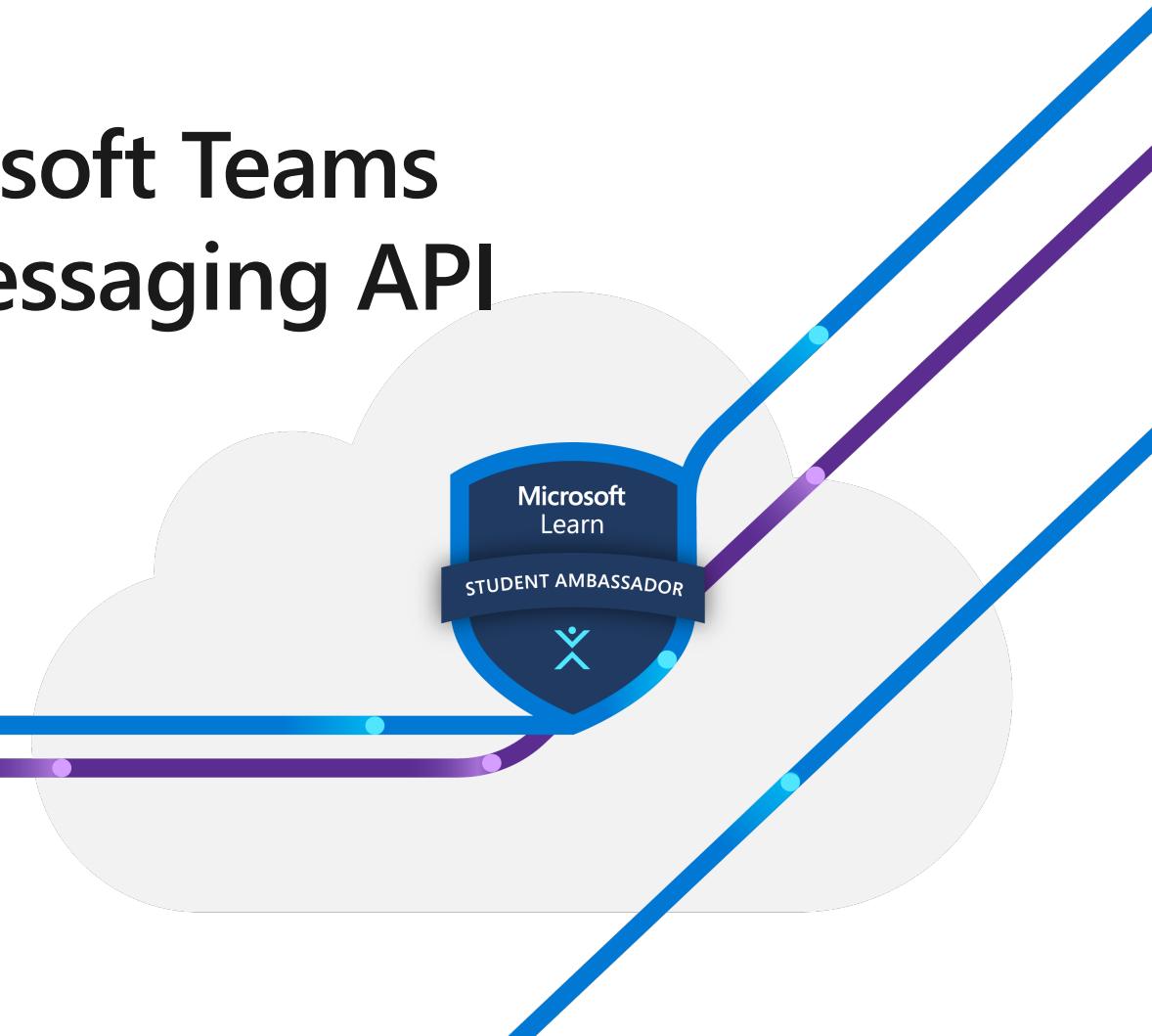




Connecting LINE Bot to Microsoft Teams using Azure Functions and Messaging API

5 February 2022 | 07:30 PM – 08:30 PM
Hosted by Supasate Vorathammathorn



Agenda

- Introduction Microsoft Learn Student Ambassadors
- Introduction to Azure Functions and Messaging API
- Demo: Deploy LINE Bot to Microsoft Teams
- Q&A

Supasate Vorathammathorn (Kom)



- Alpha Microsoft Learn Student Ambassador
- Computer Engineer Student at KMUTT
- Passionate in Artificial Intelligence, Quantum Computing, and Mixed Reality
- Cat and Dog Lover

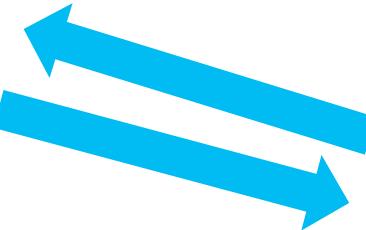


Microsoft Learn Student Ambassadors



Microsoft Learn Student Ambassadors

Student Ambassadors



Microsoft

Students at school



Program benefits



name.com

SUBWAY



- Microsoft 365 with Office apps and Microsoft Teams
- \$150 monthly Azure credit
- Visual Studio Enterprise subscription with Microsoft software, support, and training
- LinkedIn Learning
- Certification exam voucher
- Mentorship and more!

Microsoft 365

[Office 365](#) [Business Apps](#) [All apps](#) [Tips and Tricks](#)



Calendar

Schedule and share meeting and event ti...



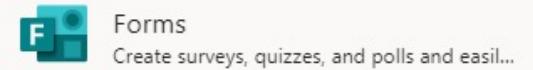
Delve

Get personal insights and relevant informa...



Excel

Discover and connect to data, model and ...



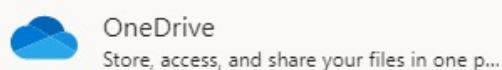
Forms

Create surveys, quizzes, and polls and easil...



Lists

Allows users to create, share, and track dat...



OneDrive

Store, access, and share your files in one p...



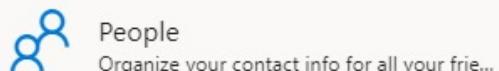
OneNote

Capture and organize your notes across all...



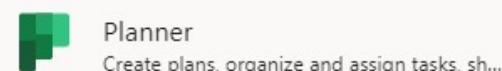
Outlook

Business-class email through a rich and fa...



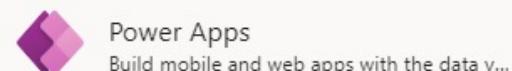
People

Organize your contact info for all your frie...



Planner

Create plans, organize and assign tasks, sh...



Power Apps

Build mobile and web apps with the data y...



Power Automate

Create workflows between your apps, files,...



Power BI

Create actionable, dynamic, and engaging ...



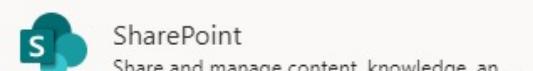
PowerPoint

Design professional presentations.



Project

Develop project plans, assign tasks, track ...



SharePoint

Share and manage content, knowledge, an...



Stream

Share videos of classes, meetings, present...



Sway

Create and share interactive reports, prese...



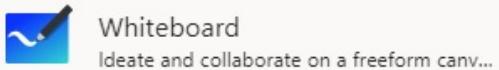
Teams

The customizable, chat-based team works...



To Do

Keep track of your tasks in one place with ...



Whiteboard

Ideate and collaborate on a freeform canv...



Word

Bring out your best writing.



Yammer

Connect with coworkers and classmates, s...

Visual Studio Enterprise subscription

Benefits included in my subscription

All Tools Support

 Visual Studio Enterprise Enterprise-class development <p>Tools and services for designing, building and managing complex enterprise applications.</p> <p>Download</p>	 Azure DevOps Basic level <p>Free Git repos, Agile planning tools and hosted builds, for any language – it's the perfect complement to your IDE.</p> <p>Get started</p>	 Azure \$150 monthly credit <p>Use credits in Azure to learn, explore, and try Azure services.</p> <p>Activate</p>	 Microsoft 365 Developer subscription (E5) <p>Admin +24 users. Develop with Microsoft Graph, SharePoint, Microsoft Teams, Azure AD, Excel and Outlook.</p> <p>Activate</p>	 Visual Studio for Mac Enterprise IDE on macOS <p>Develop apps and games for iOS, Android, and web using .NET on macOS</p> <p>Download</p>	 Windows Developer Account <p>Submit free and paid apps for all Windows devices to the Windows Store.</p> <p>Get Code</p>
 Visual Studio App Center App lifecycle management <p>Build, test, deploy, and monitor your iOS, Android, Windows, and macOS apps.</p> <p>Get started</p>	 Power BI Pro <p>Transform your data into rich visuals for you to collect and organize. Note: work/school account is required.</p> <p>Get Code</p>	 Azure DevTest Pay-As-You-Go subscription <p>Collaborate with your team in the cloud. Create multiple DevTest Pay-As-You-Go subscriptions, enabling collaboration with other subscribers...</p> <p>Activate</p>	 Visual Studio 2019 Releases <p>Install an earlier version of Visual Studio 2019</p> <p>Download</p>	 Azure Community Forum Support <p>Get help directly from the Azure team within these select forums.</p> <p>Get help</p>	 Microsoft Q&A Forum support <p>Have a technical product question? Find it on Microsoft Q&A – the home for technical questions and answers at Microsoft.</p> <p>Get help</p>
 Microsoft Tech Community Online user community <p>Connect and engage with fellow users and Microsoft technical experts on best practices, design architecture and the latest updates.</p> <p>Get help</p>	 Developer Community Forum support <p>Post questions, find answers and share your knowledge in the Developer Community forums.</p> <p>Get help</p>	 Concierge Chat Available 24/7 <p>Chat with us for assistance finding technical documentation and product information, or using your subscription benefits. Chat assistan...</p> <p>Chat now</p>			

