

오픈소스 프로젝트에서 이너소스 프로젝트로

SK Devocean 테크 세미나



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화끈거리는 조명이



나를 감싸네

Justin Yoo

시니어 클라우드 아드보캇

Microsoft

Developer Relations

 @justinchronicle

 @justinyoo



내가 보는 이너소스



오픈소스 프로젝트 문화를 기업내 프로젝트에 도입

기여에 대한 보상
문서화
기업 내부 공개 투명성

오픈소스 프로젝트를
기업과 커뮤니티가 함께 운영/기여

내 개인 오픈소스 프로젝트가
Microsoft의 이너소스 프로젝트가 되었다

배경



Azure Functions is an event driven, compute-on-demand experience that extends the existing Azure application platform with capabilities to implement code triggered by events occurring in virtually any Azure or 3rd party service as well as on-premises systems. Azure Functions allows developers to take action by connecting to data sources or messaging solutions, thus making it easy to process and react to events. Azure Functions scale based on demand and you pay only for the resources you consume.

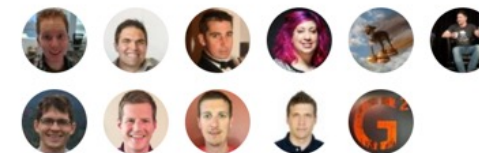
This repository acts as a directory for folks looking for the various resources we have for Azure Functions.

To get started with Azure Functions, you can visit functions.azure.com and click on the green Get Started button. If you need a trial Azure subscription, there is also a link on that page.

Visit azure.com for the primary [Azure Functions documentation page](#).

If you would like documentation on the Functions runtime oriented towards contributors, those are hosted in the [Azure WebJobs SDK script GitHub wiki](#).

Contributors 17



+ 6 contributors

github.com/Azure/Azure-Functions

오픈소스 서버리스 런타임

aliencube/AzureFunctions.Exte x Azure Functions의 OpenAPI 데 Issues · Azure/Azure-Function x Issues · Azure/azure-functions x Get involved | Microsoft Open x Home - Microsoft Azure x

https://github.com/Azure/azure-functions-host/issues?q=justinyoo

github.com/Azure/azure-functions-host

Watch 186 Unstar 1.4k Fork 311

<> Code Issues 1k Pull requests 15 Actions Projects Wiki Security Insights

Filters justinyoo Labels 118 Milestones 12 New issue

Clear current search query, filters, and sorts

0 Open 6 Closed

Author Label Projects Milestones Assignee Sort

Dependency Injection support for Functions

#3736 by fabiocav was closed on 10 May 2019 6 of 7 Epics

150

listSecrets broken for function keys in V2 (Runtime version: 2.0.12050.0)

#3411 by mjul was closed on 18 Jun 2019

11

KUDU Access Unavailable in Australia Southeast

#3061 by justinyoo was closed on 29 Jun 2018

9

WindowsAzure.Storage package version update to 8.1.4?

#1654 by justinyoo was closed on 8 Jul 2017

3

External HTTP Request within Azure Functions Timeout in 21 secs

needs-investigation pending-customer-response

#957 by justinyoo was closed on 21 Dec 2016

11

#r referencing issue between web editor and local text editor

#247 by justinyoo was closed on 13 Apr 2016

3

내가 만들어 봐야겠다!

오픈소스 프로젝트 소개



Aliencube.AzureFunctions.Extension...	Update solution references	7 months ago
Aliencube.AzureFunctions.Extension...	Add Open API Extension	2 years ago
LICENSE	Update README.md	3 years ago
README.md	Update README.md	19 days ago
Settings.StyleCop	Initial code commit	3 years ago
appveyor.yml	Add sample app for V3 runtime (#73)	13 months ago

☰ README.md

As the [Azure Functions OpenAPI Extension](#) package was officially announced during the [//Build](#) event in May 2021, this repository has now been archived. ←

If you have any questions around this extension, please pile up an issue to [here](#).

AzureFunctions.Extensions

This provides some useful extensions for Azure Functions.

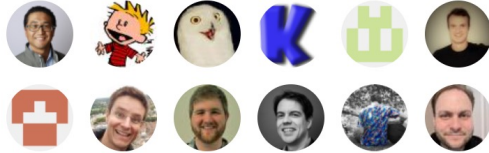
Getting Started

 Build and Test failing

Package	Status	Version
Aliencube.AzureFunctions.Extensions	downloads 288k	nuget v1.2.0

No packages published
[Publish your first package](#)

Contributors 12



Languages

C# 98.7% Other 1.3%

github.com/aliencube/AzureFunctions.Extensions

애저 펑션 확장 기능

Open API 문서 실시간 자동 생성

애저 펑션 런타임 모든 버전 지원



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This repository has been archived by the owner. It is now read-only.

