

12576 Nisanth Saravanan
RIX2024-Batch 1_Code Quality & Design Principles Lab
Assessment

Selected Project: Appointment Manager.

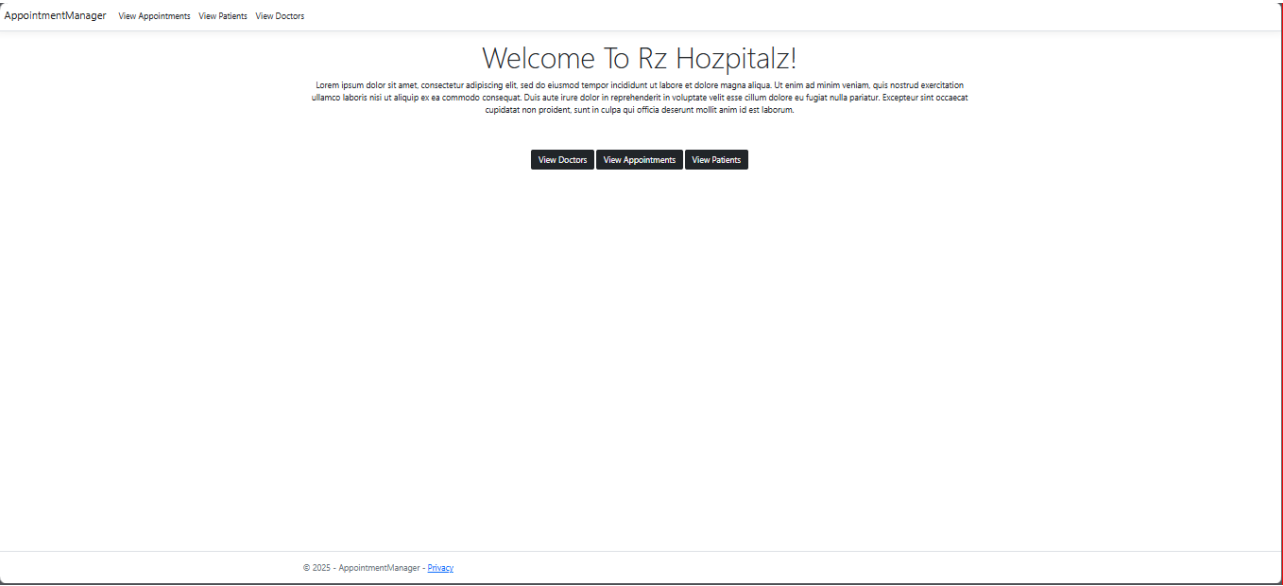
Coder: Nisanth Saravanan

Reviewer: Ranjithkumar Palanisamy

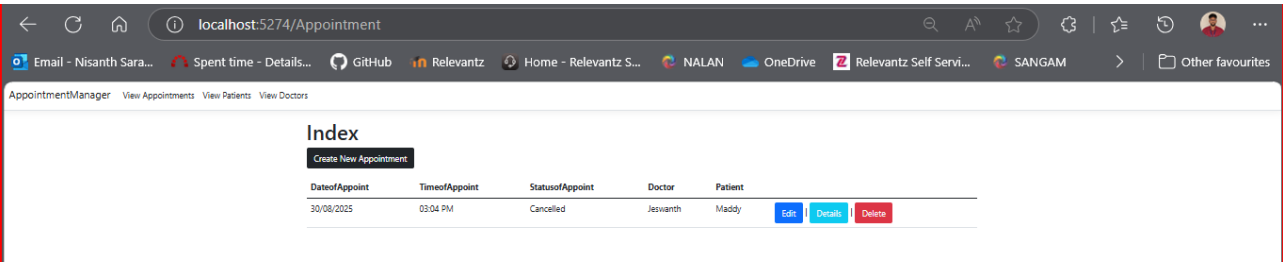
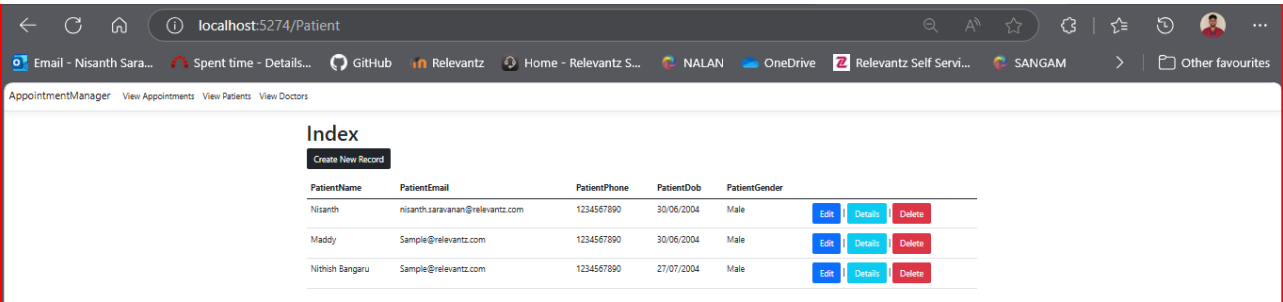
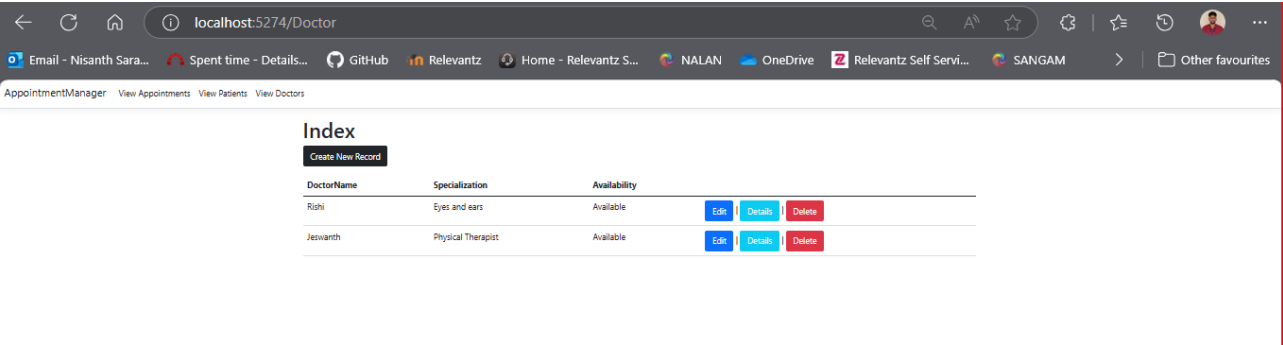
Project Description:

A MVC Project that let's us add doctor, patient and appointment, in Razor pages.

Project Output Screens:



GET Method: Status: Working.



POST Method: Status: Working.

Create

Patient

Patient Name:

Email:

Contact Number:

Date of Birth: (YYYY-MM-DD Format)

Gender:

[Back to List](#)

Create

Doctor

Doctor Name:

Specialization:

Availability:

[Back to List](#)

Create

Appointment

Patient Name:

Doctor Name:

Date of Appointment: (YYYY-MM-DD Format)

Time of Appointment: (24 Hour Format)

Status of Appointment:

[Back to List](#)

Reflection after POST:

Index

Create New Record

PatientName	PatientEmail	PatientPhone	PatientDob	PatientGender			
Nisanth	nisanth.saravanan@relevantz.com	1234567890	30/06/2004	Male	Edit	Details	Delete
Maddy	Sample@relevantz.com	1234567890	30/06/2004	Male	Edit	Details	Delete
Nithish Bangaru	Sample@relevantz.com	1234567890	27/07/2004	Male	Edit	Details	Delete
XYZ	admin@relevantz.com	1234567890	27/07/2004	Male	Edit	Details	Delete

Index

Create New Record

DoctorName	Specialization	Availability			
Rishi	Eyes and ears	Available	Edit	Details	Delete
Jeswanth	Physical Therapist	Available	Edit	Details	Delete
ABC	Something	Available	Edit	Details	Delete