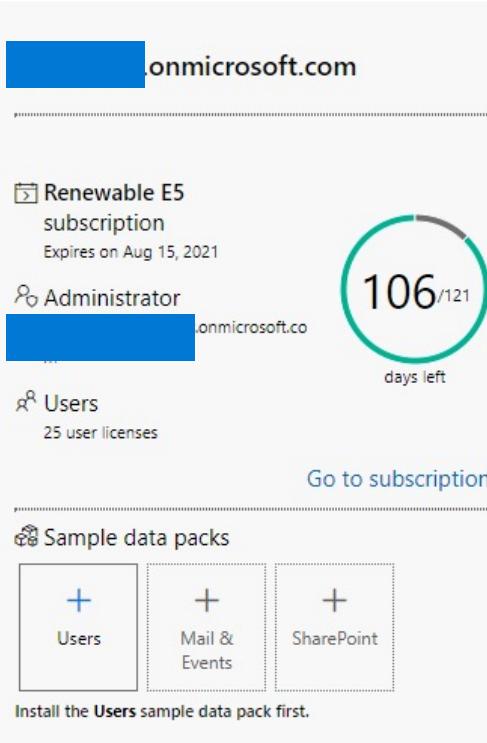
Microsoft 365 E5 subscription

Microsoft 365 Developer Program 

Delete Profile

Your Microsoft 365 developer subscriptions

To learn more about how to work with your subscription, see [Build Microsoft 365 solutions](#).

onmicrosoft.com

Renewable E5 subscription
Expires on Aug 15, 2021

Administrator  onmicrosoft.co

106 / 121 days left

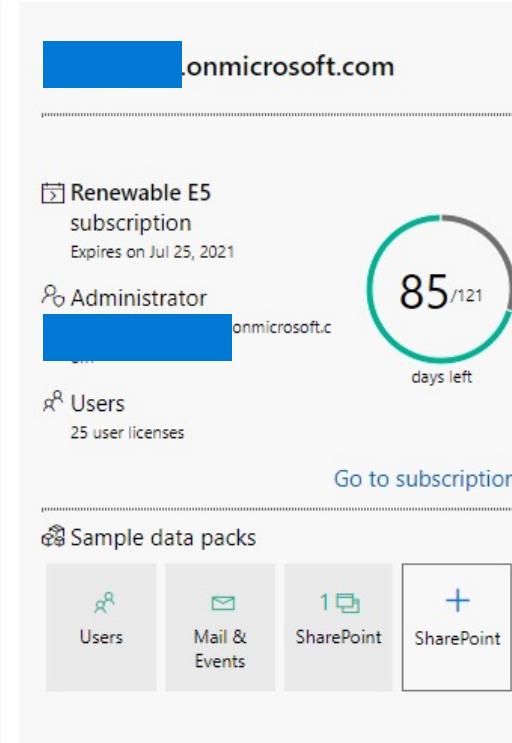
Users
25 user licenses

[Go to subscription](#)

Sample data packs

+ Users + Mail & Events + SharePoint

Install the **Users** sample data pack first.

onmicrosoft.com

Renewable E5 subscription
Expires on Jul 25, 2021

Administrator  onmicrosoft.co

85 / 121 days left

Users
25 user licenses

[Go to subscription](#)

Sample data packs

Users Mail & Events SharePoint + SharePoint

Mentorship

Extra Credit Club Posts Files Quick Reference Recordings

Extra Credit Club 9 videos | 1 follower

Let's get Started With Camtasia 01:09:13

Hello, World! 24:26

My Journey as a former Stud... 57:59

Resume Advice - How to Stan... 57:16

Sneak Peek screening of Hello... 01:22:27

Responsible Data for ML with ... 56:05

Making the Azure Maya Mystery

12:24 3:00

Markdown + Vue components

```
1 <!--
2 backdrop: images/1-nostairs-closer.png
3 --
4
5 # Your backpack
6
7 You open your sturdy backpack and find several items.
8
9 <item id="1" />
10 <item id="2" />
11 <item id="3" />
12
13 <Page url="623" instructions=
14 "A snake suddenly emerges from a shrub and slithers across
15 you. You take a step back." condition="3" />
16
17
18
19
20
21
22
23
24
25
26
27
28
```

Microsoft Azure Azure Maya Mystery

Your backpack

You open your sturdy backpack and find several items.

Unfold the faded map

Déploie le carte décolorée

Desenrollar el mapa descolorido

Take out the camera

Retirar la cámara

Take out your gate keys

Retirar las llaves de la puerta

Take out your gate keys after the snakes

Retirar las llaves de la puerta después de que salga la serpiente

AK VB

12:24 12:25 / 44:51 S VJ AK VB

Meet

Resources + your space

The image is a composite screenshot illustrating the integration of various Microsoft productivity tools:

- OneNote Notebook:** A "Content for Workshops" notebook is open. It contains a "Quick Start Guide" page with text and a "Navigating the Content for Workshops" page with a screenshot of the Microsoft Teams interface.
- Microsoft Teams:** A video call is in progress, showing four participants: Sandro, Georg, Dimitris, and Edgar. The video player at the bottom indicates the video has been playing for 18 minutes and 59 seconds.
- Code Editor:** An open file in the background is titled "Gold Workshop Series: Building a Shopping List with a Sprinkle of Intelligence". The code is written in TypeScript and defines a class for an item dialog. A tooltip from the Teams video call is overlaid on the code editor area, stating: "and the user says cancel the entire time and it's just".

