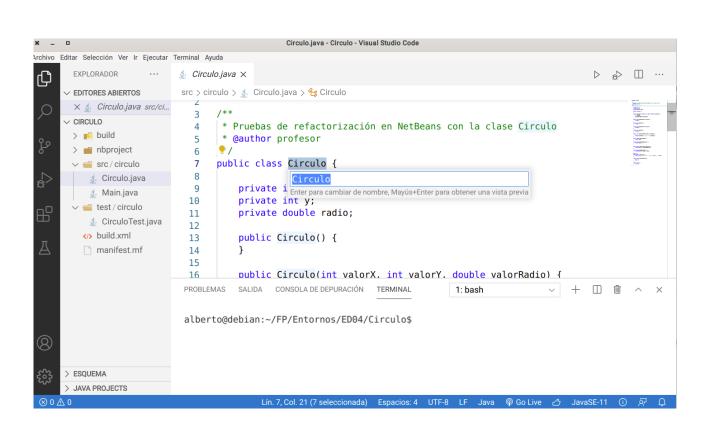
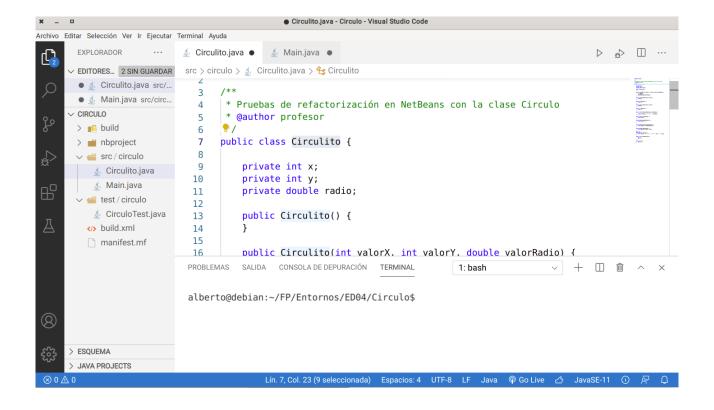
TAREA ED04

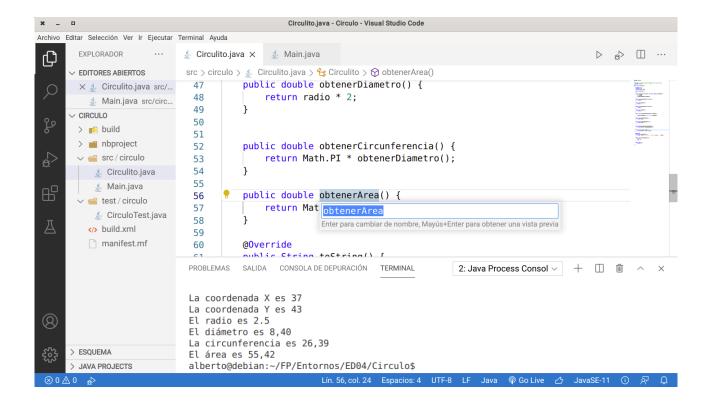
EJERCICIO 1

-Renombrar la clase "circulo"





-Renombrar el método "Obtener Area.



```
x _ =

    Circulito.java - Circulo - Visual Studio Code

Archivo Editar Selección Ver Ir Ejecutar Terminal Ayuda
       D 20 □ ···
                            src > circulo > 🐇 Circulito.java > ધ Circulito > 😚 obtenerAreaCirculo()
       No results.
                                        public double obtenerCircunferencia() {
                              52
                                             return Math.PI * obtenerDiametro();
                              53
                              54
                              55
                                        public double obtenerAreaCirculo() {
                              56
                                             return Math.PI * radio * radio;
                              57
                              58
                              59
                                        @Override
                              60
                              61
                                        public String toString() {
                              62
                                           return "Centro = [" + x + "," + y + "]; Radio = " + radio;
                              63
                              64
冒
                             PROBLEMAS SALIDA CONSOLA DE DEPURACIÓN TERMINAL
                                                                                  2: Java Process Consol \vee + \square \hat{\mathbb{I}} \wedge \times
                             La coordenada X es 37
                             La coordenada Y es 43
(Q)
                             El radio es 2.5
                             El diámetro es 8,40
                             La circunferencia es 26,39
                             El área es 55,42
                             alberto@debian:~/FP/Entornos/ED04/Circulo$
                                                        Lín. 56, col. 26 Espacios: 4 UTF-8 LF Java 🕸 Go Live 🛆 JavaSE-11
```