Index

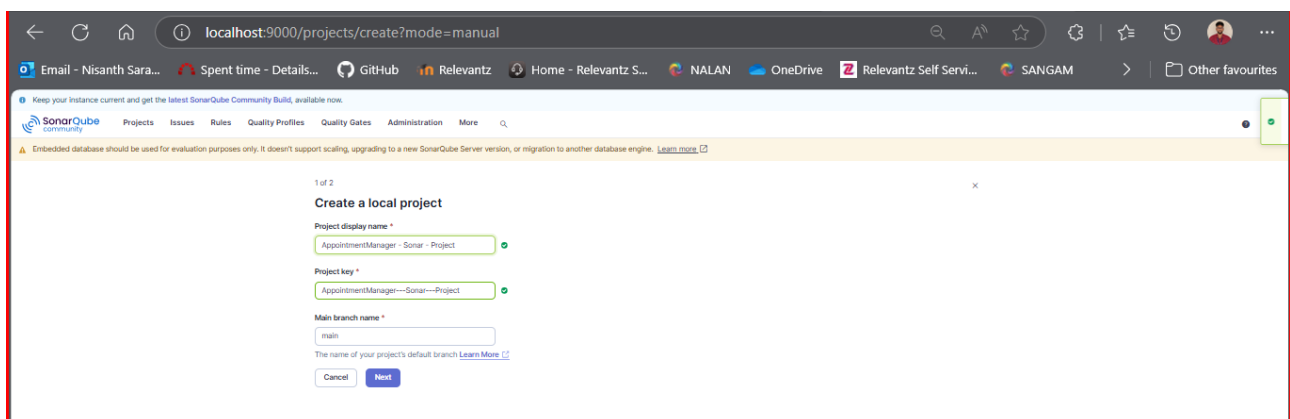
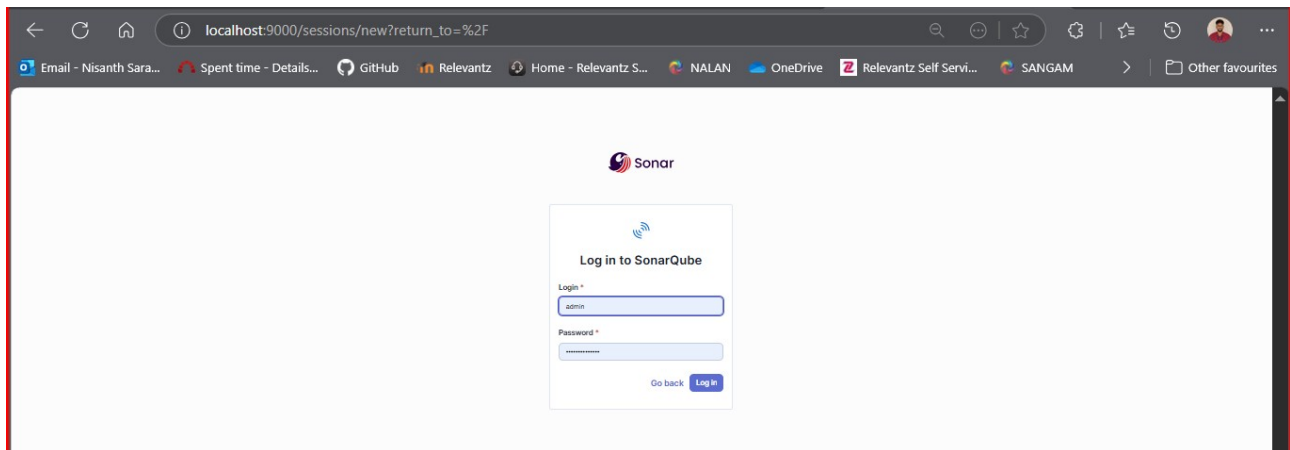
Create New Appointment

