

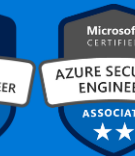
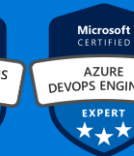
교육전 준비

유승호

Microsoft Technical Trainer - Worldwide Learning Korea

SungHo.You@microsoft.com hahaysh@hotmail.com

“약은 약사에게 Azure와 DevOps는 하야시에게”



Preparation

Introductions

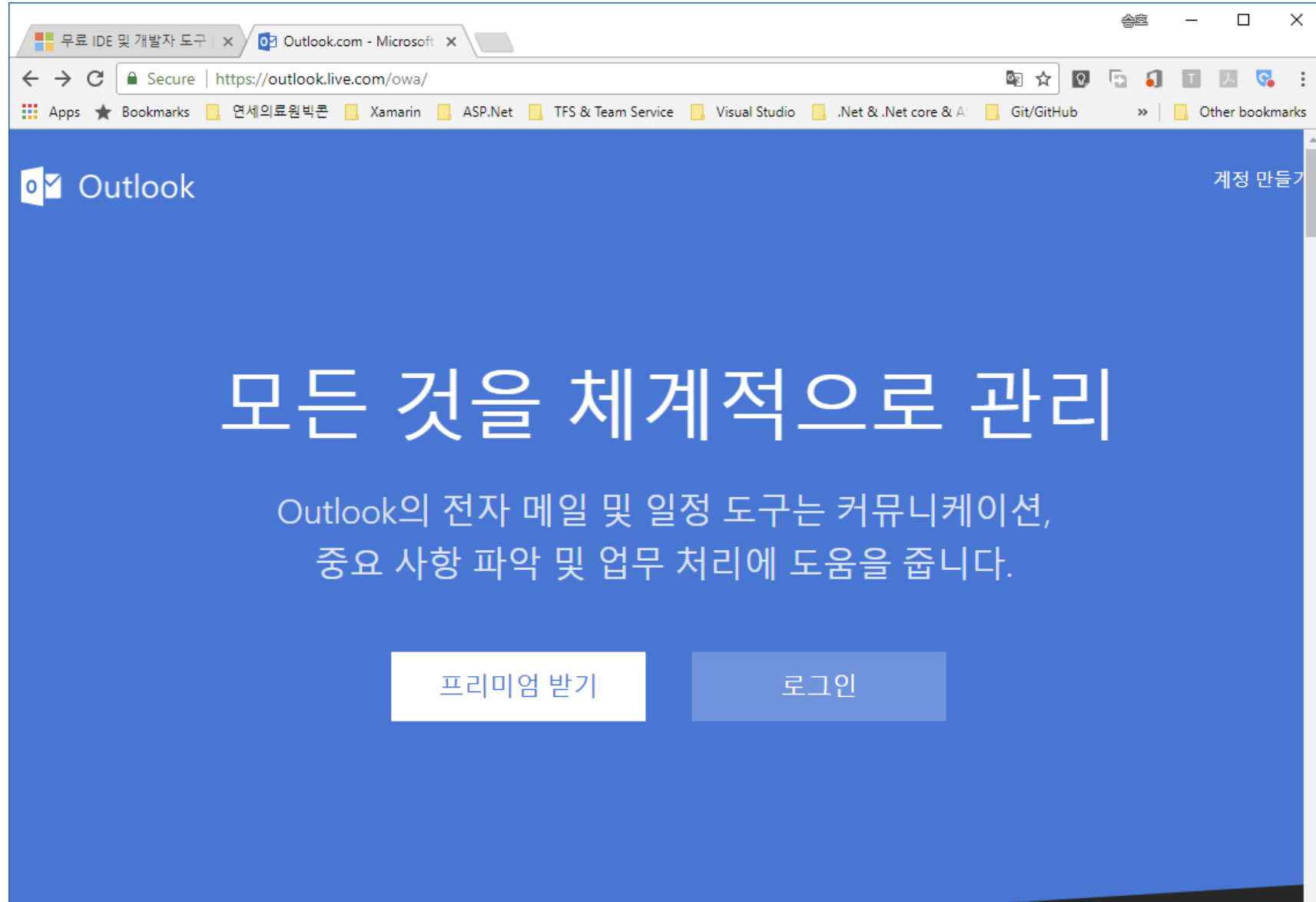


- 유승호 (SungHo You)
 - Microsoft
 - Azure Technical Trainer - Worldwide Learning, Korea
 - SungHo.You@Microsoft.com, hahaysh@hotmail.com
 - 페이스북 그룹 "나는 개발자다" :
 - <https://www.facebook.com/groups/waglnet/>
 - 좀 오래된 Microsoft MVP 출신
 - "약은 약사에게 Azure와 DevOps는 하야시에게"
 - Azure, DevOps, AKS, Infra & Admin, .Net, ASP.Net



Microsoft 포털 계정 중 하나 가입할 것

- Hotmail.com
- Outlook.com
- Live.com



컴퓨터

- 최신 Windows 10이 설치된 컴퓨터
- Windows 8하위버전도 가능한 하나
Windows 10기준으로 모든 설명이나 가이드
구성 예정
- “가능하면” Windows 10 pro 버전으로 준비



실시간 커뮤니케이션

- 돌아이 불변의 법칙 == 돌돌이 스머프의 법칙

- 옆에 있는 돌돌이 스머프에게 친한척을....

- 빨간전화기

- <http://www.xpopup.com/xpopup.exe>
- 로컬인트라넷전용
- 클립보드 전송
- 파일 전송
- 수신자 거부가 안됨

.NET Core SDK

- <https://dotnet.microsoft.com/download>
- 3.1버전 설치할것.



The screenshot shows the Microsoft .NET download page. At the top, there's a purple header with the text "Download .NET" and a sub-header "Downloads for .NET Framework and .NET Core, including ASP.NET and ASP.NET Core". Below this, there's a navigation bar with tabs for "Windows", "Linux", "macOS", and "Docker". The "Windows" tab is selected. The main content area is divided into two columns: ".NET Core" and ".NET Framework". Under ".NET Core", there's a section for ".NET Core 3.1" with a description: ".NET Core is a cross-platform version of .NET for building websites, services, and console apps." Below this, there are two buttons: "Download .NET Core Runtime" and "Download .NET Core SDK". Under ".NET Framework", there's a section for ".NET Framework 4.8" with a description: ".NET Framework is a Windows-only version of .NET for building any type of app that runs on Windows." Below this, there are two buttons: "Download .NET Framework Runtime" and "Download .NET Framework Dev Pack". At the bottom, there's a "Feedback" button on the right side.

Using Visual Studio & Azure? Take a quick, 5 minute survey to help us make Visual Studio and its Azure-related experiences better. [Take the survey >](#) X

Download .NET

Downloads for .NET Framework and .NET Core, including ASP.NET and ASP.NET Core

② Not sure where to start? See the [Hello World in 10 minutes tutorial](#) to install .NET and build your first app.

Windows Linux macOS Docker

.NET Core

.NET Framework

.NET Core 3.1

.NET Core is a cross-platform version of .NET for building websites, services, and console apps.

Run Apps ⓘ [Download .NET Core Runtime](#)

Build Apps ⓘ [Download .NET Core SDK](#)

.NET Framework 4.8

.NET Framework is a Windows-only version of .NET for building any type of app that runs on Windows.