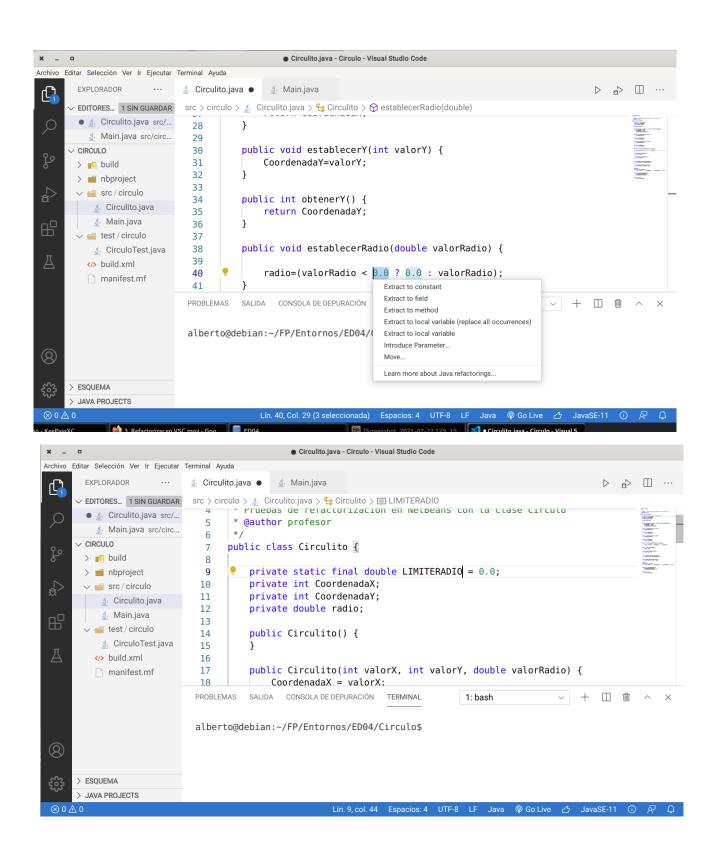
-Renombrar los campos X e Y por CoordenadaX y CoordenadaY

```
× _ =

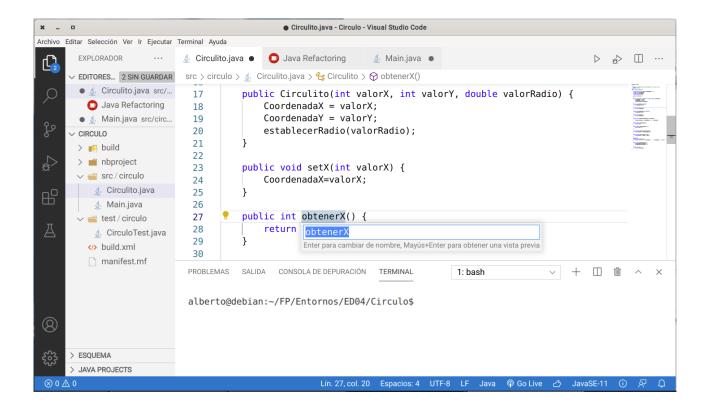
    Circulito.java - Circulo - Visual Studio Code

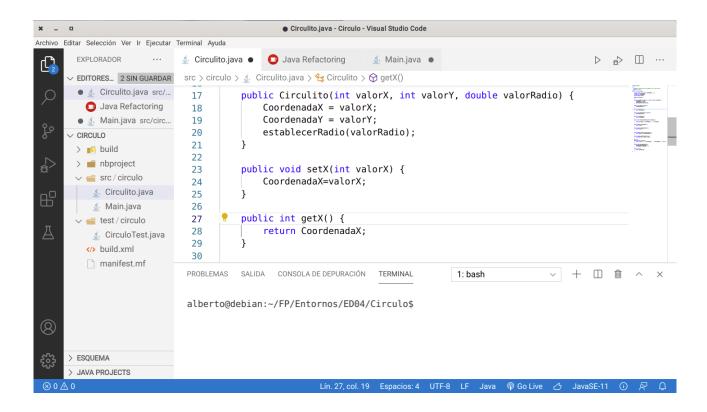
Archivo Editar Selección Ver Ir Ejecutar Terminal Ayuda
        ⊳ è □ …
                             src > circulo > 🐇 Circulito.java > ધ Circulito > 🔗 CoordenadaY
        No results.
                                     * Pruebas de refactorización en NetBeans con la clase Circulo
                                     * @author profesor
                                5
                                6
                                    public class Circulito {
                               8
                                         private int CoordenadaX;
                               9
                               10
                                        private int CoordenadaY;
                                        private double radio;
                               11
                               12
                               13
                                         public Circulito() {
                               14
                               15
                                         public Circulito(int valorX, int valorY, double valorRadio) {
                               16
                               17
                                             CoordenadaX = valorX;
 雷
                              PROBLEMAS SALIDA CONSOLA DE DEPURACIÓN TERMINAL
                                                                                  2: Java Process Consol \lor + \square \stackrel{.}{\square} \land \times
                              La coordenada X es 37
                              La coordenada Y es 43
 (Q)
                              El radio es 2.5
                              El diámetro es 8,40
                              La circunferencia es 26,39
                              El área es 55,42
                              alberto@debian:~/FP/Entornos/ED04/Circulo$
                                                        Lín. 10, col. 28 Espacios: 4 UTF-8 LF Java © Go Live 🖒 JavaSE-11 🛈
```