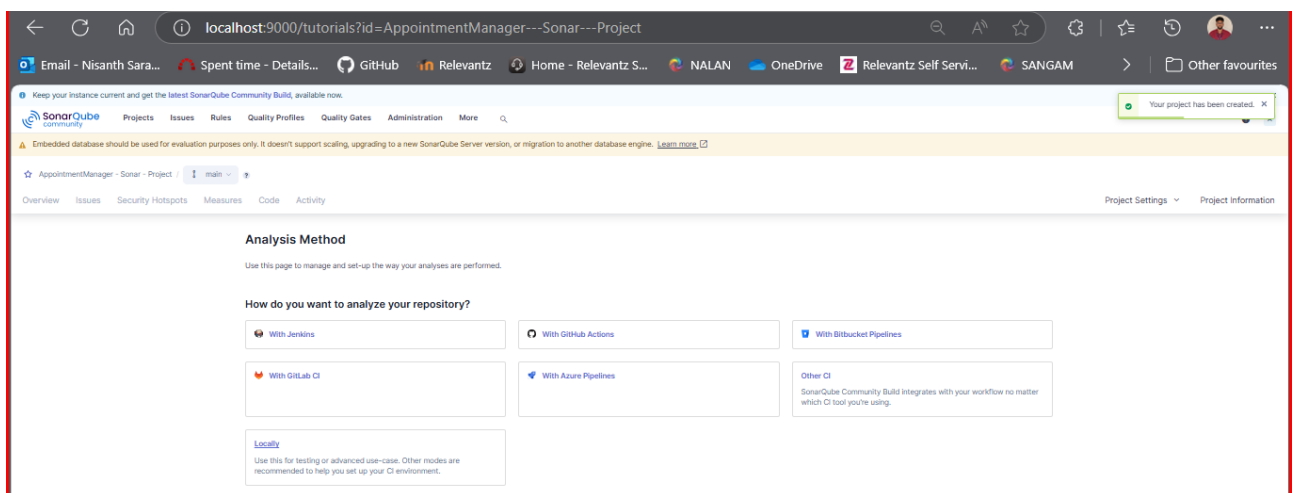
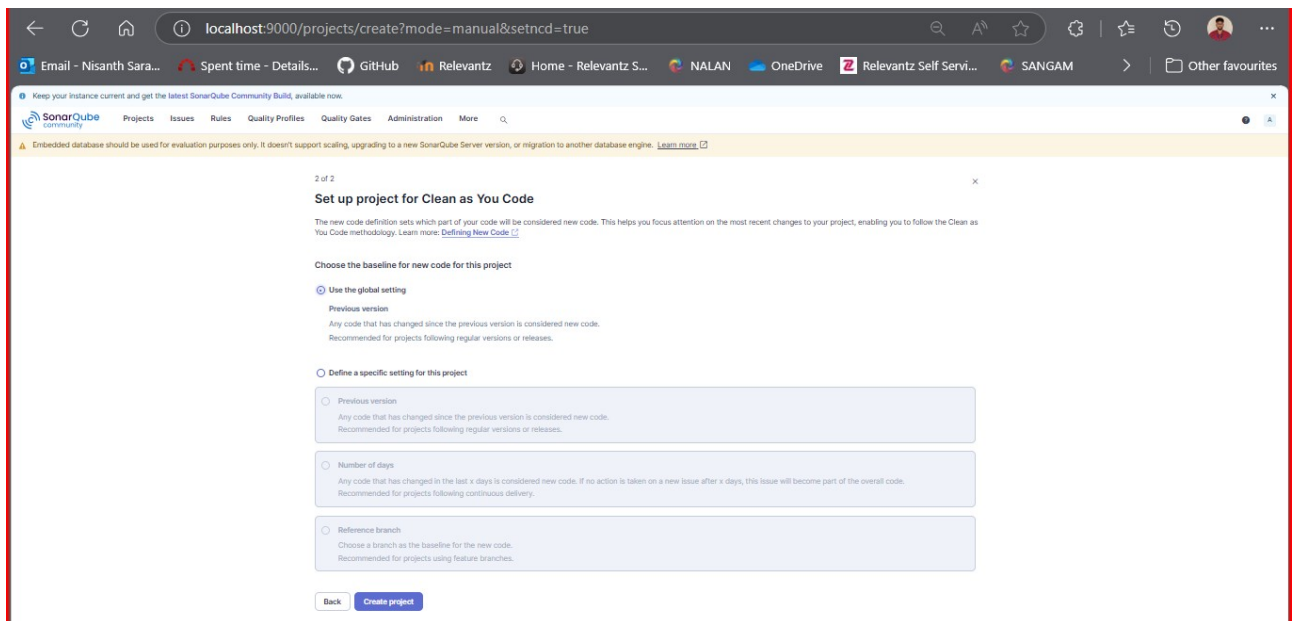
DateofAppoint	TimeofAppoint	StatusofAppoint	Doctor	Patient			
30/08/2025	03:04 PM	Cancelled	Jeswanth	Maddy	Edit	Details	Delete
30/08/2025	03:04 PM	Completed	ABC	XYZ	Edit	Details	Delete