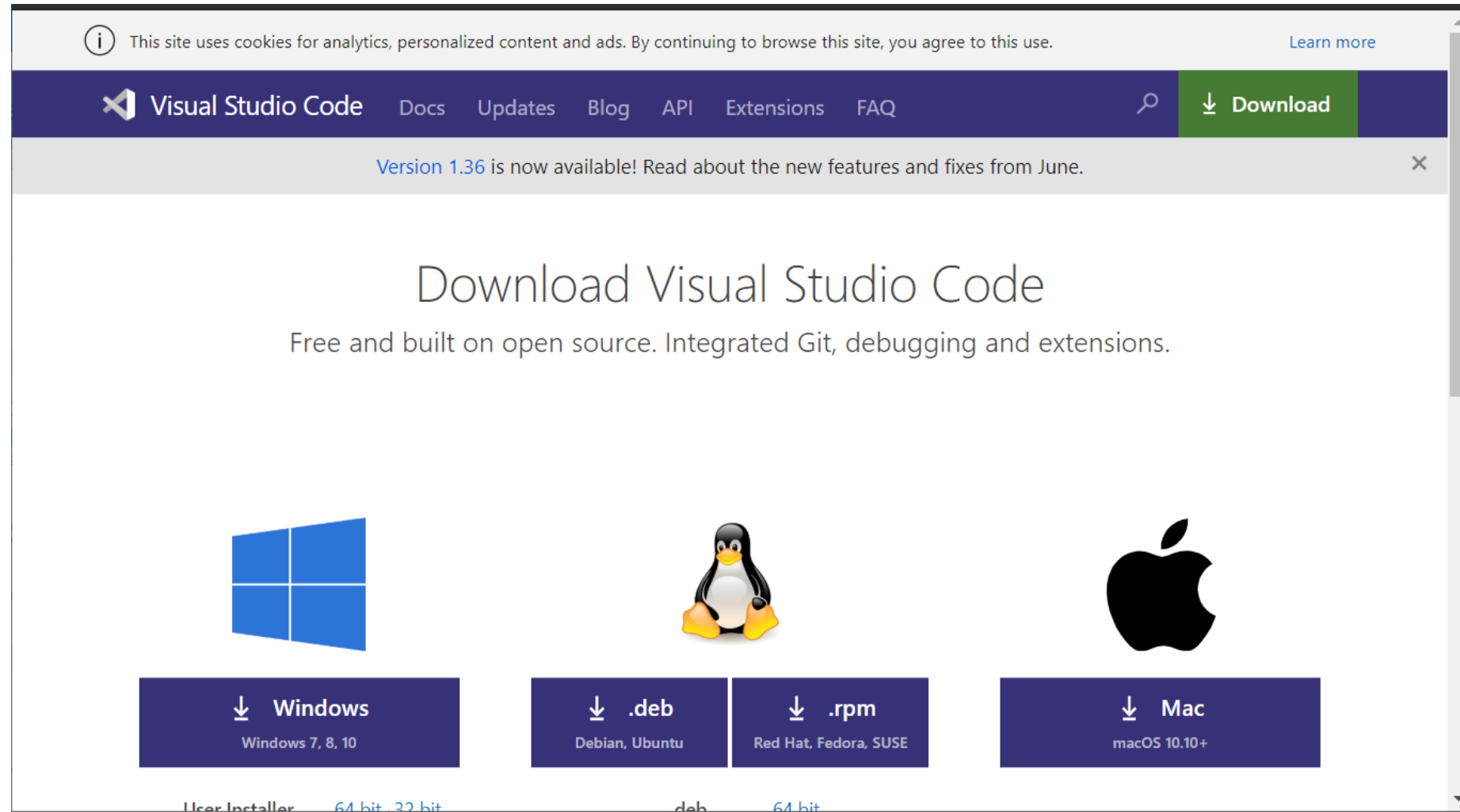
Run Apps ⓘ [Download .NET Framework Runtime](#)

Build Apps ⓘ [Download .NET Framework Dev Pack](#)

Feedback

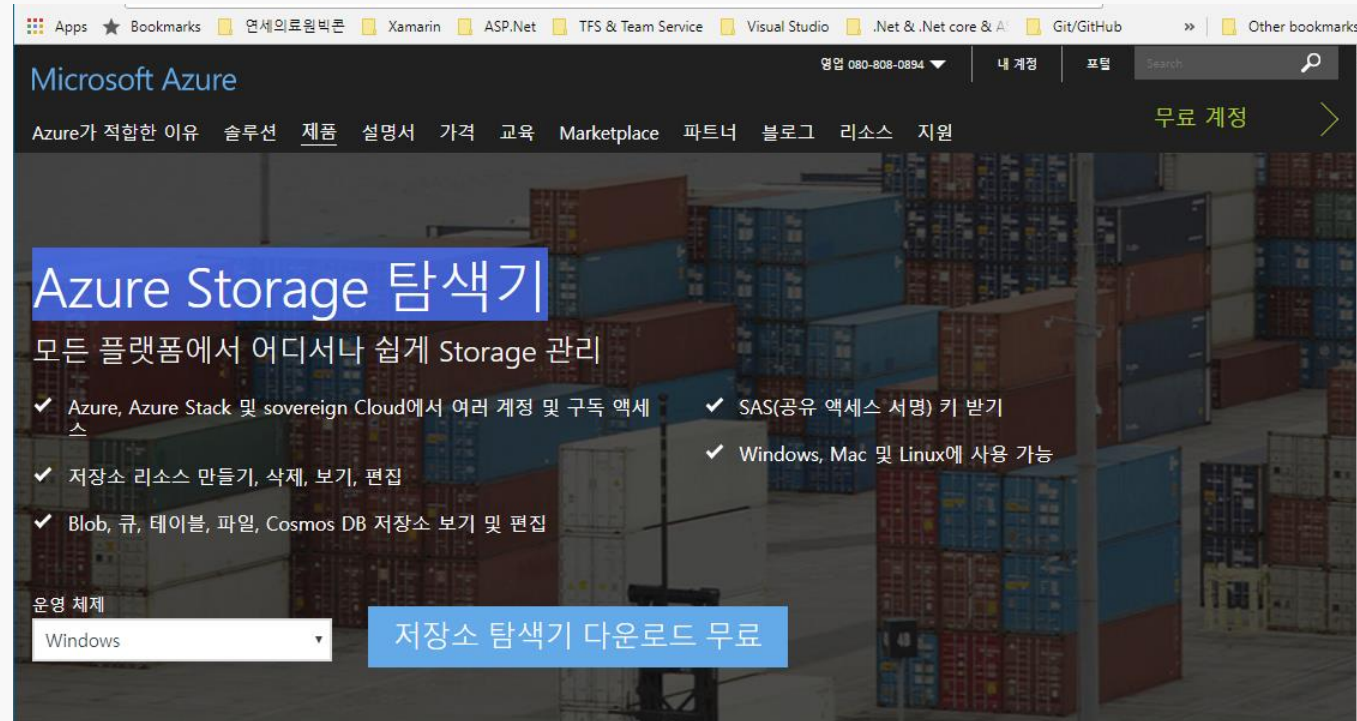
Visual Studio Code 설치

- “Visual Studio Code”로 검색 다운로드
 - <https://code.visualstudio.com/download>



Azure Storage 탐색기 설치

- 구글에서 "Azure Storage 탐색기"로 검색 다운로드
- <https://azure.microsoft.com/ko-kr/features/storage-explorer/>
- 운영체제에 맞는 저장소 탐색기를 다운로드/설치한다.