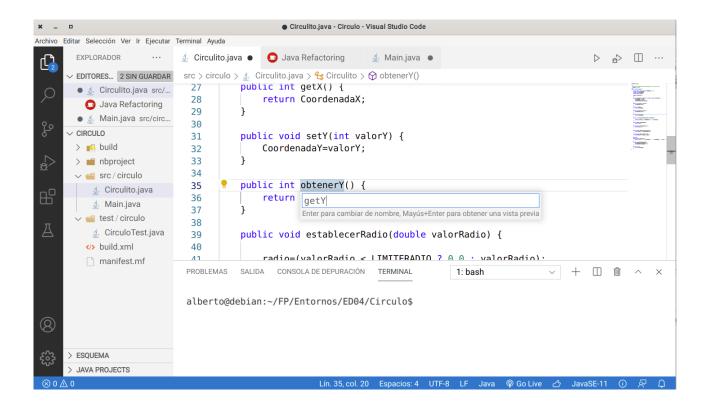
-Introducir constante LIMTERADIO de tipo double con valor 0.0

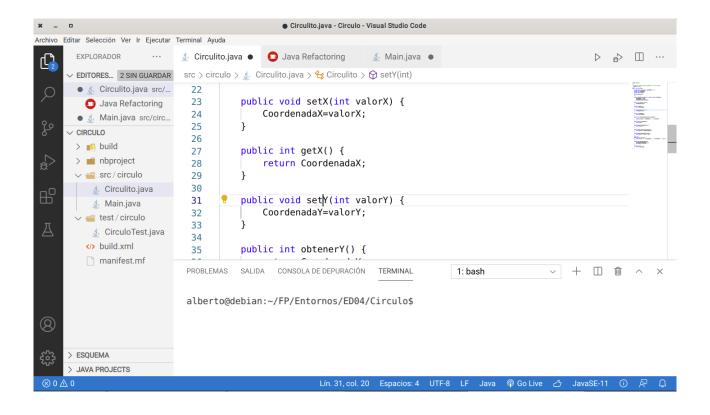


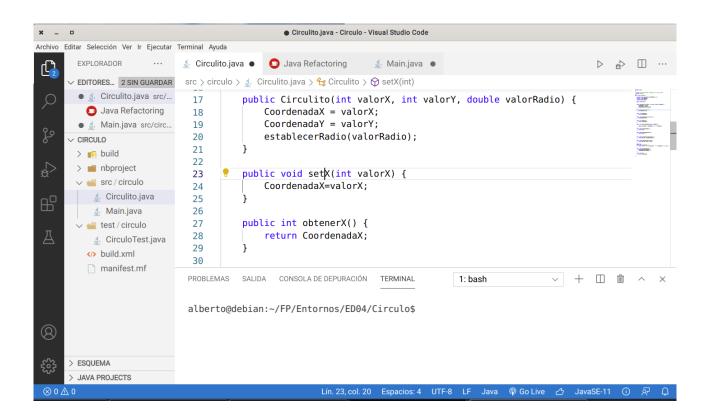
-Eliminar métodos ObtenerX, ObtenerY, establecerX, establecerY