SonarQube Setup:

```
C:\Windows\System32\cmd.exe - StartSonar.bat
Microsoft Windows [Version 10.0.19045.6093]
(c) Microsoft Corporation. All rights reserved.

D:\sonarqube-25.1.0.102122\sonarqube-25.1.0.102122\bin\windows-x86-64>StartSonar.bat
Starting SonarQube...
2025.08.01 17:16:20 INFO app[][o.s.a.AppFileSystem] Cleaning or creating temp directory D:\sonarqube-25.1.0.102122\sonarqube-25.1.0.102122\temp
2025.08.01 17:16:20 INFO app[][o.s.a.es.EsSettings] Elasticsearch listening on [HTTP: 127.0.0.1:9001, TCP: 127.0.0.1:{}]
2025.08.01 17:16:20 INFO app[][o.s.a.ProcessLauncherImpl] Launch process[ELASTICSEARCH] from [D:\sonarqube-25.1.0.102122\sonarqube-25.1.0.102122\elasticsearch]: C:\Program Files\Java\jdk-17\bin\java -Xms4m -Xmx64m -XX:+UseSerialGC -Dcli.name=server -Dcli.script=./bin/elasticsearch -Dcli.libs=lib/tools/server-cli -Des.path.home=D:\sonarqube-25.1.0.102122\sonarqube-25.1.0.102122\elasticsearch -Des.path.conf=D:\sonarqube-25.1.0.102122\sonarqube-25.1.0.102122\temp\conf\es -Des.distribution.type=tar -cp D:\sonarqube-25.1.0.102122\sonarqube-25.1.0.102122\elasticsearch\lib\*;D:\sonarqube-25.1.0.102122\sonarqube-25.1.0.102122\elasticsearch\lib\cli-launcher\* org.elasticsearch.launcher.CliToolLauncher
2025.08.01 17:16:20 INFO app[][o.s.a.SchedulerImpl] Waiting for Elasticsearch to be up and running
Standard Commons Logging discovery in action with spring-jcl: please remove commons-logging.jar from classpath in order to avoid potential conflicts
```





Analysis Method > Locally

Analyze your project

We initialized your project on SonarQube Community Build, now it's up to you to launch analyses!

1 Provide a token

[Generate a project token](#)

[Use existing token](#)

Token name ?

Analyze "AppointmentManager - Sonar - Project"

Expires in

30 days

[Generate](#)

Please note that this token will only allow you to analyze the current project. If you want to use the same token to analyze multiple projects, you need to generate a global token in your [user account](#). See the [documentation](#) for more information.

The token is used to identify you when an analysis is performed. If it has been compromised, you can revoke it at any point in time in your [user account](#).

2 Run analysis on your project

Analyze your project

We initialized your project on SonarQube Community Build, now it's up to you to launch analyses!

1 Provide a token

Analyze "AppointmentManager - Sonar - Project": **sqp_43dc78e354ed6b8d364f5b254c55add94b1c923a**

2 Run analysis on your project

What option best describes your project?

Maven Gradle **.NET** Other (for JS, TS, Go, Python, PHP, ...)

Which framework do you use?