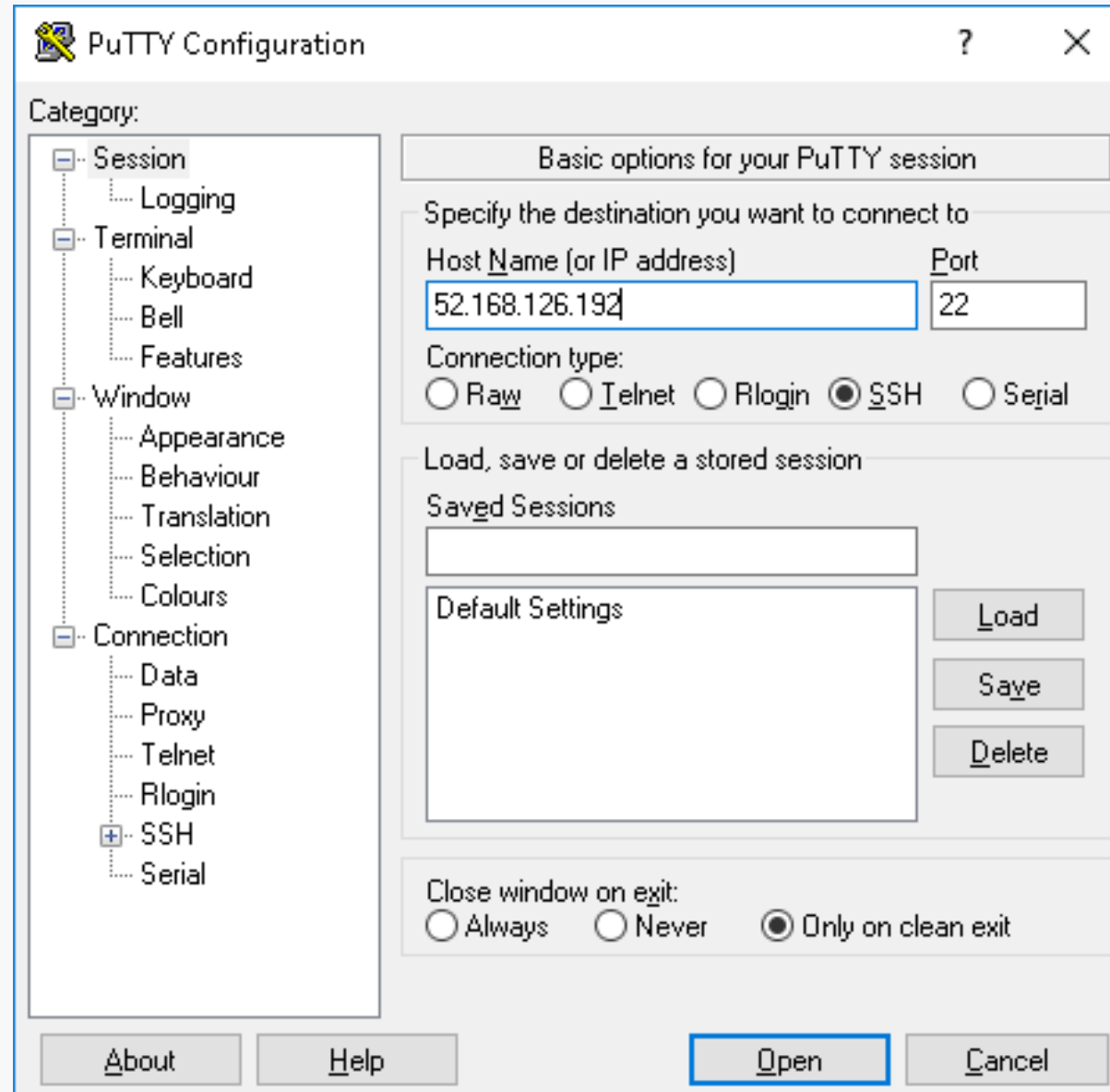


저장소 관리 시 생산성 증가

Azure Storage 탐색기를 사용하여 저장소 계정의 콘텐츠를 손쉽게 관리하세요. Blob, 파일, 큐, 테이블 및 Cosmos DB 엔티티를 업로드, 다운로드 및 관리합니다. 손쉽게 액세스하여 가상 컴퓨터 디스크를 관리하세요. Azure Resource Manager 또는 클래식 저장소 계정을 사용하고 CORS(원본 간 리소스 공유) 규칙을 관리하고 구성하세요.