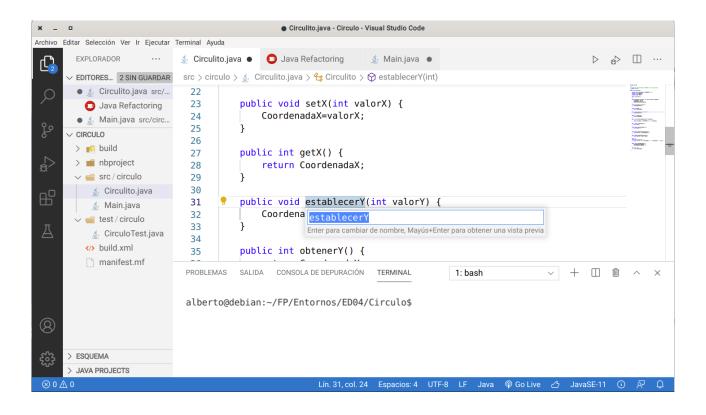


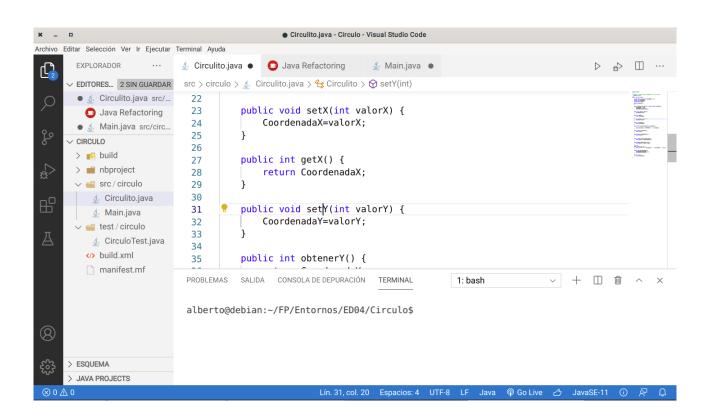












EJERCICIO 2

-Documentar con Javadoc

Lo tuve que hacer a través de la terminal con el comando "javadoc"

```
Terminal
Archivo Editar Ver Buscar Terminal Ayuda
alberto@debian:~/FP/Entornos/ED04/Circulo/src$ javadoc circulo/
Circulito.java Main.java
alberto@debian:~/FP/Entornos/ED04/Circulo/src$ javadoc circulo/Circulito.java
Loading source file circulo/Circulito.java...
Constructing Javadoc information...
Standard Doclet version 11.0.9.1
Building tree for all the packages and classes...
Generating ./circulo/Circulito.html...
Generating ./circulo/package-summary.html...
Generating ./circulo/package-tree.html...
Generating ./constant-values.html...
Building index for all the packages and classes...
Generating ./overview-tree.html...
Generating ./index-all.html...
Building index for all classes...
Generating ./allclasses-index.html...
Generating ./allpackages-index.html...
Generating ./deprecated-list.html...
Building index for all classes...
Generating ./allclasses.html...
Generating ./allclasses.html...
Generating ./index.html...
Generating ./help-doc.html...
alberto@debian:~/FP/Entornos/ED04/Circulo/src$
```

Captura de pantalla de la pagina web generada por javadoc

Package circulo

L CLASSES

IMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

extends java.lang.Object en NetBeans con la clase Circulo Constructors
Constructor
Circulito()
Circulito(int valorX, int valorY, double valorRadio) Method Summary All Methods Instance Methods Concrete Methods

Medifier and Type Method

int a()

void establecerRadio(double valorRadio) void setablecerRadio(double velori
int getX()
double obtenerAreaCirculo()
double obtenerPiametro()
double obtenerPiametro()
double obtenerBadio()
void setX(int velorX)
void setY(int velorY)
java.lang.String toString() Se obtiene el area del circu Se obtiene la circunferenci Se obtiene el diametro Se obtiene el radio trasladarCentro() void Methods inherited from class java.lang.Object clone, equals, finalize, getClass, hashCode, notify, notifyAll, Constructor Detail Circulito public Circulito() public Circulito(int valorX, int valorY, double valorRadio) Method Detail public void setX(int valorX)
Parameters:
valorX public int getX() Returns: int setY public int getY() Returns: int establecerRadio public void establecerRadio(double valorRadio)
En este método se establece que el radio no debe ser m
Parameters:
valorRadio obtenerRadio public double obtenerRadio()
Se obtiene el radio
Returns:
double obtenerDiametro public double obtenerDiametro() Se obtiene el diametro Returns: double obtenerCircunferencia public double obtenerCircunferencia() Se obtiene la circunferencia Returns: double obtenerAreaCirculo public double obtenerAreaCirculo() Se obtiene el area del círculo Returns: double public java.lang.String toString() Se obtiene los resultados por pantalla Overridesi toString in class java.lang.Object Returns: String public void trasladarCentro() .