Swag box



Our events



OO HUAWEI P30 Pro
LEICA QUAD CAMERA

Student Ambassadors + Microsoft presenters



New friends from different universities



Leadership experiences



Hang out



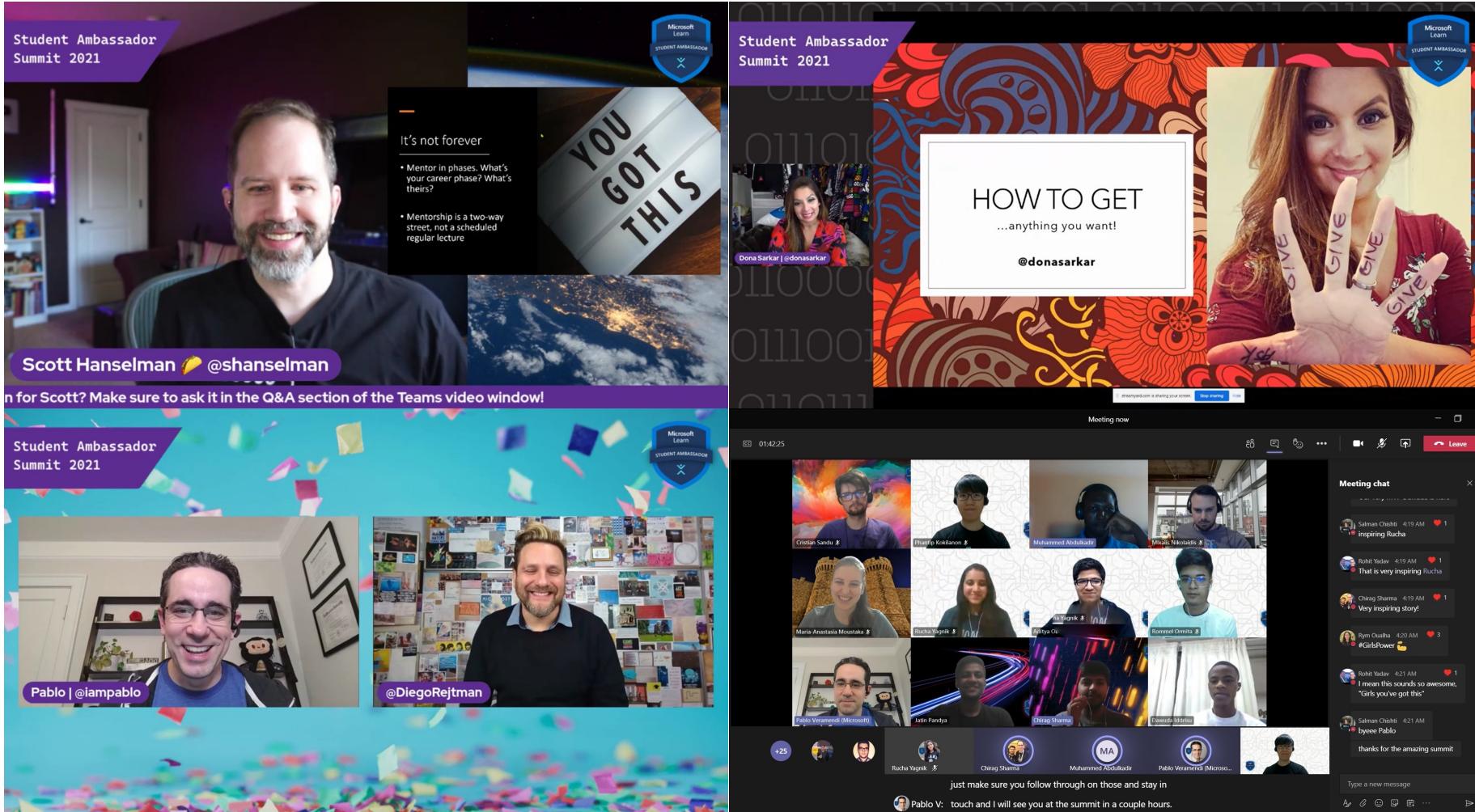
New experiences



Student Ambassador Summit 2019 at Sydney



Virtual Student Ambassador Summit 2021



Roadmap



- ✓ Join and engage in a League
- ✓ Skilling on Microsoft Learn

- USD150 monthly Azure Credit
- Visual Studio Enterprise Sub
- LinkedIn Learning
- MTC certification exam voucher
- Name.com domain name



- ✓ Hosting events

- Alpha benefits
- Swag
- Event Support
- Mentorship
- Access to Ambassador Summits



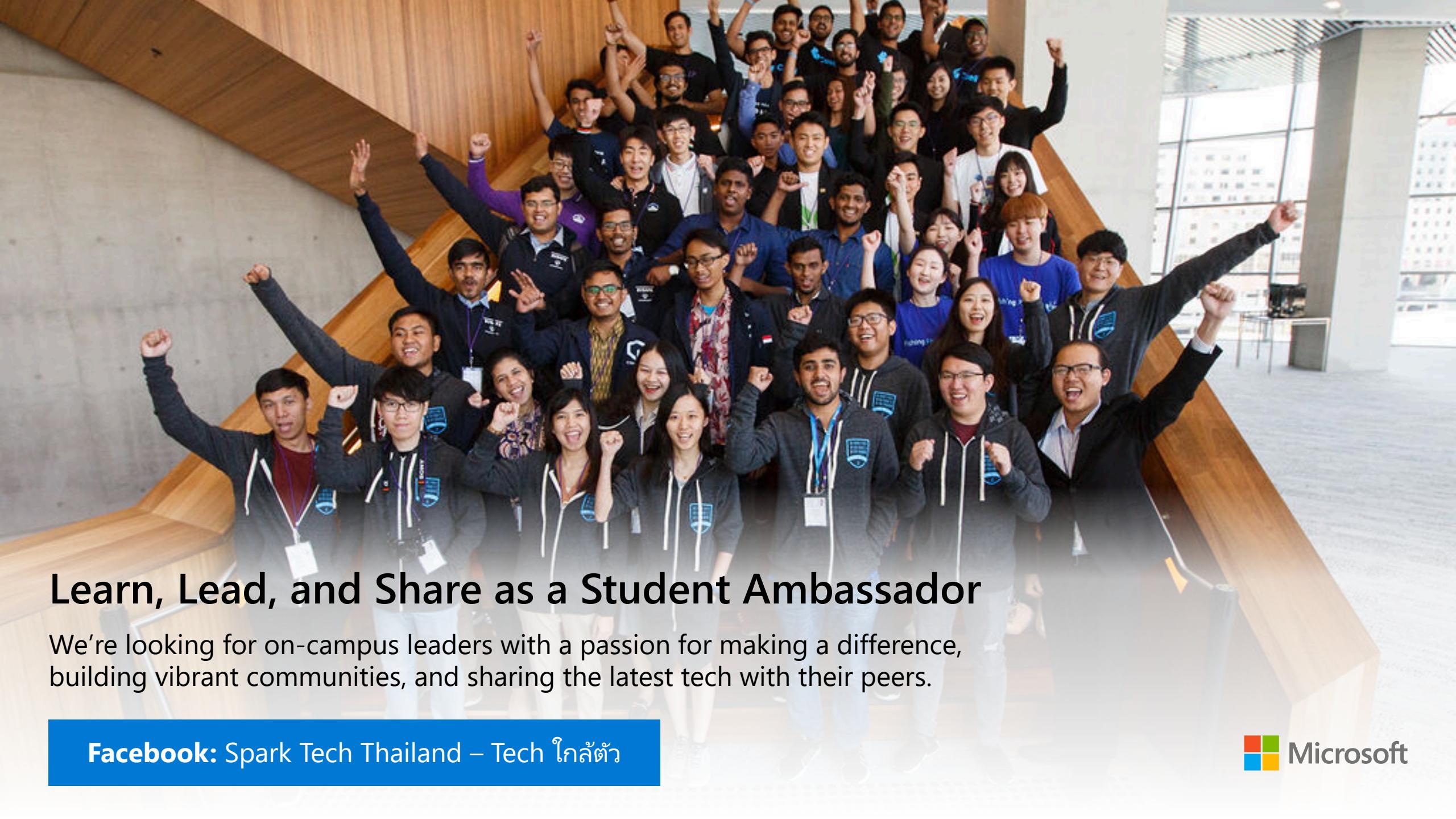
- ✓ Contributing to the community

- Alpha and Beta benefits
- Access special events and speaking engagements
- Program Leadership opportunities
- Participate in pilot programs
- Microsoft Most Valuable Professional (MVP) Mentorship
- May be nominated to MVP program

All Student Ambassadors get Microsoft 365 w/ Office & Teams as well as TechSmith Snagit & Camtasia

Spark Tech Community Meetups





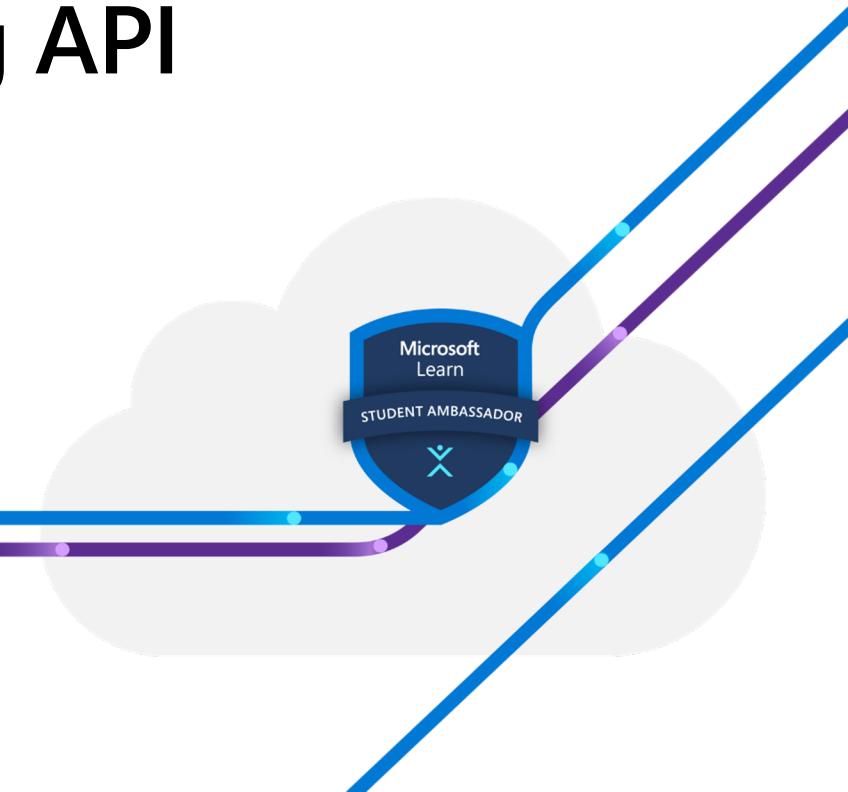
Learn, Lead, and Share as a Student Ambassador

We're looking for on-campus leaders with a passion for making a difference, building vibrant communities, and sharing the latest tech with their peers.