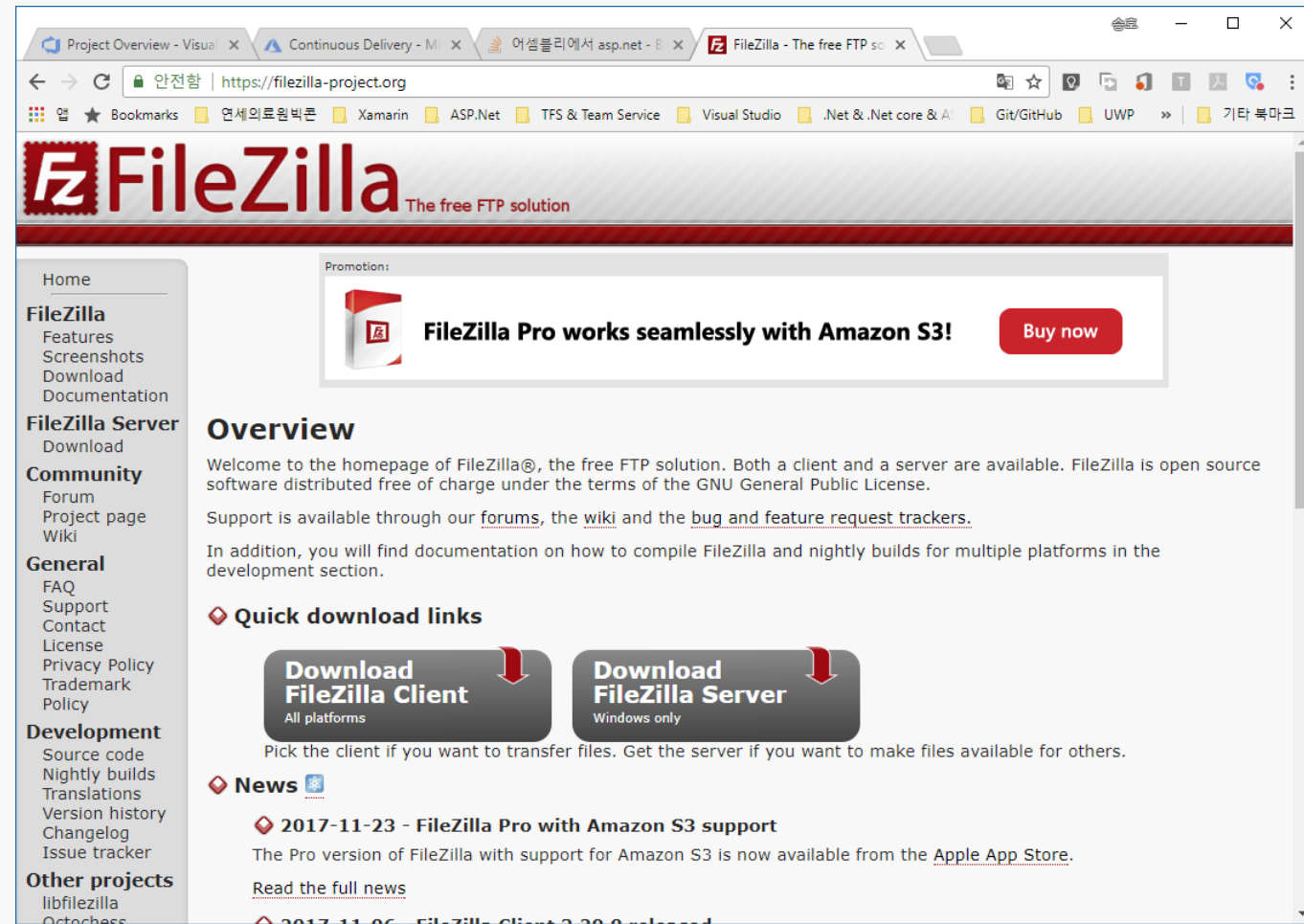
Putty설치

- <https://www.putty.org/>



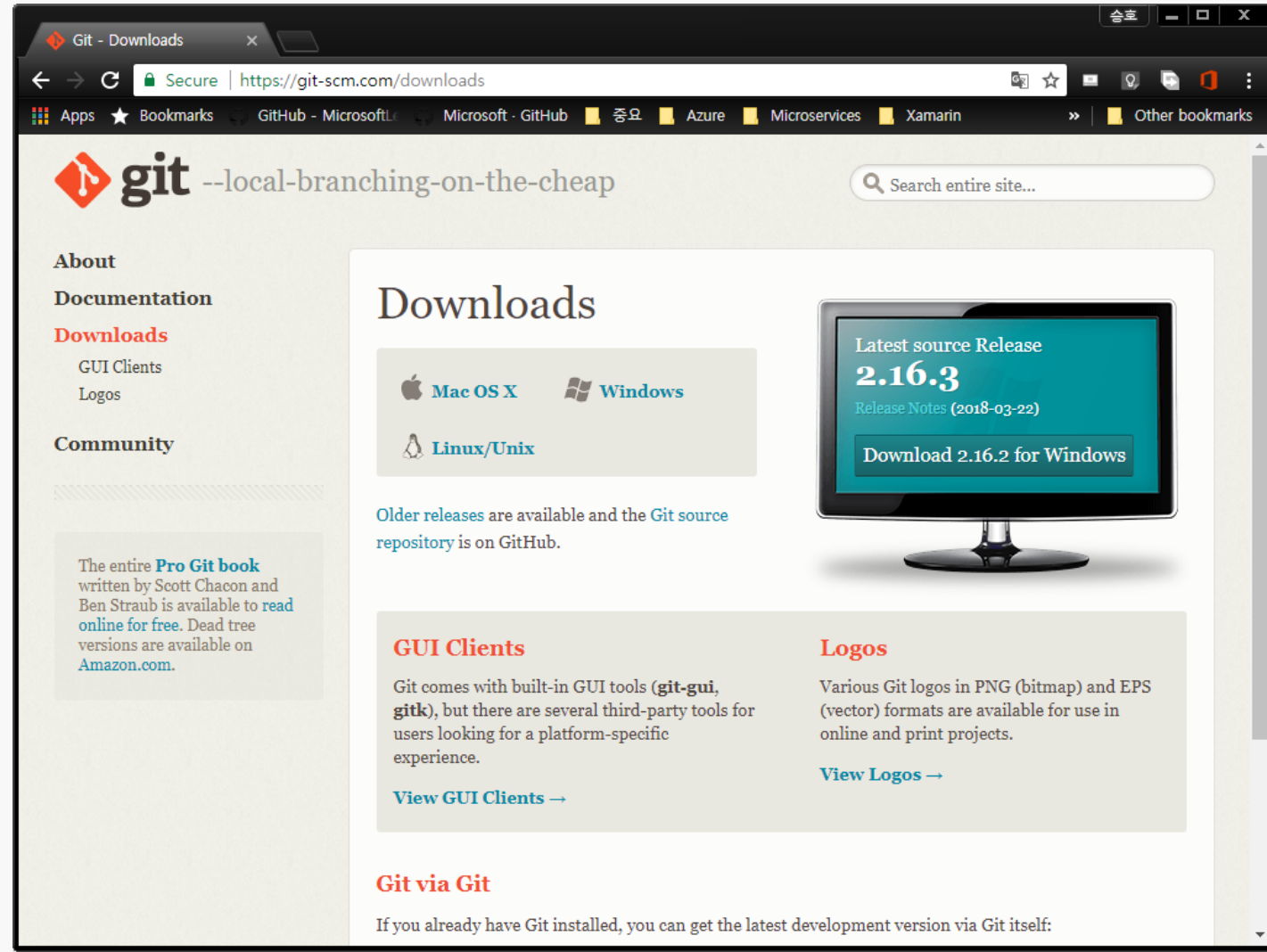
FTP클라이언트 프로그램 설치

- FileZilla
 - <https://filezilla-project.org/>



Git 설치

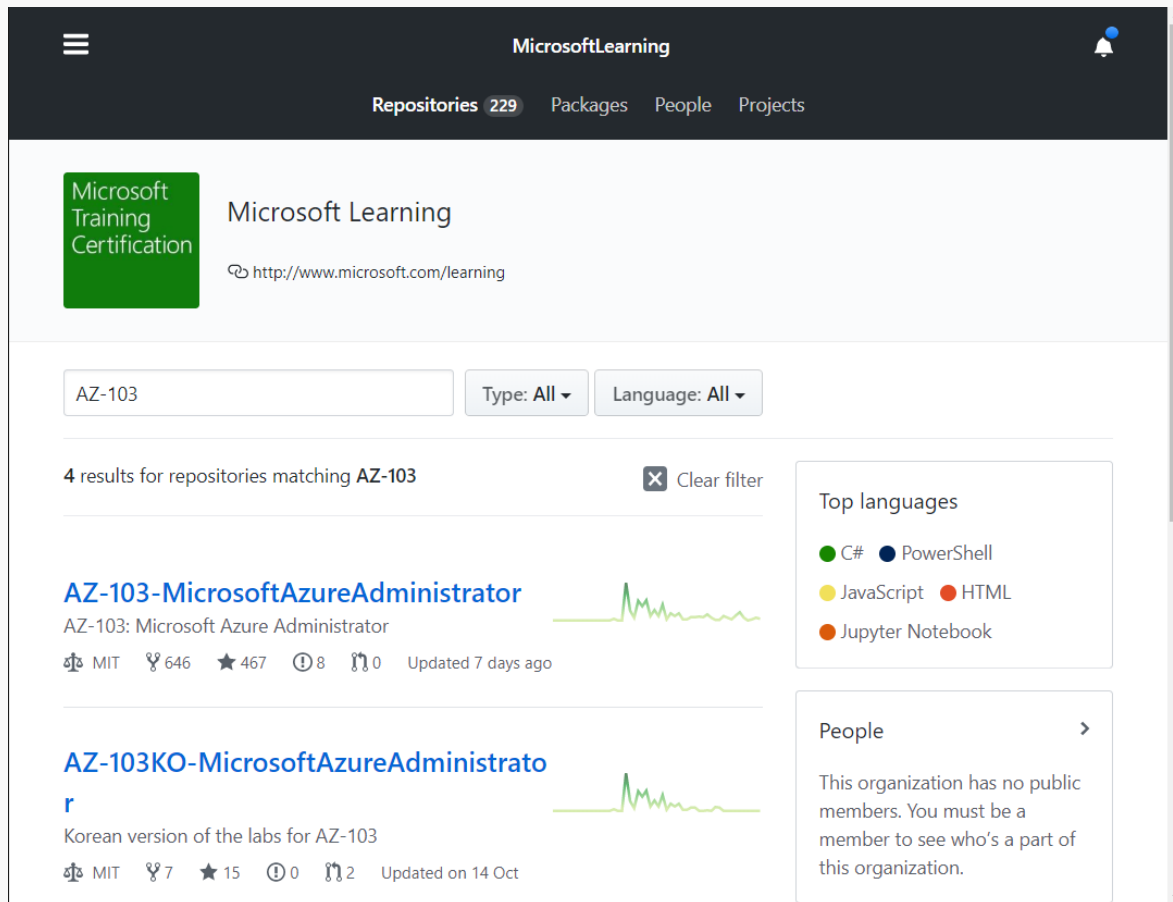
- <https://git-scm.com/downloads>
- 필히 설치(즉시)



Github HOL 로컬 Clone

- Microsoft Learning

- <https://github.com/MicrosoftLearning>



- Command창

- AZ-104: git clone <https://github.com/MicrosoftLearning/AZ-104KO-MicrosoftAzureAdministrator>
- AZ-204: git clone <https://github.com/MicrosoftLearning/AZ-204KO-DevelopingSolutionsforMicrosoftAzure>
- AZ-303 : git clone <https://github.com/MicrosoftLearning/AZ-303-Microsoft-Azure-Architect-Technologies>
- AZ-304 : git clone <https://github.com/MicrosoftLearning/AZ-304-Microsoft-Azure-Architect-Design>
- AZ-400 : git clone <https://github.com/MicrosoftLearning/AZ400-DesigningandImplementingMicrosoftDevOpsSolutions>
- DevOps Labs : <https://azuredevopslabs.com/>
- AZ-500 : git clone <https://github.com/MicrosoftLearning/AZ500-AzureSecurityTechnologies>

Microsoft study 삼총사

- DOCS

- <https://docs.microsoft.com/ko-kr/>

- Learning

- <https://docs.microsoft.com/ko-kr/learn/certifications/>

- Youtube

- <https://www.youtube.com/user/microsoftlearning>

- 한글로 보는 법

- 크롬의 자동 번역
- 유튜브이 자동 자막 → 자동 번역

The screenshot shows the Microsoft Docs website. The top navigation bar includes the Microsoft logo, links for .NET, About, Learn, Architecture, Docs, Downloads, and Community, and a 'Get Started' button. The breadcrumb trail indicates the current page is 'Docs / .NET / .NET Guide / .NET Microservices - DevOps e-book'. A search filter box on the left is titled 'Filter by title' and lists several documents. The document 'Build ASP.NET Core 2.0 applications deployed as Linux containers into AKS/Kubernetes orchestrator' is highlighted. A context menu is open over this document, showing options like Back, Forward, Reload, Save as..., Print..., Cast..., Translate to 한국어 (highlighted), View page source, and Inspect. The main content area shows the title of the document and a list of features for AKS.