.NET Core .NET Framework

```
+ Developer PowerShell ~
*****
** Visual Studio 2022 Developer PowerShell v17.14.7
** Copyright (c) 2025 Microsoft Corporation
*****
PS D:\Intern Files\Intern Assessment\L1 Assessment\Code Quality\ApPOINTManager_Code_Review_Repo\AppointmentManager\AppointmentManager> dotnet tool in
stall --global dotnet-sonarscanner
Tool 'dotnet-sonarscanner' is already installed.
PS D:\Intern Files\Intern Assessment\L1 Assessment\Code Quality\ApPOINTManager_Code_Review_Repo\AppointmentManager\AppointmentManager>
```

```
PS D:\Intern Files\Intern Assessment\L1 Assessment\Code Quality\ApPOINTManager_Code_Review_Repo\AppointmentManager\AppointmentManager> dotnet sonarsc
anner begin /k:"AppointmentManager---Sonar---Project" /d:sonar.host.url="http://localhost:9000" /d:sonar.token="sqp_43dc78e354ed6b8d364f5b254c55add9
4b1c923a"
SonarScanner for MSBuild 10.3
Using the .NET Core version of the Scanner for MSBuild
Pre-processing started.
Preparing working directories...
17:20:14.732 Updating build integration targets...
17:20:14.938 Using SonarQube v25.1.0.102122.
17:20:15.054 Fetching analysis configuration settings...
17:20:16.258 Provisioning analyzer assemblies for cs...
17:20:16.259 Installing required Roslyn analyzers...
17:20:16.26 Processing plugin: csharp version 10.4.0.108396
17:20:16.651 Provisioning analyzer assemblies for vbnet...
17:20:16.651 Installing required Roslyn analyzers...
17:20:16.652 Processing plugin: vbnet version 10.4.0.108396
17:20:16.683 Incremental PR analysis: Base branch parameter was not provided.
17:20:16.684 Cache data is empty. A full analysis will be performed.
17:20:16.736 Pre-processing succeeded.
PS D:\Intern Files\Intern Assessment\L1 Assessment\Code Quality\ApPOINTManager_Code_Review_Repo\AppointmentManager\AppointmentManager>
```

```
PS D:\Intern Files\Intern Assessment\L1 Assessment\Code Quality\ApPOINTManager_Code_Review_Repo\AppointmentManager\AppointmentManager> dotnet build
Restore complete (0.5s)
AppointmentManager succeeded with 31 warning(s) (11.7s) → bin\Debug\net8.0\AppointmentManager.dll
D:\Intern Files\Intern Assessment\L1 Assessment\Code Quality\ApPOINTManager_Code_Review_Repo\AppointmentManager\AppointmentManager\Views\Apptm
ent\Delete.cshtml(36,39): warning CS8602: Dereference of a possibly null reference.
D:\Intern Files\Intern Assessment\L1 Assessment\Code Quality\ApPOINTManager_Code_Review_Repo\AppointmentManager\AppointmentManager\Views\Apptm
ent\Delete.cshtml(42,39): warning CS8602: Dereference of a possibly null reference.
D:\Intern Files\Intern Assessment\L1 Assessment\Code Quality\ApPOINTManager_Code_Review_Repo\AppointmentManager\AppointmentManager\Views\Apptm
ent\Details.cshtml(35,39): warning CS8602: Dereference of a possibly null reference.
```

```
PS D:\Intern Files\Intern Assessment\L1 Assessment\Code Quality\ApPOINTManager_Code_Review_Repo\AppointmentManager\AppointmentManager> dotnet sonarsc
anner end /d:sonar.token="sqp_43dc78e354ed6b8d364f5b254c55add94b1c923a"
SonarScanner for MSBuild 10.3
Using the .NET Core version of the Scanner for MSBuild
Post-processing started.
17:21:15.491 Starting with Scanner for .NET v8 the way the `sonar.projectBaseDir` property is automatically detected has changed and this has an imp
act on the files that are analyzed and other properties that are resolved relative to it like `sonar.exclusions` and `sonar.test.exclusions`. If you
would like to customize the behavior, please set the `sonar.projectBaseDir` property to point to a directory that contains all the source code you wa
nt to analyze. The path may be relative (to the directory from which the analysis was started) or absolute.
Calling the SonarScanner CLI...
INFO: Scanner configuration file: C:\Users\nisanth.saravanan\.dotnet\tools\store\dotnet-sonarscanner\10.3.0\dotnet-sonarscanner\10.3.0\tools\netcore
app3.1\any\sonar-scanner-5.0.2.4997\bin\..\conf\sonar-scanner.properties
INFO: Project root configuration file: D:\Intern Files\Intern Assessment\L1 Assessment\Code Quality\ApPOINTManager_Code_Review_Repo\AppointmentManag
er\AppointmentManager\.sonarqube\out\sonar-project.properties
INFO: SonarScanner 5.0.2.4997
INFO: Java 17.0.13 Eclipse Adoptium (64-bit)
INFO: Windows 10.0.0 amd64
```

```
INFO: -----
INFO: EXECUTION SUCCESS
INFO: -----
INFO: Total time: 20.344s
INFO: Final Memory: 15M/60M
INFO: -----
The SonarScanner CLI has finished
17:21:36.954 Post-processing succeeded.
PS D:\Intern Files\Intern Assessment\L1 Assessment\Code Quality\ApPOINTManager_Code_Review_Repo\AppointmentManager\AppointmentManager>
```

Initial SonarQube Analysis:

The screenshot shows the SonarQube dashboard for a project named 'AppointmentManager'. The interface is in a browser window at 'localhost:9000'. The top navigation bar includes links for 'Email', 'Spent time', 'Details', 'GitHub', 'Relevantz', 'Home', 'NALAN', 'OneDrive', 'Relevantz Self Servi...', 'SANGAM', and 'Other favourites'. The main header shows the project name and a 'main' branch. A yellow banner at the top indicates that the embedded database should be used for evaluation purposes only. The dashboard displays a 'Quality Gate' status of 'Failed' with a red 'X' icon. Below this, a warning message states: 'The last analysis has warnings. See details'. The 'New Code' tab is selected, showing '2 failed' results. The 'Overall Code' tab is also visible. The dashboard is divided into several sections: 'Security' (12 Open issues, D), 'Reliability' (48 Open issues, D), 'Maintainability' (38 Open issues, A), 'Accepted issues' (0, 0.0% coverage, 207 lines to cover), 'Duplications' (17.7%, 1.9k lines), and 'Security Hotspots' (2, E). The 'Activity' section is at the bottom.

Category	Value	Grade
Security	12 Open issues	D
Reliability	48 Open issues	D
Maintainability	38 Open issues	A
Accepted issues	0	0.0%
Duplications	17.7%	
Security Hotspots	2	E

This is a detailed view of the SonarQube dashboard. The top navigation bar includes links for 'Email', 'Spent time', 'Details', 'GitHub', 'Relevantz', 'Home', 'NALAN', 'OneDrive', 'Relevantz Self Servi...', 'SANGAM', and 'Other favourites'. The main header shows the project name and a 'main' branch. A yellow banner at the top indicates that the embedded database should be used for evaluation purposes only. The dashboard displays a 'Quality Gate' status of 'Failed' with a red 'X' icon. Below this, a warning message states: 'The last analysis has warnings. See details'. The 'New Code' tab is selected, showing '2 failed' results. The 'Overall Code' tab is also visible. The dashboard is divided into several sections: 'Security' (12 Open issues, D), 'Reliability' (48 Open issues, D), 'Maintainability' (38 Open issues, A), 'Accepted issues' (0, 0.0% coverage, 207 lines to cover), 'Duplications' (17.7%, 1.9k lines), and 'Security Hotspots' (2, E). The 'Activity' section is at the bottom.

Category	Value	Grade
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Accepted issues	0	0.0%
Duplications	17.7%	
Security Hotspots	2	E

Peer-Review Comments:

QUALITY ASSURANCE AUDIT CHECKLIST TEMPLATE										
Ref No.	Source[Code File] Position [Code Line]	SCORE [1-5]	MEETS STANDARDS	OPPORTUNITIES FOR IMPROVEMENT	MINOR CONCERNS	MAJOR CONCERNS	NOTES	RECOMMENDATIONS	STATUS MARK RESOLVED	
1	AuthService - line: 7	3	No	Yes	Yes	No	Class name must be pascal	change authService to Pascal case	RESOLVED	RESOLVED
2	PatientLoc - line: 6, 10, 12, 18	4	No	Yes	Yes	No	variable must be non-nullabile	add "!" to data type => string?	RESOLVED	RESOLVED
3	AppointmentLoc - line: 18, 20	4	No	Yes	Yes	No	variable must be non-nullabile	add "!" to data type => string?	RESOLVED	RESOLVED
4	PatientLoc - line: 6	3	No	Yes	Yes	No	Class name must be pascal	To pascal	RESOLVED	RESOLVED
5	AppointmentLoc - line: 6	3	No	Yes	Yes	No	Class name must be pascal	To pascal	RESOLVED	RESOLVED
6	DoctorLoc - line: 6	4	No	Yes	Yes	No	Class name must be pascal	To pascal	RESOLVED	RESOLVED
7	DoctorLoc - line: 10, 12, 14	4	No	Yes	Yes	No	variable must be non-nullabile	add "!" to data type => string?	RESOLVED	RESOLVED
8	NewsHomeIndex.html	5	No	Yes	Yes	No	check the paragraph tag once	Add some simple and understandable sentence	NOT RESOLVED	The paragraph is a design placeholder
9	General	4	No	Yes	Yes	No	Add some why comments	Add some why commands	RESOLVED	RESOLVED
10	General	3	No	Yes	Yes	No	Remove unwanted commands	Delete those commands	RESOLVED	RESOLVED
11	General	5	Yes	Yes	-	-	Proper Naming	Naming for Class	RESOLVED	RESOLVED
12	General	5	Yes	Yes	-	-	Proper Naming	Naming for Objects	RESOLVED	RESOLVED
13	General	5	Yes	Yes	-	-	Proper Naming	Naming for Variables	RESOLVED	RESOLVED
14	General	5	Yes	Yes	-	-	Proper Naming	Naming for Namespace	RESOLVED	RESOLVED
15	General	5	Yes	Yes	-	-	Proper Naming	Naming for label in html	RESOLVED	RESOLVED
16	General	5	Yes	Yes	-	-	Proper Naming	Naming for Placeholder in html	RESOLVED	RESOLVED
17	General	5	Yes	Yes	-	-	Proper Naming	Proper method naming	RESOLVED	RESOLVED
18	General	5	Yes	Yes	-	-	Proper Naming	Proper File Naming	RESOLVED	RESOLVED
19	General	5	Yes	Yes	-	-	Implemented asynchrouous	Implemented Asynchronous	RESOLVED	RESOLVED
20	General	5	Yes	Yes	-	-	Remove unused imports	check every import have used	RESOLVED	RESOLVED
21										