Facebook: Spark Tech Thailand – Tech igo lattaw



Connecting LINE Bot to Microsoft Teams using Azure Functions and Messaging API



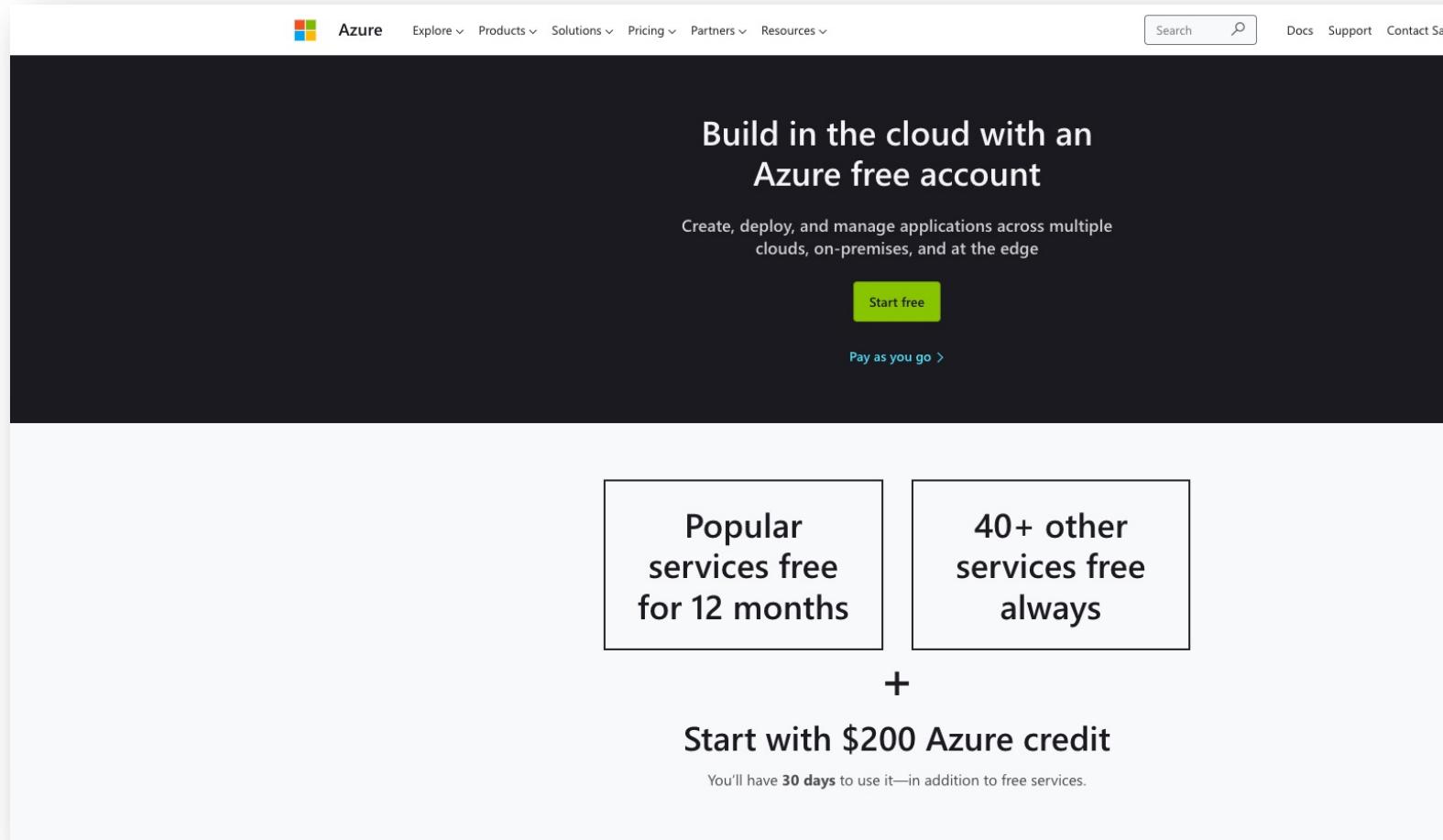
Hands-on



Tools

Azure free account:
azure.com/free

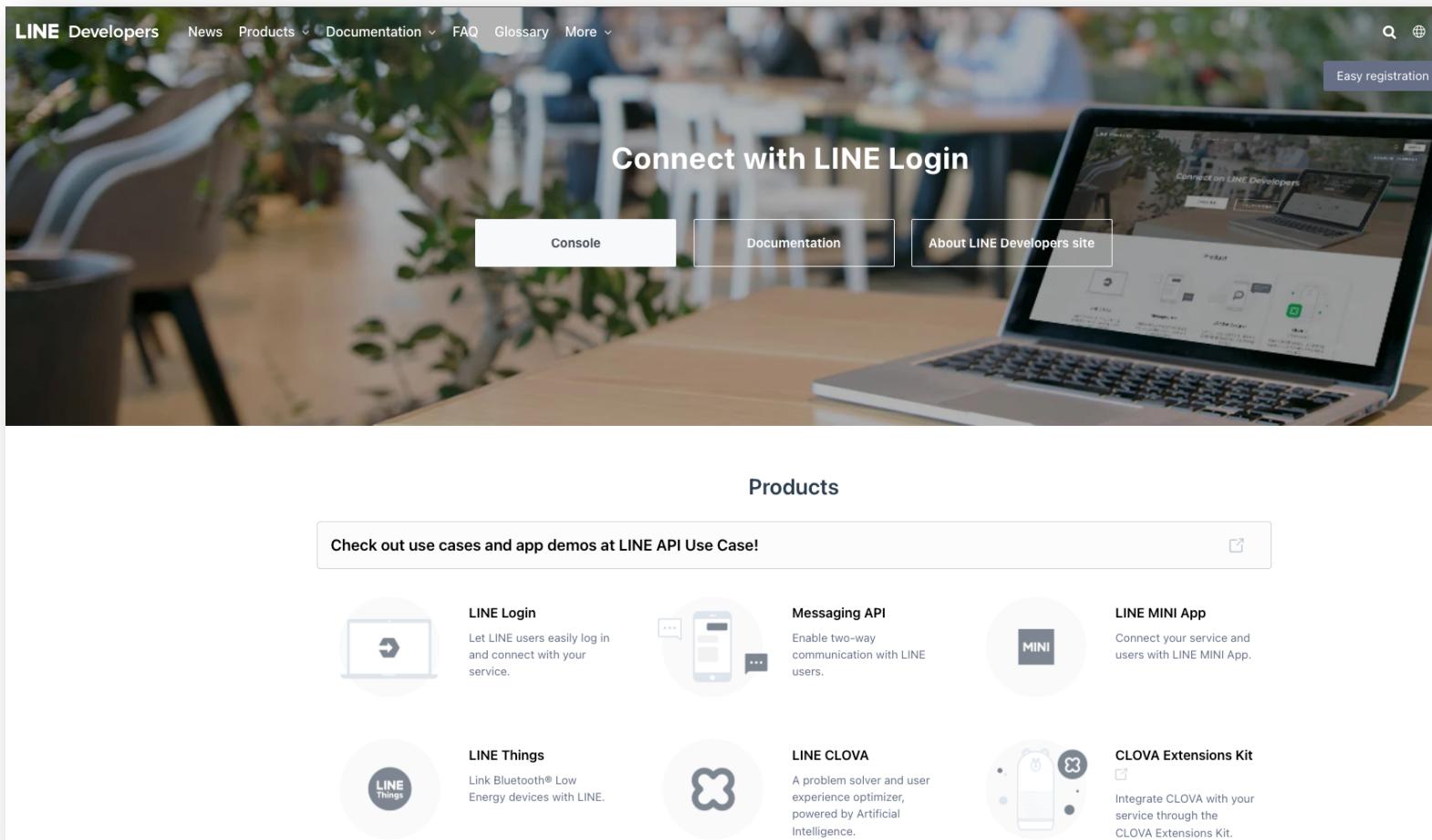
Azure for Students:
azure.com/students



The screenshot shows the Azure homepage with a dark header bar. The header includes the Microsoft logo, the word "Azure", and navigation links for "Explore", "Products", "Solutions", "Pricing", "Partners", and "Resources". On the right side of the header is a search bar with a magnifying glass icon and links for "Docs", "Support", and "Contact Sales". Below the header, a large black banner features the text "Build in the cloud with an Azure free account" and a subtext "Create, deploy, and manage applications across multiple clouds, on-premises, and at the edge". A green "Start free" button is located in the center of the banner. To the right of the banner, there is a link "Pay as you go >". Below the banner, two white rectangular boxes are displayed side-by-side. The left box contains the text "Popular services free for 12 months". The right box contains the text "40+ other services free always". A small blue plus sign (+) is positioned between the two boxes. At the bottom of the banner, the text "Start with \$200 Azure credit" is displayed, followed by a smaller note: "You'll have 30 days to use it—in addition to free services."

Tools

LINE Developers:
developers.line.biz



The screenshot shows the homepage of the LINE Developers website. At the top, there's a navigation bar with links for News, Products, Documentation, FAQ, Glossary, More, and a search icon. A prominent banner features a laptop displaying the website itself, with the text "Connect with LINE Login". Below the banner are three buttons: "Console", "Documentation" (which is currently selected), and "About LINE Developers site". The main content area has a blurred background of a person working at a desk. A section titled "Products" contains six items, each with an icon and a brief description:

- LINE Login**: Let LINE users easily log in and connect with your service.
- Messaging API**: Enable two-way communication with LINE users.
- LINE MINI App**: Connect your service and users with LINE MINI App.
- LINE Things**: Link Bluetooth® Low Energy devices with LINE.
- LINE CLOVA**: A problem solver and user experience optimizer, powered by Artificial Intelligence.
- CLOVA Extensions Kit**: Integrate CLOVA with your service through the CLOVA Extensions Kit.