Microsoft | .NET About Learn Architecture Docs Downloads Community Get Started All Microsoft

Docs / .NET / .NET Guide / .NET Microservices - DevOps e-book

Filter by title

- Deploy to Azure Kubernetes Service (AKS)
- Development environment for Docker apps
- Inner-loop development workflow for Docker apps
- Visual Studio Tools for Docker
- Use Windows PowerShell commands in a DockerFile to set up Windows Containers (Docker standard based)
- Build ASP.NET Core 2.0 applications deployed as Linux containers into AKS/Kubernetes orchestrator**
- > Docker application DevOps workflow with Microsoft tools
- > Run, manage, and monitoring Docker production environments
- Key takeaways

Download PDF

Build ASP.NET Core 2.2 application deployed as Linux containers into an AKS/Kubernetes orchestrator

02/25/2019 • 5 minutes to read

In this article

- Creating the ASP.NET Core application
- Register the Solution in the AKS cluster

Azure Kubernetes Service (AKS) simplifies container deployment and management. AKS main features are:

- An Azure-hosted control plane
- Automated upgrades
- Self-healing
- User configurable scaling
- A simpler user experience for both developers and cluster operators.

The following examples explore the creation of an ASP.NET Core 2.2 application that runs on Linux and deploys to an AKS Cluster in Azure, while development is done using Visual Studio Code.

2017

Certification Areas (AZ-204)

Study Areas	Weights
Develop Azure compute solutions	25-30%
Develop for Azure storage	10-15%
Implement Azure security	15-20%
Monitor, troubleshoot, and optimize Azure solutions	10-15%
Connect to and consume Azure and third-party services	25-30%

- Percentages indicate the relative weight of each area on the exam
- The higher the percentage, the more questions you are likely to see in that area

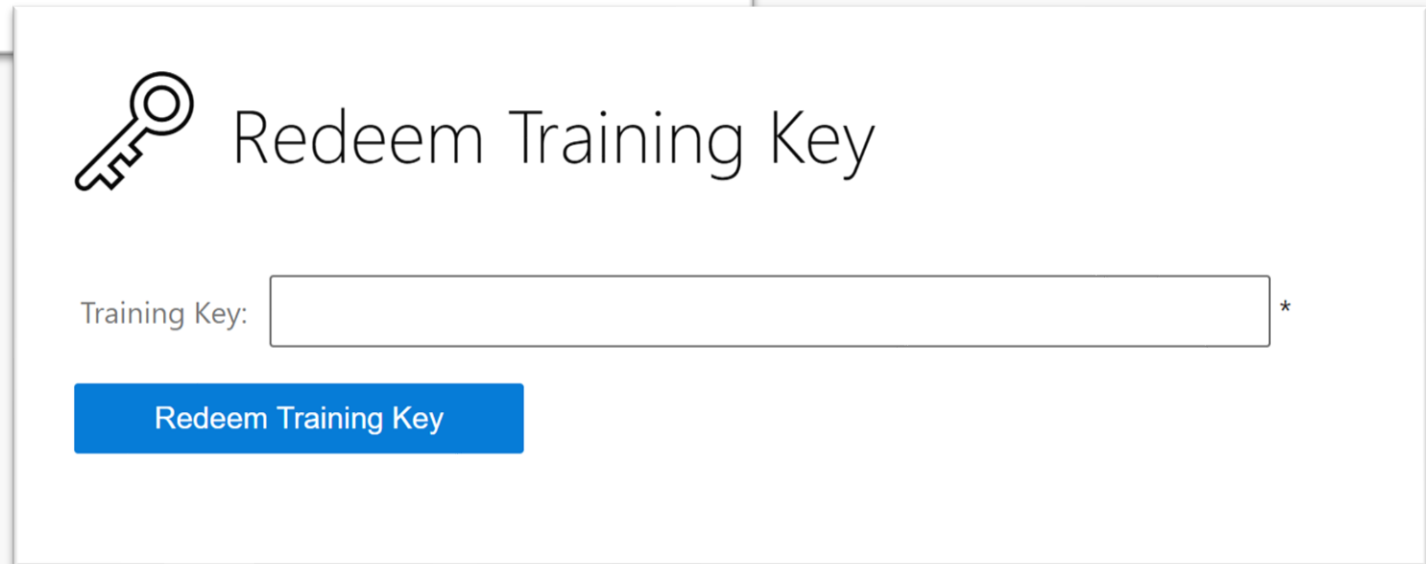
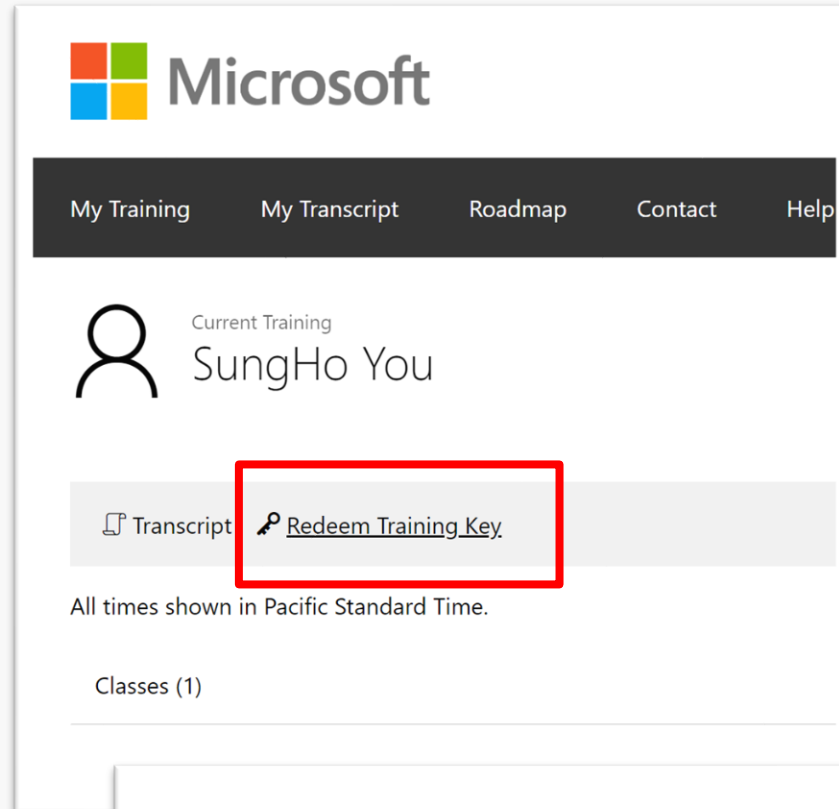
learnondemand

접속

- <https://esi.learnondemand.net/>
- 회원가입 (MS포탈 계정으로)

Add Code

- Key 입력

A screenshot of the 'Redeem Training Key' form. It features a key icon to the left of the title 'Redeem Training Key'. Below the title, there is a label 'Training Key:' followed by a text input field. A small asterisk '*' is located to the right of the input field. At the bottom of the form is a blue button with the text 'Redeem Training Key'.