12576_Nisanth_Quality-Assurance-Audit-Checklist.xlsx

GitHub Link:

[Nisanth-Saravanan/AppointManager Code Review Repo](https://github.com/Nisanth-Saravanan/AppointManager_Code_Review_Repo)

https://github.com/Nisanth-Saravanan/AppointManager_Code_Review_Repo

Nisanth-Saravanan / AppointManager_Code_Review_Repo

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

AppointManager_Code_Review_Repo Public

main 1 Branch 0 Tags

Go to file

Add file

Nisanth-Saravanan PDF Documentation Commit. c576b79 · 11 minutes ago 6 Commits

AppointmentManager Final Resolved Code Commit. 14 minutes ago

12576_Nisanth_Quality-Assurance-Audit-C... Final Resolved Code Commit. 14 minutes ago

12576_Nisanth_Saravanan_CodeQuality.pdf PDF Documentation Commit. 11 minutes ago

About

No description, website, or topics provided.

Activity

0 stars

0 watching

0 forks

Post Refactoring SonarQube Analysis:

The screenshot shows the SonarQube dashboard for a project named 'AppointmentManager'. The browser address bar indicates the URL is 'localhost:9000/dashboard?id=AppointmentManager---Sonar---Project&codeScope=overall'. The dashboard header includes navigation links for Projects, Issues, Rules, Quality Profiles, Quality Gates, Administration, and More. A notification bar at the top states: 'Keep your instance current and get the latest SonarQube Community Build, available now.' Below this, a warning message reads: 'Embedded database should be used for evaluation purposes only. It doesn't support scaling, upgrading to a new SonarQube Server version, or migration to another database engine. [Learn more](#)'.

The main section displays the project 'AppointmentManager - Sonar - Project' with a dropdown menu showing 'main' as the selected branch. The 'Overview' tab is active, showing a 'Quality Gate' status of 'Passed' with a green checkmark. A warning message states: 'The last analysis has warnings. [See details](#)'. The last analysis was performed 3 minutes ago.

The dashboard provides a summary of code quality metrics:

Security	Reliability	Maintainability
10 Open issues	30 Open issues	27 Open issues
Accepted issues: 6 <small>Valid issues that were not fixed</small>	Coverage: 0.0% <small>On 207 lines to cover.</small>	Duplications: 17.6% <small>On 1.9k lines.</small>
Security Hotspots: 2		

The metrics are represented by colored circles: Security (D), Reliability (D), Maintainability (A), Accepted issues (D), Coverage (D), Duplications (D), and Security Hotspots (E).

At the bottom, there is an 'Activity' section which is currently empty.

This image provides a detailed view of the SonarQube dashboard metrics. The top section shows the project 'main' with '1.6k Lines of Code' and 'Version not provided'. A 'Set as homepage' button is available. The 'Quality Gate' status is 'Passed' with a green checkmark. A warning message states: 'The last analysis has warnings. [See details](#)'. The last analysis was performed 3 minutes ago.

The dashboard provides a summary of code quality metrics:

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