PACKAGE CLASS TREE DEPRECATED INDEX HEL

public int a()
Returns:
int

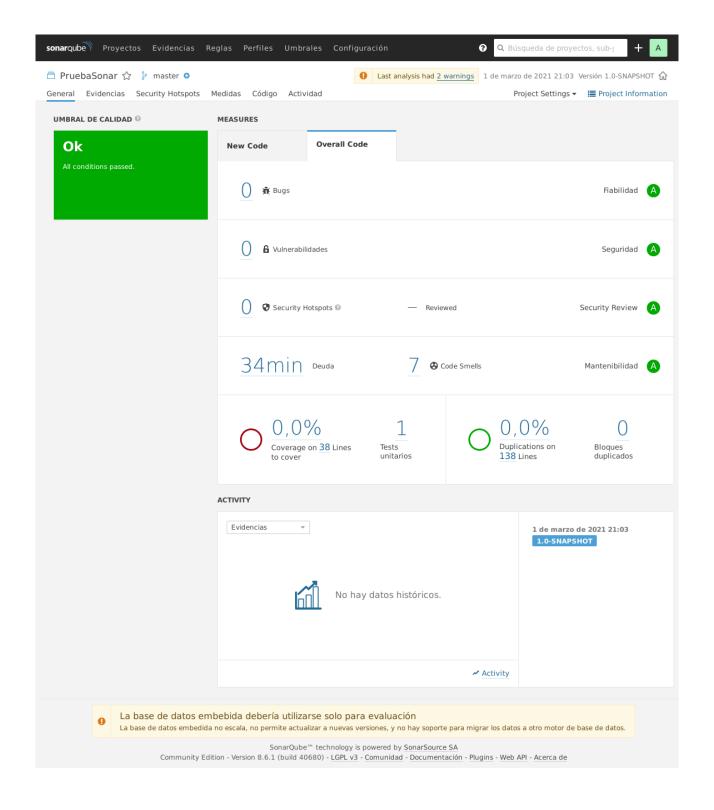
EJERCICIO 3

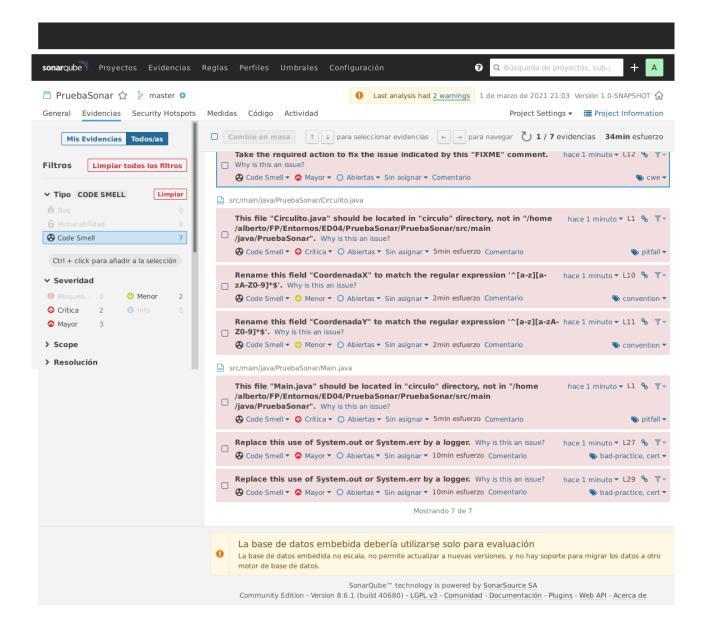
-Instalar Sonarqube y analizar el software "Circulito.java"