View Labs 접속


- 첫번째 랩에서 Azure Pass 가져오기
 - 로그인한 후에 우측 랩을 그대로 따라하기

Enrollments (5)

Activities (Total Expected Duration 9 hours, 35 minutes)

☐ Disable all activities.

1

 Microsoft Azure Fundamentals (Expected Duration 9 hours, 35 minutes)
ESI | AZ-900T00A: Microsoft Azure Fundamentals, AZ-900T00A

[Launch](#)

Enabled ☒

Course Information

AZ-900T00A: Microsoft Azure Fundamentals - [InPrivate] - Microsoft Edge

https://labclient.labondemand.com/LabClient/84158ac6-74a8-4275-a69d-9460ad7ae236?rc=10

Admin

Password

AZ-900T00A: Microsoft Azure Fundamentals

19 Hr 10 Min Remaining

Instructions Resources Help

☐ 4. Click "Confirm" if the correct email address is listed.

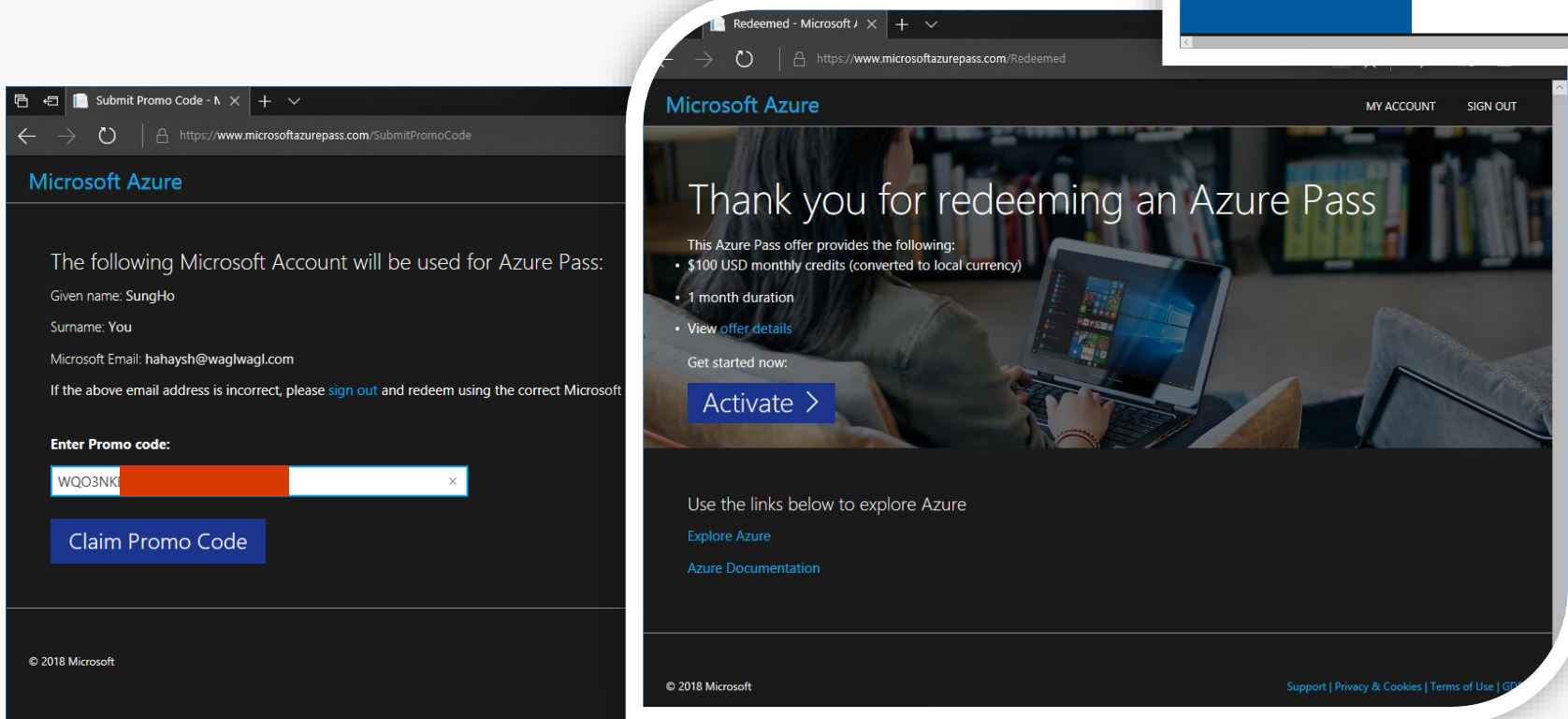
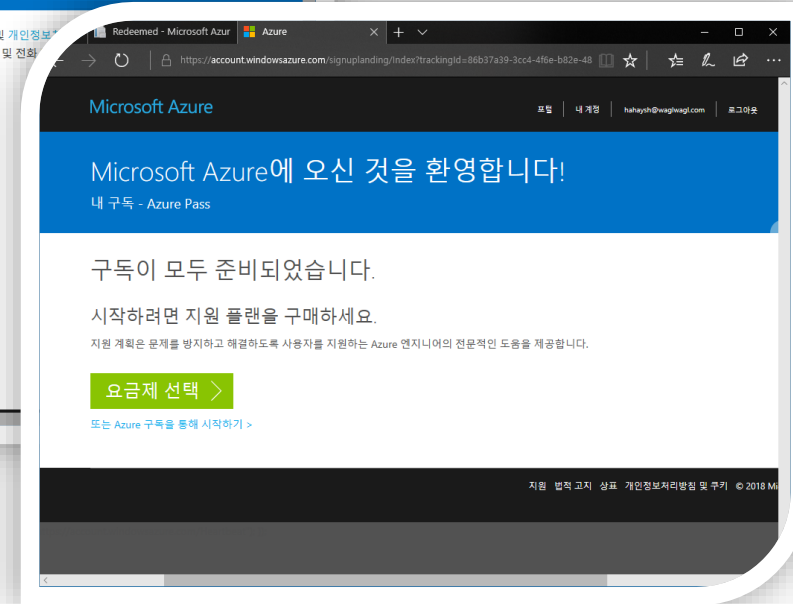
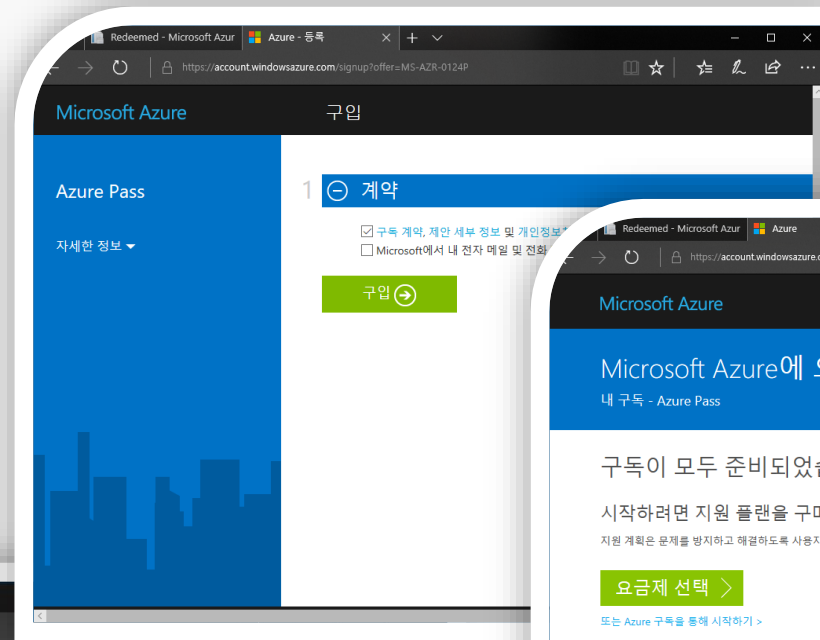
☐ 5. Enter your promo code **Q362G3CSK6LMTGUNHR** in the Promo code box and click "Claim Promo Code".