At the bottom right of the page, there's a "Easy registration" button.

What is Azure?



Azure is a continually expanding set of cloud services that help your organization meet your current and future business challenges.

Azure gives you the freedom to build, manage, and deploy applications on a massive global network using your favorite tools and frameworks.

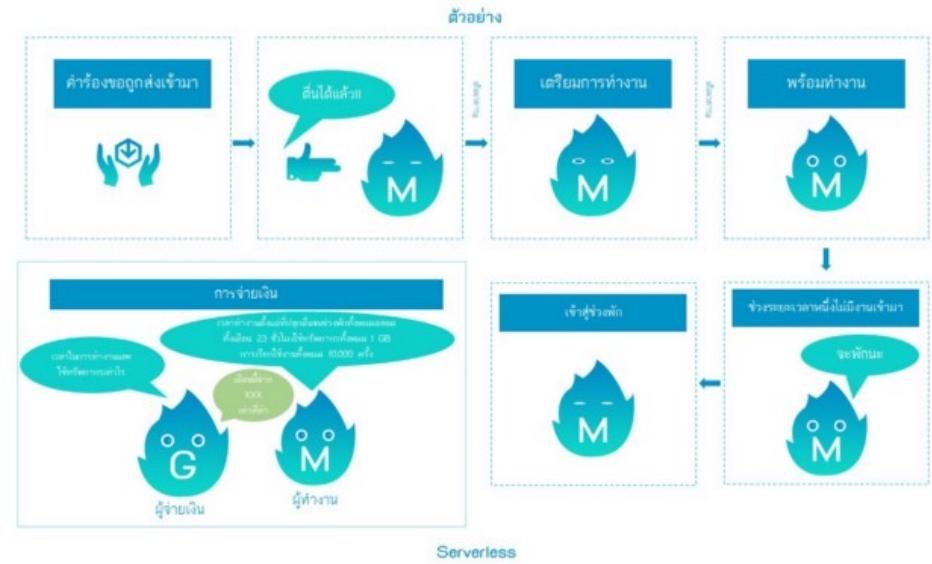
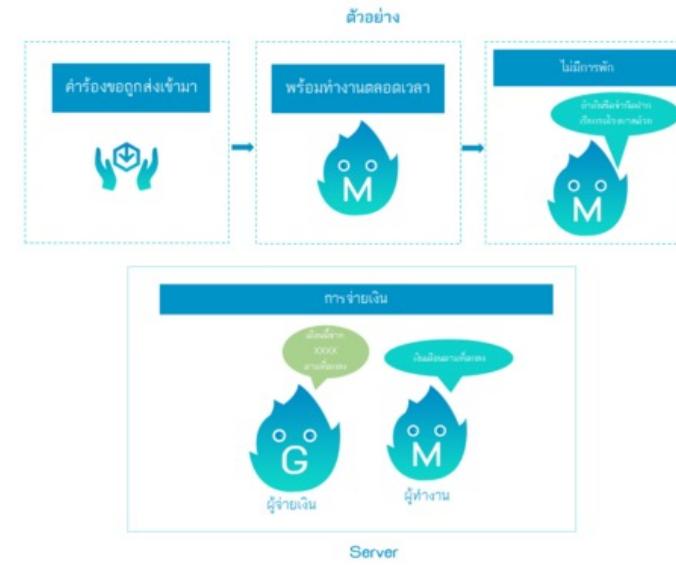
What is Azure Functions?



Azure Functions is a serverless application platform. It enables developers to host business logic that can be executed without provisioning infrastructure. Functions provides intrinsic scalability, and you are charged only for the resources used. You can write your function code in the language of your choice, including C#, F#, JavaScript, Python, and PowerShell Core. Support for package managers like NuGet and NPM is also included, so you can use popular libraries in your business logic.

Server vs Serverless

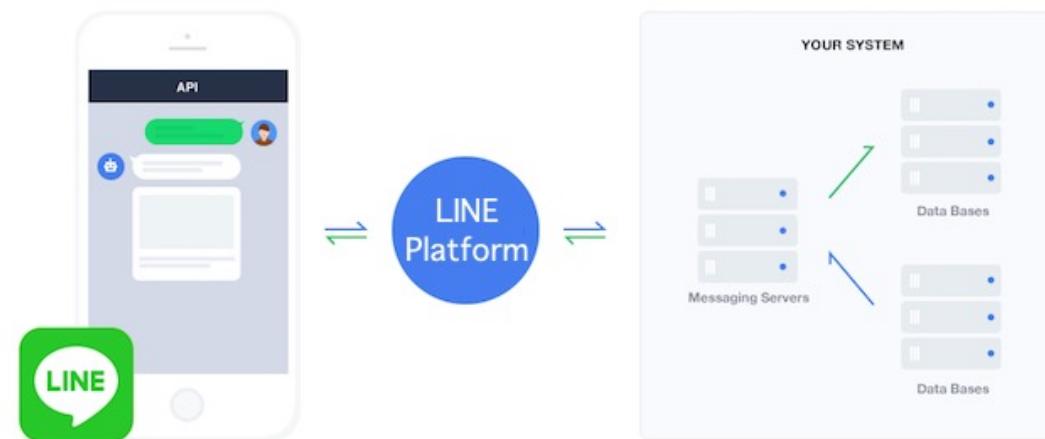
Learn more:
bit.ly/serverVSServerless



What is Messaging API?

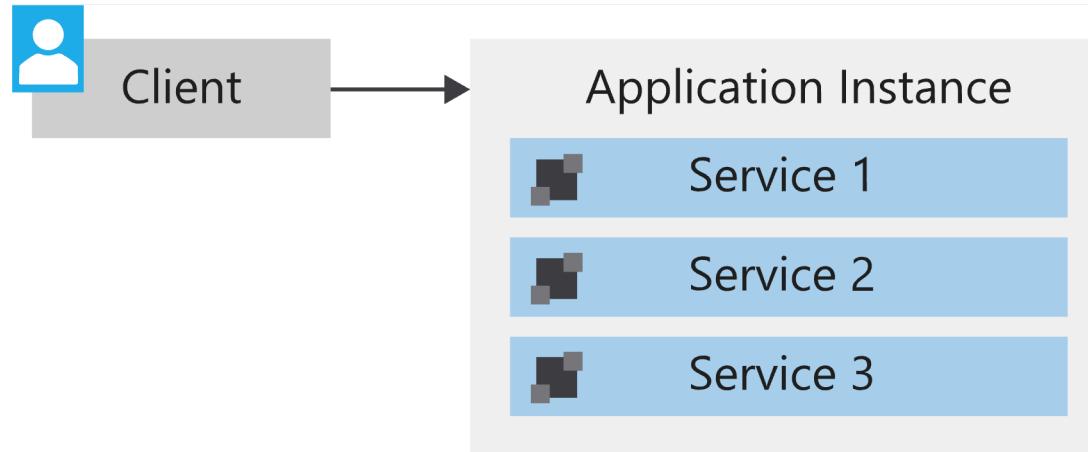
The Messaging API lets you develop two-way communication between your service and LINE users.

- Send reply messages, push messages, and various message types
- Get content sent by users and user profiles
- And more

