



SonarQube
Cloud

Hunor Ördög,
Norbert-
Raymond Pap,
István-Lehel
Balázs

Brand changes
- 28 oct 2024

Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines

SonarQube Cloud

formerly SonarCloud

Hunor Ördög, Norbert-Raymond Pap, István-Lehel Balázs

Department of Mathematics and Informatics
Babeș-Bolyai University, Cluj-Napoca

2024 November



Contents

SonarQube Cloud

Hunor Ördög,
Norbert-
Raymond Pap,
István-Lehel
Balázs

Brand changes
- 28 oct 2024

Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines

- 1 Brand changes - 28 oct 2024
- 2 Introduction
- 3 Why Use SonarCloud?
- 4 Key Features
- 5 How SonarCloud Works
- 6 SonarCloud in Action
- 7 Integration with GitHub and CI/CD Pipelines

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Norbert-
Raymond Pap,
István-Lehel
Balázs

Brand changes
- 28 oct 2024

Introduction

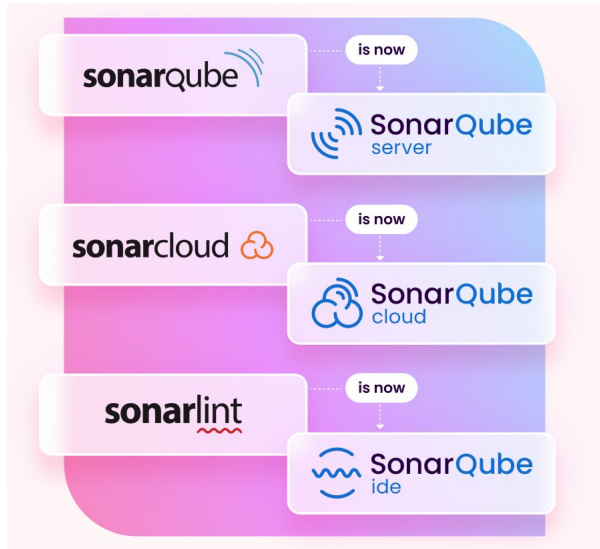
Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines





What is Sonar?

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István-Lehel
Balázs

Brand changes
- 28 oct 2024

Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines

- Tool for **code quality** and **security** throughout the development lifecycle.
- Catch **bugs**, **vulnerabilities**, and **design issues** (Duplicated code, Large methods, Inconsistent naming).
- Improve **maintainability**, **readability**, and **security**.

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Balázs

Brand changes
- 28 oct 2024

Introduction

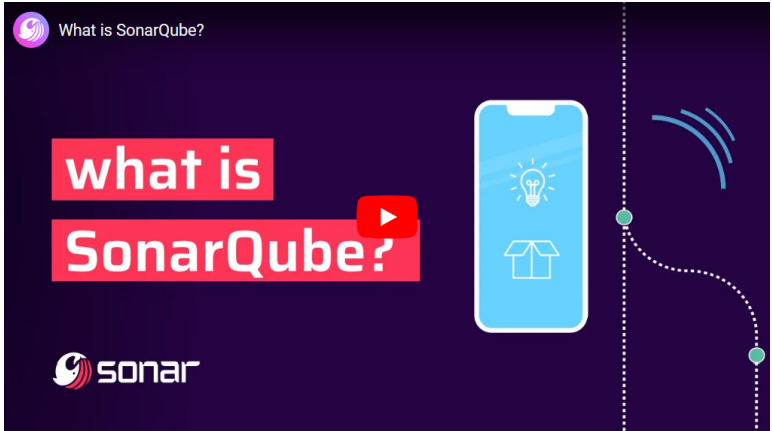
Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines





Importance of Code Quality

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Raymond Pap,
István-Lehel
Balázs

Brand changes
- 28 oct 2024

Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines

- **Enhances Code Maintainability:** Ensures code is clean and structured, making future modifications easier.
- **Prevents Technical Debt:** Identifies potential issues early to avoid accumulating maintenance burdens.



Importance of Code Quality

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István-Lehel
Balázs

Brand changes
- 28 oct 2024

Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines

- **Reduces Defects and Bugs:** Early detection of code issues minimizes the chance of runtime errors.
- **Improves Team Collaboration:** Sets a standard for quality, enabling consistent and effective code reviews.



Importance of Code Quality

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Brand changes
- 28 oct 2024

Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines

- **Facilitates Learning and Growth:** Promotes best practices, reinforcing sound coding principles for developers.



Security Benefits

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Brand changes
- 28 oct 2024

Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines

- **Vulnerability Detection:** Sonar identifies security vulnerabilities and potential exploits in your code, helping prevent data breaches and security incidents.
- **OWASP Compliance:** Ensures code adheres to recognized security standards like OWASP Top 10, promoting industry-level security practices.



Development Best Practices

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Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines

- **Code Smell Detection:** Highlights suboptimal code structures that could lead to future maintenance problems.
- **Enforces Coding Standards:** Automates the application of style and quality guidelines, ensuring consistency across the codebase.
- **Automated Quality Gates:** Sets pass/fail criteria for code quality, allowing only compliant code to merge into main branches, maintaining high development standards.



Code Analysis

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Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines



Language Support

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- 28 oct 2024

Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines



Integration Capabilities

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- 28 oct 2024

Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines



Cloud-Based Convenience

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Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines



Static Code Analysis

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Brand changes
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Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines



Quality Gates

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Brand changes
- 28 oct 2024

Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines



Dashboard and Reports

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- 28 oct 2024

Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines



Example Workflow

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- 28 oct 2024

Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines



Live Demo

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- 28 oct 2024

Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines



Setting Up SonarCloud in GitHub

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Brand changes
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Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines



Basic Pipeline Configuration

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Balázs

Brand changes
- 28 oct 2024

Introduction

Why Use
SonarCloud?

Key Features

How
SonarCloud
Works

SonarCloud in
Action

Integration
with GitHub
and CI/CD
Pipelines