[aliencube](#) / [AzureFunctions.Extensions](#) Archived

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9

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74

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dev ▾

2 branches 40 tags

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[Code ▾](#)

About



[justinyoo](#) Update README.md



aca0051 19 days ago



355 commits

This provides some useful extensions for Azure Functions.

진행상황



어느날

매니저와 1:1 미팅 중



“ 애저 평션에
이 기능이
아직 부족하다

“ 내 오픈소스
프로젝트가
딱 그 기능인데?





“

오... 그래?
한 번 볼까?

그렇게 해서 논의를 시작했습니다

그리고 현재 이전 완료!



Search or jump to...



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Azure / **azure-functions-openapi-extension** Public

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32

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Code Issues **44** Pull requests **5** Discussions Actions Projects Wiki Security Insights

aka.ms/azfunc-openapi

main ▾

3 branches

12 tags

Go to file

Add file ▾

Code ▾

About



This extension provides an Azure Functions app with Open API capability for better discoverability to consuming parties

www.nuget.org/packages/microsoft.azure.functions.openapi

[azure](#) [openapi](#) [azure-functions](#)
[swagger-ui](#) [hacktoberfest](#)
[power-platform](#)

Readme

MIT License

Releases 12

v0.8.1 preview Update Latest

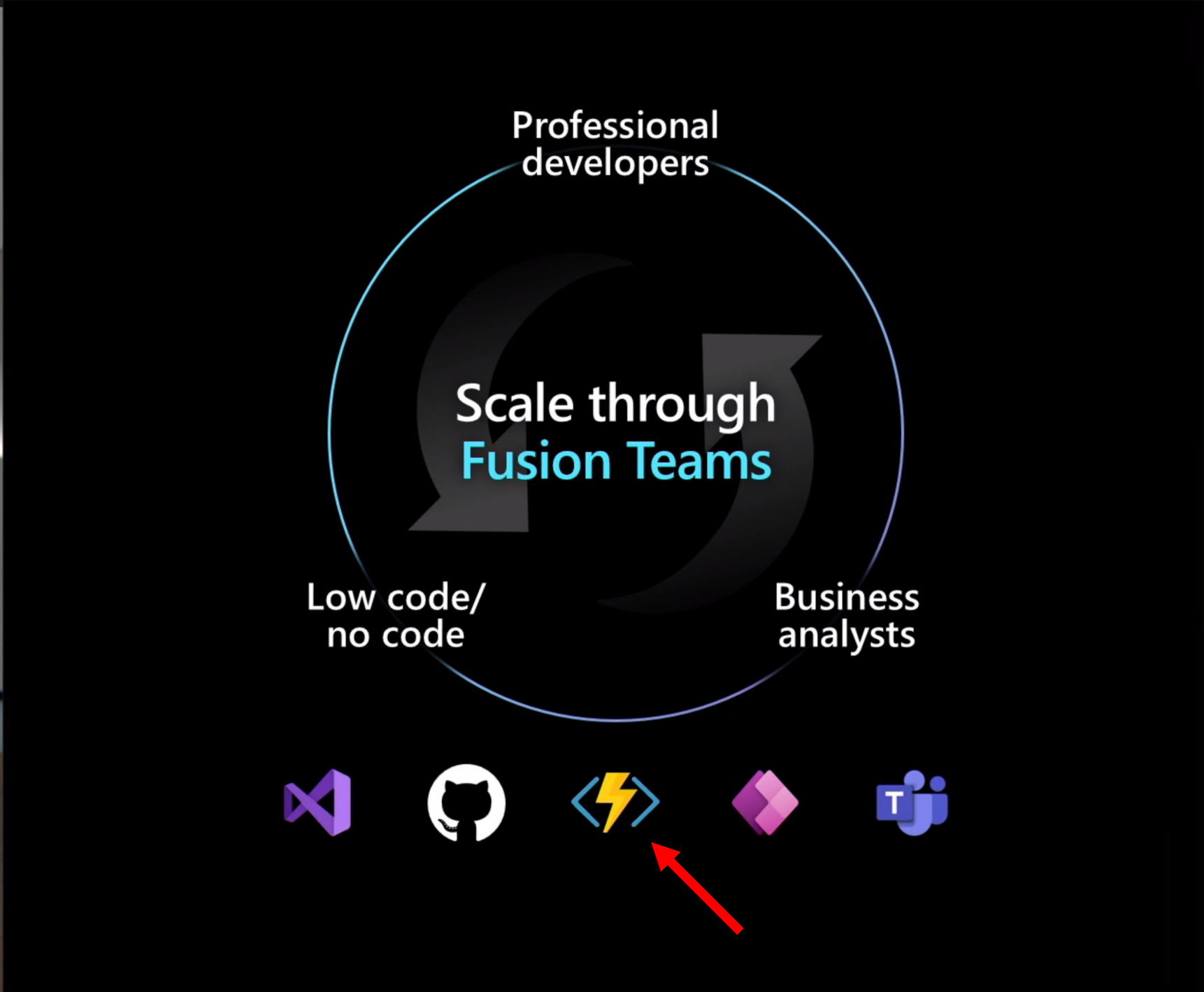


justinyoo Add PR template

✓ 8bfdbe6 5 days ago 188 commits

.github	Add PR template	5 days ago
.vscode	Tag filtering for Swagger UI and OpenAPI document (#221)	last month
builds	Update AzDevOps release pipeline workflow	2 months ago
docs	Add issue template	5 days ago
images	Revising .NET 5 Isolated Worker (#187)	2 months ago
release-notes	Update release note	2 months ago
samples	Feature/#156 list of recursive models (#233)	13 days ago
src	Update type extension methods to detect arrays and dictionaries b...	5 days ago
templates	Revising .NET 5 Isolated Worker (#187)	2 months ago

Microsoft //Build 에서 공식 발표



```

16 namespace ToyotaFunctionApp
17 {
18     0 references | pmgdemoadmin, 17 hours ago | 2 authors, 7 changes
19     public static class ToyotaVehicleRequest
20     {
21         [OpenApiOperation(operationId: nameof(GetVehicleRequest), Visibility = OpenApiVisibilityType.Important)
22         [OpenApiResponseWithBody(HttpStatusCode.OK, "application/json", typeof(VehicleOBJ))]
23         //add swagger
24         //adding more documentation
25
26         [FunctionName(nameof(GetVehicleRequest))]
27         2 references | pmgdemoadmin, 17 hours ago | 2 authors, 7 changes
28         public static async Task<IActionResult> GetVehicleRequest(
29             [HttpTrigger(AuthorizationLevel.Anonymous, "get", Route = null)] HttpRequest req,