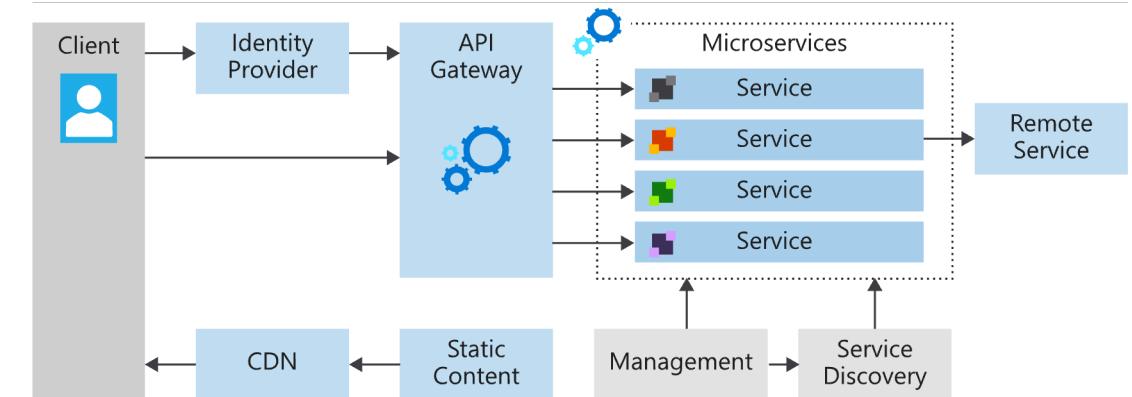


Monolith and Microservice Architecture

Monolith

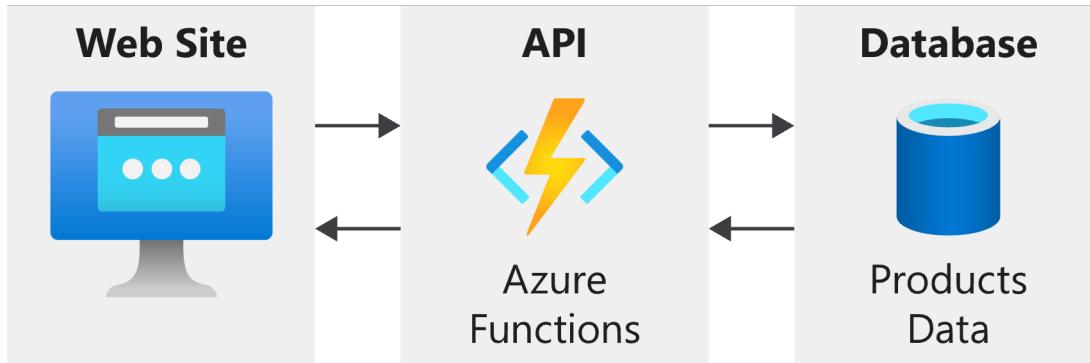


Microservice

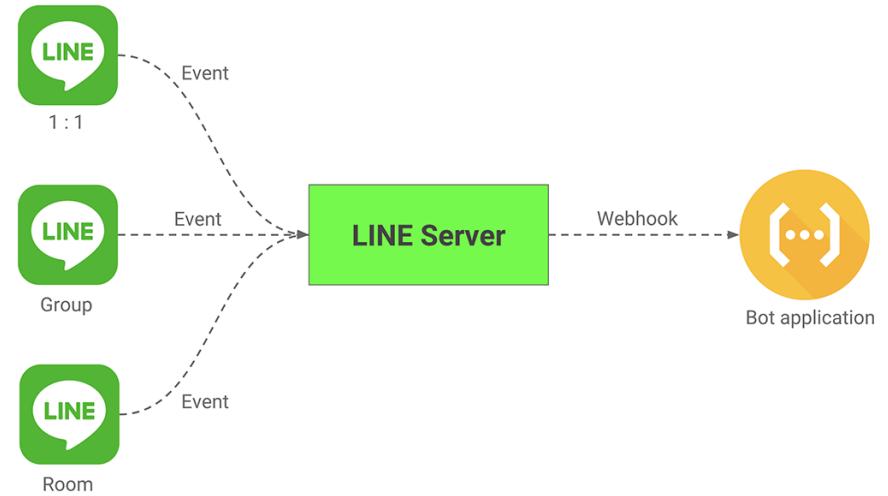


API and Webhooks

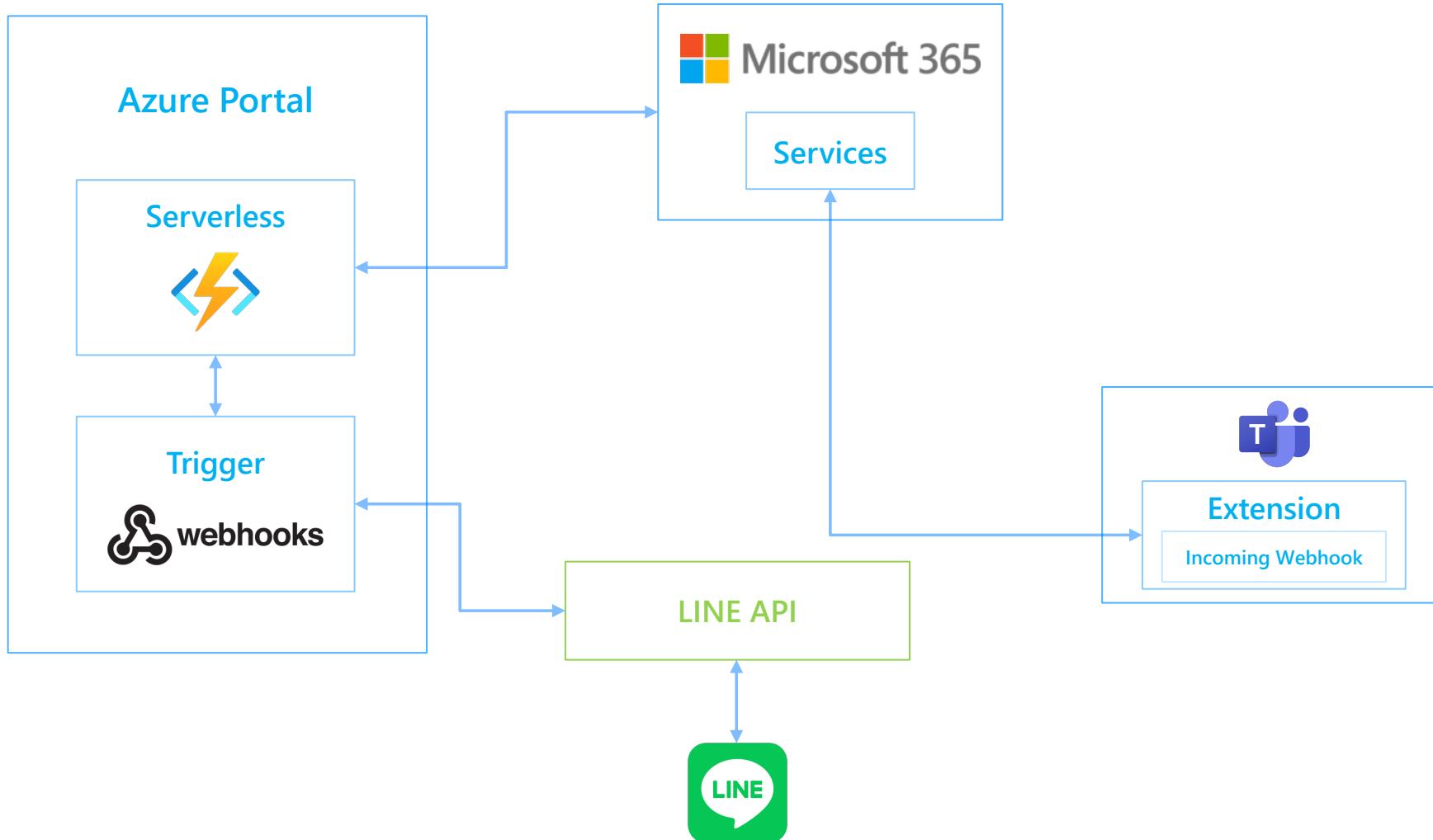
API (Application Programming Interface)