☐ 6. It may take up to 5 minutes to process the redemption.

Next: Log In >

Azure Pass 등록

- Azure Pass 등록
- <http://www.microsoftazurepass.com>



Portal.azure.com 구독확인

- Azure Pass 등록 후
 - <http://portal.azure.com> 구독 확인
 - (구독이름은 아래와 다를 수 있음)

Microsoft Azure 리소스, 서비스 및 문서 검색(G+)

hahaysh@hotmail.com HAHAYSH

대시보드 > 구독

구독 hahaysh

+ 추가

hahaysh의 구독을 표시합니다. 구독이 보이지 않나요? [디렉터리 전환](#)

내 역할 ① 상태 ①

8개 선택됨 3개 선택됨

적용

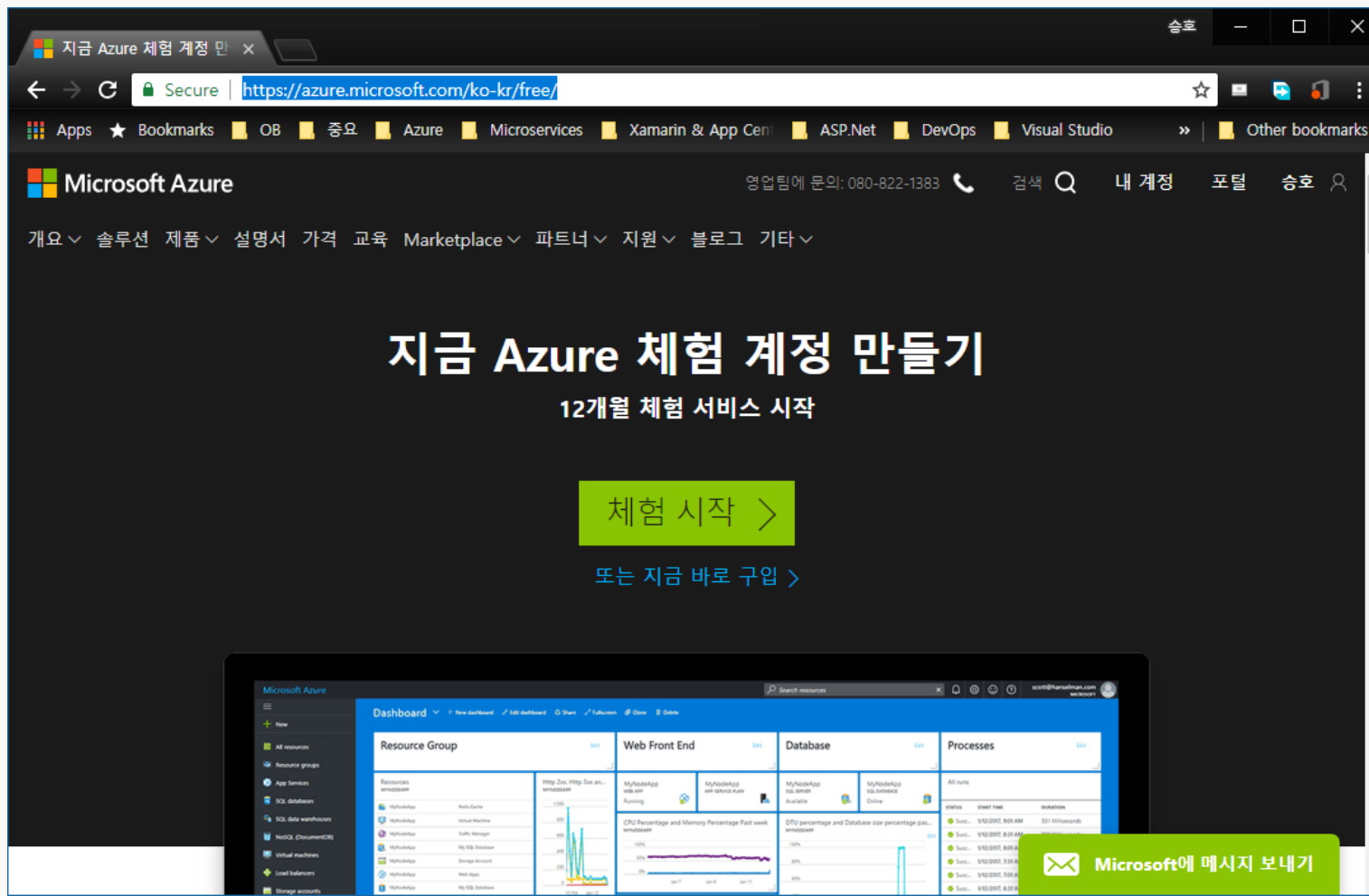
표시 4/5 구독 ☒ 다음에서 선택된 구독만 표시 [글로벌 구독 필터](#) ①

필터링 항목 검색...

구독 이름	구독 ID	내 역할	현재 비용	상태
Azure Pass - Sponsorship	86d49baa-530b-4ee9-a0...	계정 관리자	사용할 수 없음	✓ 활성화
MSDN 플랫폼	da827bfb-71c7-4907-ae7...	계정 관리자	₩58.48	✓ 활성화
Visual Studio Enterprise	466ef88e-df39-44ba-bdc...	계정 관리자	0.00	✓ 활성화
Visual Studio Enterprise	7e063fe4-a07a-4ff3-b0d...	계정 관리자	₩5,388.93	✓ 활성화

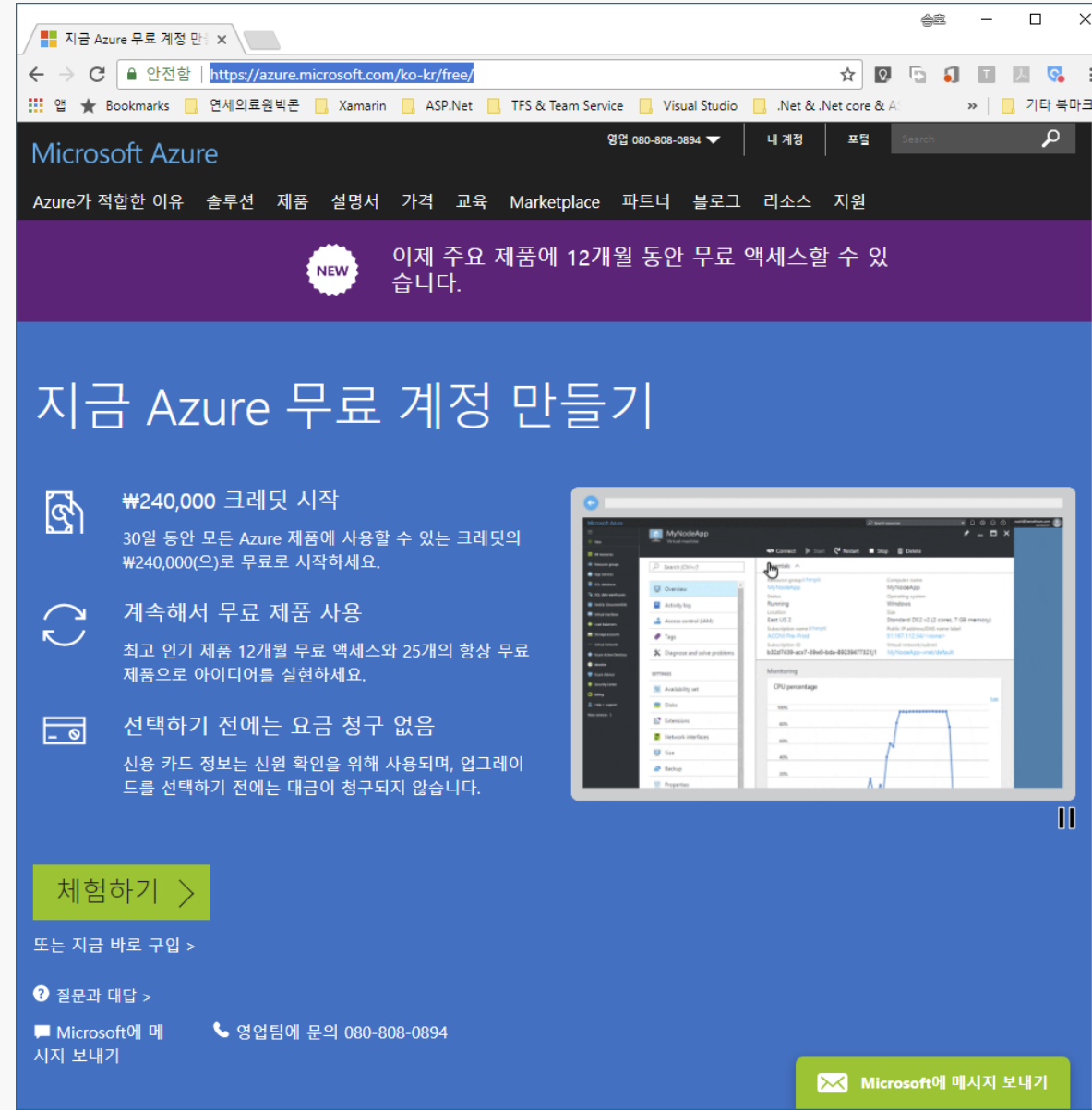
Azure 체험 계정 생성(옵션)