30             ILogger log)
31         {
32             //this is the http trigger
33             log.LogInformation("C# HTTP trigger function processed a request.");
34
35             string vinId = req.Query["VIN"];
36             string model = req.Query["model"];
37             model = string.IsNullOrEmpty(model) ? "Highlander" : model;
38
39             string requestBody = await new StreamReader(req.Body).ReadToEndAsync();
40             dynamic data = JsonConvert.DeserializeObject(requestBody);
41             vinId = vinId ?? data?.name;
42
43             var accessories = new List<Accessory>() {
44                 new Accessory() { accessoryid = Guid.NewGuid().ToString(), accesorytype="Exterior", accesoryname="Exterior" }
45             };
46         }
47     }
48 }

```

- Solution 'ToyotaFunctionApp' (1 of 1 project)
- ToyotaFunctionApp
 - Connected Services
 - Dependencies
 - Properties
 - host.json
 - OpenAPIConfiguration.cs
 - ToyotaGetVehicleRequest.cs
 - VehicleOBJ.cs

배운 것들



커뮤니티 주도의 오픈소스 정책과 대기업 주도의 오픈소스 정책은 다르더라

opensource.microsoft.com

The Open Source Guides ↗

 [microsoft/opensource.microsoft.com](https://github.com/microsoft/opensource.microsoft.com) ↗

개인의 기여에 의존하는 오픈소스 프로젝트
VS
팀이 서포트하는 오픈소스 프로젝트

지속성 Sustainability

하위 호환성 유지

개인 경력 관리



FOSS Fund

The Free and Open Source Software Fund (FOSS Fund) is a way for our employees to collectively select open source projects to receive \$10,000 sponsorship awards throughout the year.

Microsoft's engineers select projects they are super passionate about. Only employees who contribute to open source projects can participate in the selection process.

[Learn about the Microsoft FOSS Fund process](#)



직원들이 선택한 오픈소스 프로젝트

연간 1만불 상당 현금 지원



ajv

The fastest JSON validator for Node.js and browser.

Used in many Microsoft projects.

ajv.js.org ↗



NgRx

Reactive Extensions for Angular. Used by many Microsoft projects.

Sponsorship towards core contributor Brandon Roberts.

<https://ngrx.io/> ↗



ESLint

Find and fix problems in your JavaScript code.

ESLint is an open source project that is part of the Microsoft Open Source Ecosystem.



Chayn

Award-winning feminist tech project helping survivors of abuse get the information & support they need. Open-source. Volunteer-run. 'Design with, not for.'

Chayn is a global nonprofit, run by survivors and allies from around the world, creating resources to inform and support the healing of survivors of gender-based violence. We create open source online resources and services for survivors of abuse that are trauma-informed, intersectional, multi-lingual and feminist.

chayn.co ↗

Ooui

A small cross-platform UI library that brings the simplicity of native UI development to the web.