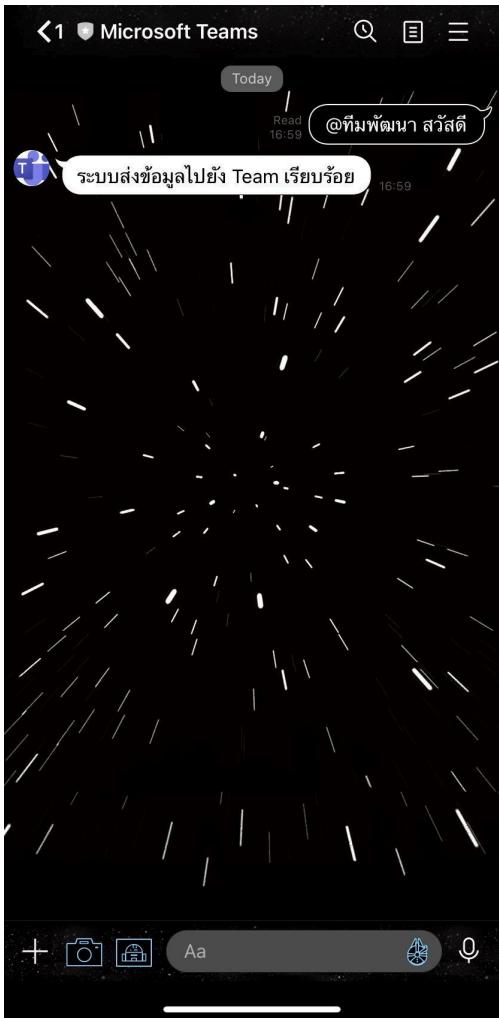
Webhooks



System Architecture

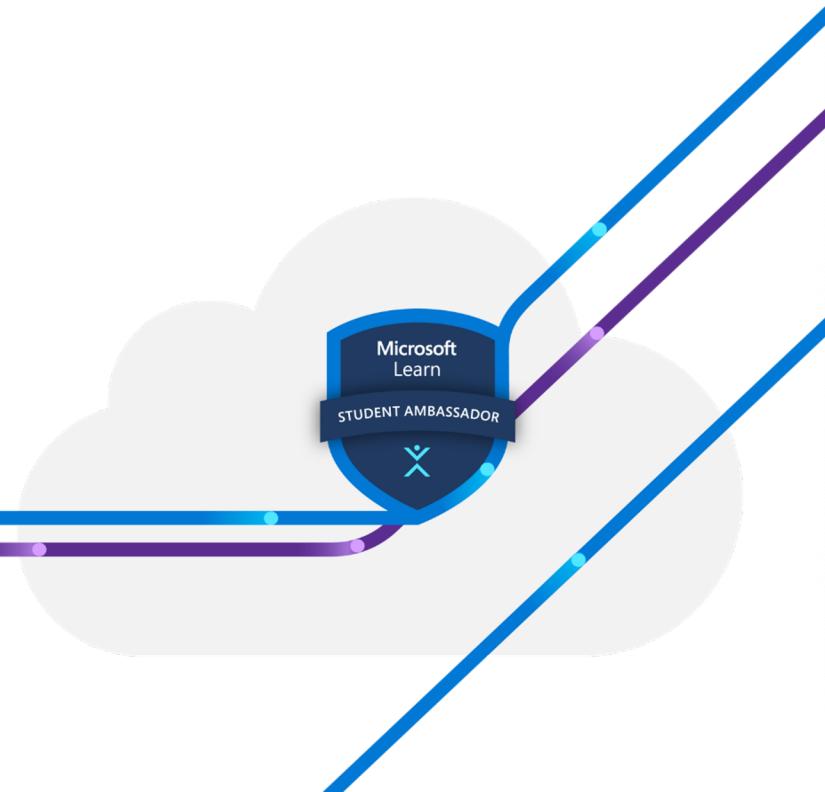


Example



A screenshot of a Microsoft Teams channel interface titled 'General'. At the top right are buttons for 'Meet', a profile picture, and more options. The channel header shows a profile picture of a person in a yellow and grey jacket. Below the header is a message from 'test' at 3:22 PM: 'Supasate Vorathamathorn has set up a connection to Incoming Webhook so group members will be notified for this configuration with name test'. Below this is a message from 'test' at 4:46 PM: 'ข้อความจาก Komm (ส่วนตัว) วันที่ 03 เดือน กุมภาพันธ์ 2022 เวลา: 09:46' followed by 'ข้อความ @ทีมพัฒนา ช่วยตรวจสอบและแก้ไขจุดผิดพลาดด่วน'. Below that is another message from 'test' at 4:59 PM: 'ข้อความจาก Komm (ส่วนตัว) วันที่ 03 เดือน กุมภาพันธ์ 2022 เวลา: 09:59' followed by 'ข้อความ @ทีมพัฒนา สวัสดี'. At the bottom is a blue button labeled 'New conversation'.

Demo



Resources



Microsoft Learn

Find your way to deeper content, training options, communities and certification details across all Microsoft cloud solutions right here.



Start learning at Microsoft.com/Learn

The screenshot shows the Microsoft Learn homepage. At the top, there's a navigation bar with links to Microsoft, Docs, Documentation, Learn (which is underlined), Q&A, Code Samples, Shows, and Events. To the right of the navigation is a search bar and a 'Sign in' button. Below the navigation, a main banner features the word 'LEARN' in large, colorful, winding lines against a background of a circuit board pattern. To the left of the banner is a dark callout box with the text 'WELCOME TO MICROSOFT LEARN' and 'Discover your path'. It includes a paragraph about learning paths and two buttons: 'Customize my path' and 'Browse the full catalog'. Below the banner are four main sections: 'LEARNING PATHS' (with an icon of a suitcase and the text 'Learn on your own schedule'), 'CERTIFICATIONS' (with an icon of a trophy and the text 'Become Microsoft certified'), 'LEARN TV' (with an icon of a television and the text 'Watch live and recorded events'), and 'Popular learning paths and modules' (which is currently empty). At the bottom, there are three cards for 'Azure Fundamentals part 1: Describe core Azure concepts', 'Azure Fundamentals part 2: Describe core Azure services', and 'Azure Fundamentals part 3: Describe core solutions and management tools on Azure'. Each card includes a small icon, the title, a brief description, and a duration.

Learning Path	Description	Duration
Azure Fundamentals part 1: Describe core Azure concepts	Learn on your own schedule	1 hr 34 min
Azure Fundamentals part 2: Describe core Azure services	Become Microsoft certified	2 hr 40 min
Azure Fundamentals part 3: Describe core solutions and management tools on Azure	Watch live and recorded events	2 hr 20 min

Microsoft Virtual Training Days

These 1- and 2-day virtual events will give you the opportunity to expand your skillset and connect with Microsoft experts.



Register at bit.ly/MSVTDTH

Join our community

Subscribe to the Microsoft.Source newsletter and receive regular updates from our community experts and exclusive invites to our community events and workshops.



aka.ms/devTH



Microsoft.Source newsletter

The screenshot shows the Microsoft Azure homepage. At the top, there's a navigation bar with links for Azure, Explore, Products, Solutions, Pricing, Partners, Resources, and a green 'Free account' button. Below this is a large black overlay with white text: 'Sign up for the Microsoft.Source newsletter' and 'Receive a regular digest of relevant technical content, events, and training'. At the bottom of this overlay, there's descriptive text about the newsletter and a bulleted list of benefits.

Sign up for the Microsoft.Source newsletter

Receive a regular digest of relevant technical content, events, and training

Get the latest articles, documentation, and events from Microsoft.Source—the curated monthly developer community newsletter. Learn about new technologies and find opportunities to connect with other developers online and locally.

- Stay at the forefront of rapidly evolving technologies with resources that are relevant to your field, location, and areas of interest—including articles, GitHub repositories, and how-to guides.
- Get notified about events—from local hacks, workshops, and training sessions to virtual meetups and global conferences.
- Learn what you want, when you want, how you want. Resources include in-person hands-on workshops, free, interactive online training and sandbox environments.

The screenshot shows an email message in the 'Microsoft.Source Newsletter - Inbox'. The subject is 'Microsoft.Source Newsletter | Issue 7'. The message body includes a Microsoft logo, a brief introduction, and two buttons: 'Give feedback' and 'Get more of what you want in each edition'. Below this is a 'Featured Story' section with a link to 'Vanilla JS and HTML –No frameworks, no libraries, no problem >'. There are also sections for 'What's New' (with a link to 'Build a web experience to send GIFs to MXChip >'), 'Events' (with links to 'Cosmos DB Live Webcast / Online >' and 'OpenHack Serverless / Los Angeles >'), and a 'See all events' link.

Microsoft

Microsoft.Source Newsletter | Issue 7

You're reading Microsoft.Source, the developer community newsletter featuring ideas and projects from your peers down the street—and around the world. If someone forwarded you this newsletter and you want to receive future editions, [sign up >](#)

Give feedback Get more of what you want in each edition.

Featured Story

Vanilla JS and HTML –No frameworks, no libraries, no problem >
Do you know what it takes to render HTML elements without the complexity of AngularJS, React, Svelte, or Vue.js? See how to create a simple web page with pure HTML, CSS, and JS.
Web. JavaScript. HTML

What's New

Build a web experience to send GIFs to MXChip >
IoT. project

The Making of Azure Mystery Mansion >
Game, Twine, PlayFab

Trying to make FETCH happen >
Serverless. IoT. Azure Functions

Events

Cosmos DB Live Webcast / Online >
Expert-led. containers. .Net

OpenHack Serverless / Los Angeles >
In-person event, serverless, hack

[See all events](#)

Azure APAC Community Portal on Discord

The screenshot shows a Discord interface for the "Azure APAC Discussion F..." server. The left sidebar lists channels: #announcements (selected), #resources, #hack-time, #introduction, #events, #welcome-and-rules, #help, #webinar-series, #onboarding, #meeting-plans, #off-topic, #go-professional-with-azu..., #general, #lookingforspeakers, #startups, #Lounge, and #Meeting Room. The main channel, #announcements, contains a pinned message from gauravc12 on October 22, 2021, announcing the "Go Professional with Azure Challenge". The message includes a link: <https://azure.styava.dev/apac/en/go-professional-with-azure-challenge>. Below the message is an image of the challenge landing page, which features a trophy and various prizes like Surface devices. A second pinned message from gauravc12 on November 2, 2021, states: "gauravc12 pinned a message to this channel. See all pinned messages." The bottom of the screen shows the standard Discord message input bar.



discord.gg/caF3A2zbeA

Azure Community Thailand on Facebook



bit.ly/AzureCommunityTH

Microsoft Developer on YouTube

The screenshot shows the Microsoft Developer YouTube channel page. The channel has 324K subscribers. The main video thumbnail is for "CodeStories Denmark | All about sustainable software engin..." with 3,265 views and posted 1 month ago. The video description discusses climate change and the "Hack the Climate" event. Below the video, there's a section for "Microsoft Build 2021" featuring several video thumbnails with titles like "Azure App Dev | Microsoft Build 2021", "Modern Work (Teams, Graph, Windows, Dynamics 365) |...", "Power Platform | Microsoft Build 2021", "AI, Innovation and Startups | Microsoft Build 2021", "Azure Solutions (Data, Infrastructure, IoT and Mixed...)", and "Security | Microsoft Build 2021". Each thumbnail includes a view count and a "VIEW FULL PLAYLIST" link.



aka.ms/developer/MSDeveloperYouTube

Beginner's Series playlists

The screenshot shows a YouTube playlist page for a series titled "Beginner's Series to: Dev Containers". The page includes a sidebar with navigation links like Home, Explore, Subscriptions, Library, and History. The main content area displays 8 video thumbnails, each with a title, duration, and a "Visual Studio Code" label. The videos cover topics such as introduction, installing the extension, adding a dev container, running a project, forwarding ports, modifying project configuration, installing software, and summarizing the series.