x _	Terminal
Archivo	Editar Ver Buscar Terminal Ayuda
	Sensor Zero Coverage Sensor (done) time=7ms
	Sensor Java CPD Block Indexer
	Sensor Java CPD Block Indexer (done) time=16ms
	SCM Publisher No SCM system was detected. You can use the 'sonar.scm.prov property to explicitly specify it.
	CPD Executor Calculating CPD for 2 files
	CPD Executor CPD calculation finished (done) time=6ms
	Analysis report generated in 57ms, dir size=99 KB
-	Analysis report compressed in 20ms, zip size=19 KB
	Analysis report uploaded in 36ms
	ANALYSIS SUCCESSFUL, you can browse http://localhost:9000/dashboard?id=ci
rculo	Note that you will be able to assess the undated dashboard once the serve
	Note that you will be able to access the updated dashboard once the serve processed the submitted analysis report
	More about the report processing at http://localhost:9000/api/ce/task?id=
	WcmzFM2cls6v6J
[INFO]	Analysis total time: 4.813 s
	BUILD SUCCESS
	T + 1 + 1
	Total time: 7.226 s Finished at: 2021-03-01T21:03:41+01:00
	Finished at: 2021-03-01121:03:41+01:00
	o@debian:~/FP/Entornos/ED04/PruebaSonar/PruebaSonar\$

× Terminal Archivo Editar Ver Buscar Terminal Ayuda ar.projectKey=circulo -Dsonar.host.url=http://localhost:9000 -Dsonar.login=59b83 53246f95f05e8a62627c340a8a45941d113 WARNING: An illegal reflective access operation has occurred WARNING: Illegal reflective access by com.google.inject.internal.cglib.core.\$Ref lectUtils\$1 (file:/usr/share/maven/lib/guice.jar) to method java.lang.ClassLoade r.defineClass(java.lang.String,byte[],int,int,java.security.ProtectionDomain) WARNING: Please consider reporting this to the maintainers of com.google.inject. internal.cglib.core.\$ReflectUtils\$1 WARNING: Use --illegal-access=warn to enable warnings of further illegal reflect ive access operations WARNING: All illegal access operations will be denied in a future release [INFO] Scanning for projects... [INFO] [INFO] Building PruebaSonar 1.0-SNAPSHOT [INFO] -----[jar]-----[INFO] [INFO] --- sonar-maven-plugin:3.8.0.2131:sonar (default-cli) @ PruebaSonar ---[INFO] User cache: /home/alberto/.sonar/cache [INFO] SonarQube version: 8.6.1 [INFO] Default locale: "es_ES", source code encoding: "UTF-8" [INFO] Load global settings [INFO] Load global settings (done) | time=97ms

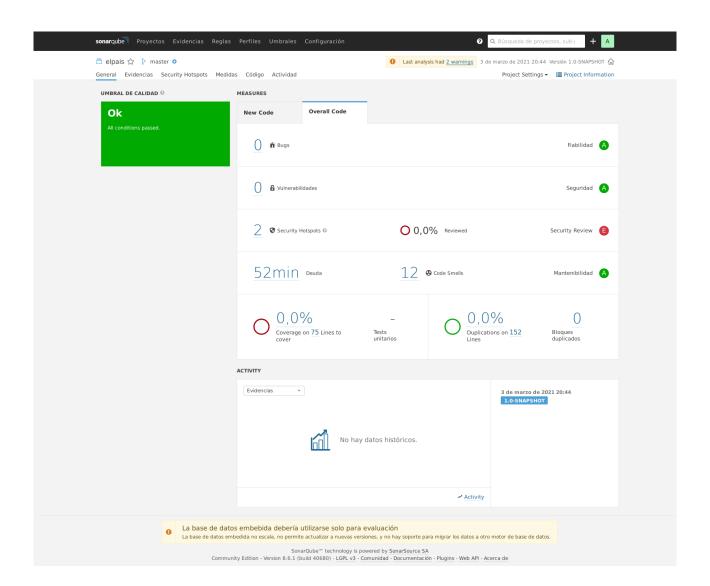
[INFO] Server id: BF41A1F2-AXenIMPofj5IfsLhVpgn