Ooui(pronounced weee!) is a small cross-platform UI library for .NET that uses web technologies.

github.com/praecclarum/Ooui ↗



dbaTools

dbatools is PowerShell module that you may think of like a command-line SQL Server Management Studio.

dbatools is an open source project that is part of the Microsoft Open Source Ecosystem.



.NET Nano Framework

.NET nanoFramework goal is to be a platform that enables the writing of managed code applications for constrained embedded devices. Developers can harness the familiar IDE Visual Studio and their .NET (C#) knowledge to quickly write applications without having to worry about the low level hardware intricacies of a micro-controller.

Developers can harness the familiar IDE Visual Studio and their .NET (C#) knowledge to quickly write applications without having to worry about the low level hardware intricacies of a micro-controller.

nanoframework.net ↗

syn

Syn is a parsing library for parsing a stream of Rust tokens into a syntax tree of Rust source code.

47% of all published Rust crates on crates.io depend transitively on syn. The Microsoft windows crate as well as the Azure SDK for Rust depend on syn for code generation. Sponsorship to maintainer David Tolnay.

github.com/dtolnay/syn ↗

Coloroma

A simple cross-platform colored terminal text in Python

2021

- Fund #14 (October 2021): open for nominations.
- Fund #13 (September 2021): voting underway until September 30th.
- Fund #12 (August 2021): **QEMU**: *QEMU is a generic and open source machine emulator and virtualizer. Virtualization is a fundamental piece for effective OS development and beyond, be it emulating a bare-metal K8s environment or testing software on various OSes. QEMU also enables users to run an operating system other than their current one.*
- Fund #11 (June 2021)
 - **Coloroma**: *This is a critical project in the Python ecosystem for enabling "normal" color output to work on Windows. It is used by a wide variety of projects, including the Azure CLI and pip.*
 - **Grain**: *Grain is a new language targeting WebAssembly. As WebAssembly is taking off cloud-side, we see this language as a great "scripting-like" language for building Wasm-native applications._*
- June 2021 one-time, 10K Sponsorships:
 - **Ajv**: *The fastest JSON validator for Node.js and browser.*
 - **Ooui**: *Ooui (pronounced weee!) is a small cross-platform UI library for .NET that uses web technologies.*
 - **.NET nanoFramework**: *.NET nanoFramework goal is to be a platform that enables the writing of managed code applications for constrained embedded devices.*
 - **Syn**: *Parser for Rust source code.*
 - **Hikaya**: *Supporting nonprofits to tell their stories through data.*
 - **NgRx**: *Reactive Extensions for Angular.*
 - **Chayn**: *Chayn helps women experiencing abuse find the right information and support they need to take control of their lives.*
- Fund #10 (May 2021): **dbatools**: *dbatools is PowerShell module that you may think of like a command-line SQL Server Management Studio. The project initially started out as just Start-SqlMigration.ps1, but has now grown into a collection of over 500 commands that help automate SQL Server tasks and encourage best practices..*
- Fund #9 (April 2021): **SharpLab**: *SharpLab is a .NET code playground that shows intermediate steps and results of code compilation.*
- Fund #8 (March 2021): **ILSpy**: *ILSpy ships in Visual Studio and is powering the important Decompilation feature, used by many VS users.*
- Fund #7 (February 2021): **home-assistant**: *Open source home automation that puts local control and privacy first. Powered by a worldwide community of tinkerers and DIY enthusiasts.*
- Fund #6 (January 2021): **matplotlib**: *Matplotlib is a comprehensive library for creating static, animated, and interactive visualizations in Python.*

2020

계획



주 운영진은 그대로 유지

기존 서비스와 긴밀한 통합



Web-Dev-For-Beginners

24 Lessons, 12 Weeks, Get Started as a Web Developer

☆ 35,247

👤 4,866

JavaScript

[Web-Dev-For-Beginners repository](#) →



ML-For-Beginners

12 weeks, 25 lessons, 50 quizzes, classic Machine Learning for all

☆ 22,389

👤 4,589

Jupyter Notebook

[ML-For-Beginners repository](#) → <https://microsoft.github.io/ML-For-Beginners/> ↗



PowerToys

Windows system utilities to maximize productivity

☆ 60,876

👤 3,354

C#

[PowerToys repository](#) →



vscode

Visual Studio Code

☆ 121,916

👤 20,121

TypeScript

[vscode repository](#) → <https://code.visualstudio.com> ↗



terminal

The new Windows Terminal and the original Windows console host, all in the same place!

opensource.microsoft.com

질문 있으신 분?



감사합니다!

오픈소스 프로젝트에서
이너소스 프로젝트로