Beginner's Series to: Dev Containers

8 videos • 5,779 views • Last updated on Jan 26, 2021

Using a Docker container as a development environment has many great benefits, such as easily switching between different languages and toolsets and providing all your teammates a consistent machine configuration. But what's the best way to get started with containers? And what if you aren't a Docker expert?

Well look no further, because we've created a series of videos about dev containers in Visual Studio Code! We'll show you how to get, create, and configure a container-based development environment with the VS Code Remote - Containers extension.

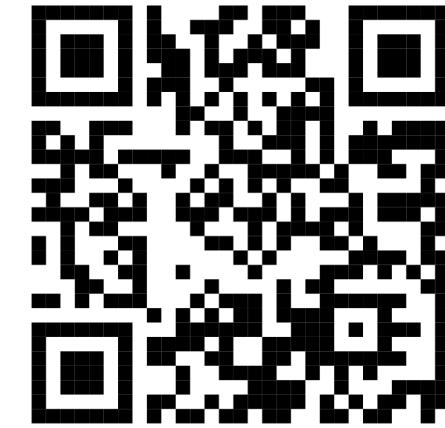
By the end of this series, you'll be able to configure any project so that it runs inside a Docker container.

SHOW MORE

Visual Studio Code SUBSCRIBE

Video Number	Title	Duration	Category
1	Introduction [1 of 8] Beginner's Series to: Dev Containers	3:30	Visual Studio Code
2	Installing the Remote - Containers Extension [2 of 8] Beginner's Series to: Dev Containers	2:16	Visual Studio Code
3	Adding a dev container to a project [3 of 8] Beginner's Series to: Dev Containers	3:00	Visual Studio Code
4	Running a project in a dev container [4 of 8] Beginner's Series to: Dev Containers	2:52	Visual Studio Code
5	Forwarding ports [5 of 8] Beginner's Series to: Dev Containers	4:42	Visual Studio Code
6	Modifying a project configuration [6 of 8] Beginner's Series to: Dev Containers	6:23	Visual Studio Code
7	Installing software [7 of 8] Beginner's Series to: Dev Containers	5:27	Visual Studio Code
8	Summary and what's next [8 of 8] Beginner's Series to: Dev Containers	2:45	Visual Studio Code

LINE Developers Group Thailand on Facebook



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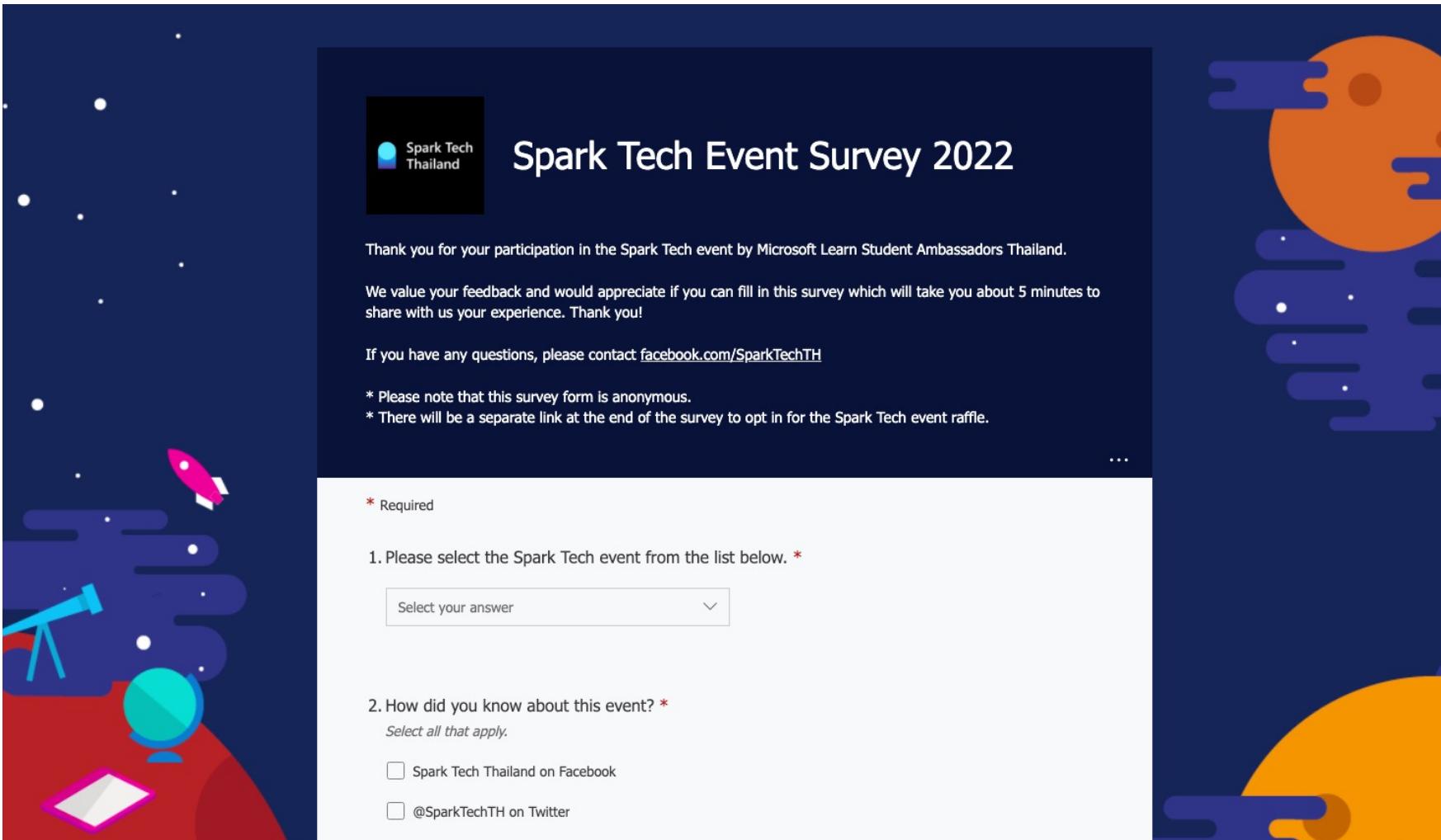
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Event survey



Spark Tech Event Survey 2022

Thank you for your participation in the Spark Tech event by Microsoft Learn Student Ambassadors Thailand.

We value your feedback and would appreciate if you can fill in this survey which will take you about 5 minutes to share with us your experience. Thank you!

If you have any questions, please contact facebook.com/SparkTechTH

* Please note that this survey form is anonymous.
* There will be a separate link at the end of the survey to opt in for the Spark Tech event raffle.

* Required

1. Please select the Spark Tech event from the list below. *

Select your answer

2. How did you know about this event? *

Select all that apply.

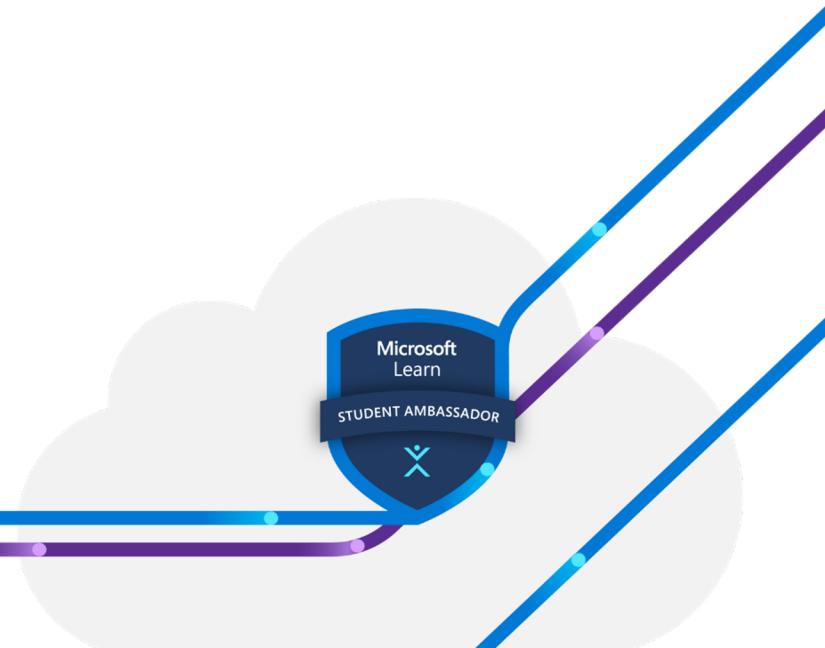
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Q&A



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Facebook: Spark Tech Thailand – Tech ใกล้ตัว



Thank you.