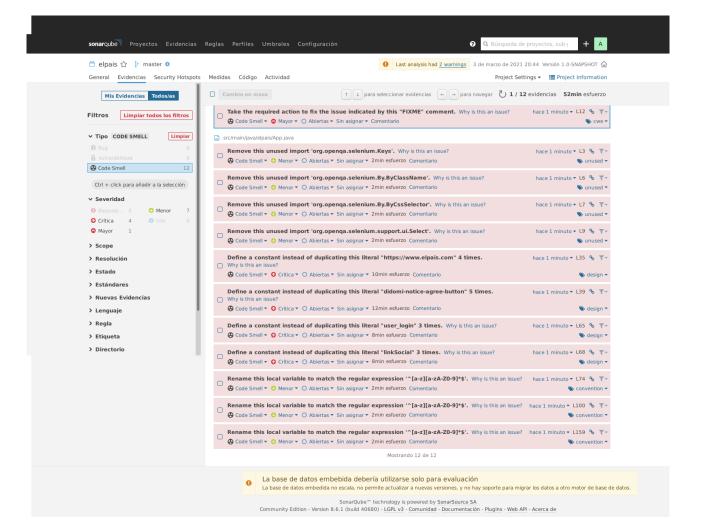




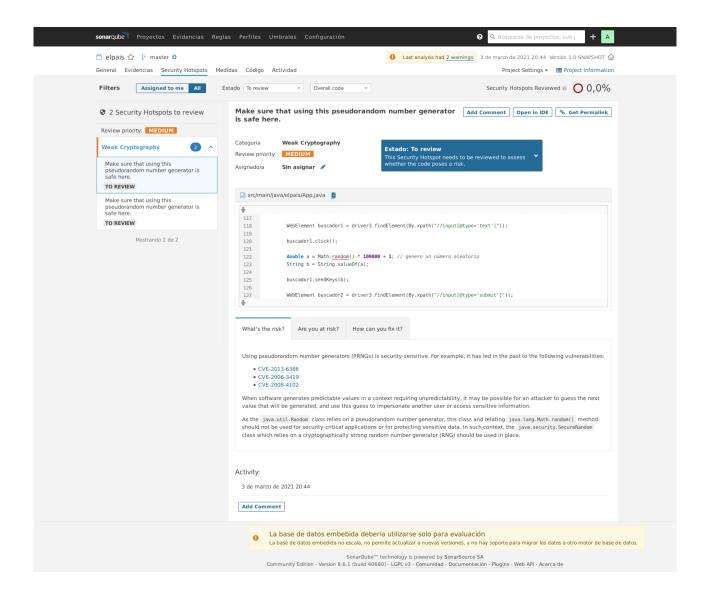
EJERCICIO 4

-Documentar y analizar el proyecto con "Sonarcube" hecho en ED03.

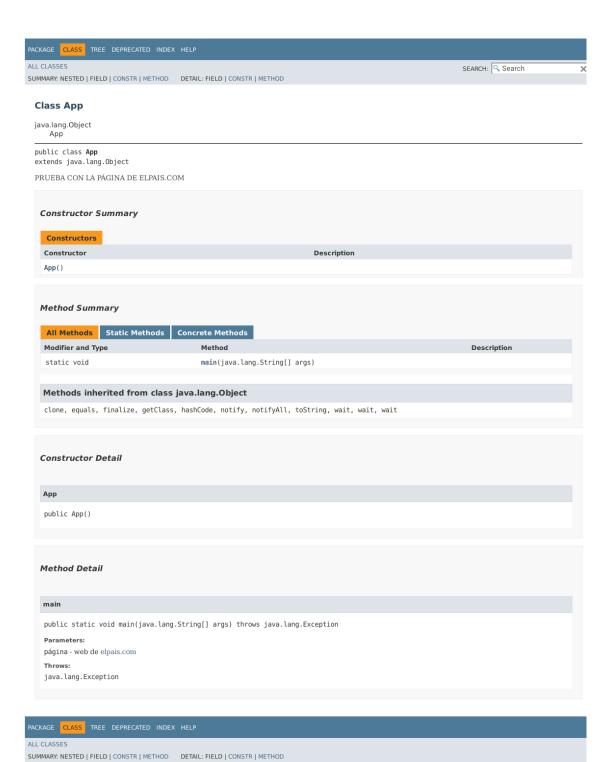




Aquí muestra un posible riesgo de seguridad por usar el método "java.lang.Math.Random()" por existir riesgo de predictibilidad en los valores generados recomendando usar la clase "java.security.SecureRandom".



Documentación con javadoc de mi programa con selenium



Para que funcionase el comando "javadoc" fue necesario crear una capeta "lib" en el proyecto con el archivo "client-combined-3.141.59.jar" y ejecutar el comando "javadoc -classpath lib/client-combined-3.141.59.jar src/main/java/elpais/App.java "