- <https://azure.microsoft.com/ko-kr/free/>



Azure 무료크래딧 받아두기(옵션)

- <https://azure.microsoft.com/ko-kr/free/>
 - 개인적으로 이미 받아서 사용한 사람은 추가로 받을 수 없음.





Microsoft Azure


Azure가 적합한 이유 솔루션 제품 설명서 가격 교육 Marketplace 파트너 블로그 리소스 지원

NEW 이제 주요 제품에 12개월 동안 무료 액세스할 수 있습니다.

지금 Azure 무료 계정 만들기


 **₩240,000 크레딧 시작**
30일 동안 모든 Azure 제품에 사용할 수 있는 크레딧의 ₩240,000(으)로 무료로 시작하세요.


 **계속해서 무료 제품 사용**
최고 인기 제품 12개월 무료 액세스와 25개의 항상 무료 제품으로 아이디어를 실현하세요.


 **선택하기 전에는 요금 청구 없음**
신용 카드 정보는 신원 확인을 위해 사용되며, 업그레이드를 선택하기 전에는 대금이 청구되지 않습니다.


체험하기 >

또는 지금 바로 구입 >

 질문과 대답 >

 Microsoft에 메
시지 보내기

 영업팀에 문의 080-808-0894


 Microsoft에 메시지 보내기

skillpipe


접속

- <https://www.skillpipe.com/>

회원가입

 Menu

Sign In


Skillpipe

Email *

Password *

☐ Keep me signed in.

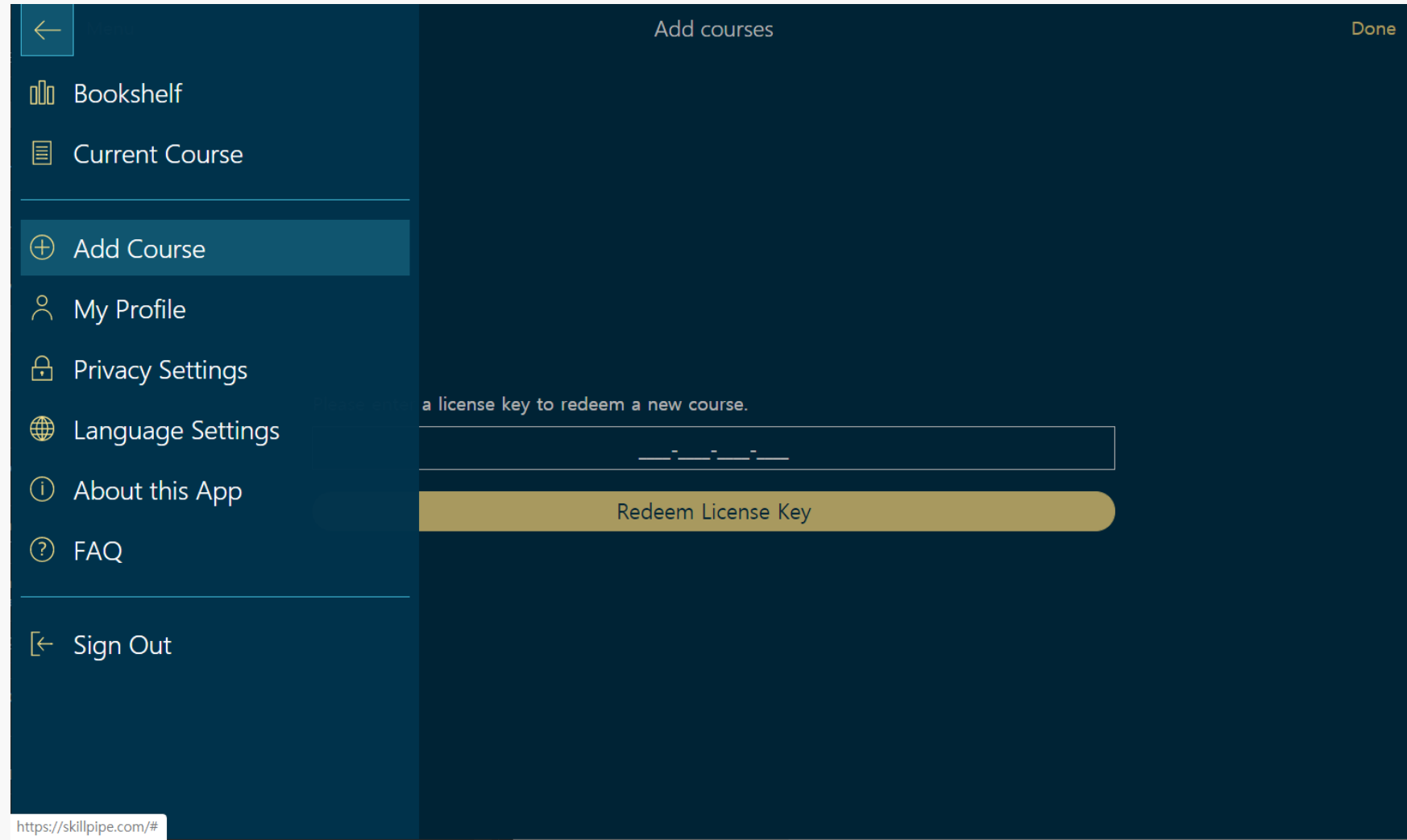
Sign In

Forgot your password? [Reset it.](#)

Do not have an account? [Join now.](#)

Add Course

- 메일로 제공받은 Key 입력



메일로 온 화면

Subject: Skillpipe - Courseware License Key



Dear ?? ?,

get access to your digital courseware in Skillpipe by following the instructions below:

AZ-304T00KO-A - Microsoft Azure Architect Design

1. Access Skillpipe

Warm-up :
Azure 포털 사용하기

Azure Portal

- 왼쪽메뉴

- 왼쪽메뉴의 기본 메뉴들
 - 모든서비스를 선택, Azure의 모든 서비스를 한눈에 볼 수 있다.
- 즐겨찾기 – 선택형
 - 즐겨찾기 하면서 아래쪽에 자동으로 Microsoft의 무료교육 링크를 이용할수 있다.

- 상단메뉴둘러보기

- 클라우드 셸 실행 – Bash 선택
- 알림서비스
- 서비스상태 – [자세하게 설명]

Azure Portal

• 단축키

- Ctrl+/ Search blade menu items
- G+ / Search resources (global)
- G+D Go to the Dashboard
- G+A Go to All resources
- G+R Go to Resources Group

• 설정

- 언어변경
- 사인아웃
- 기본메뉴 docking형태 선택
- 테마변경
- 고대비설정

Warm-up :
Azure Cloud Shell

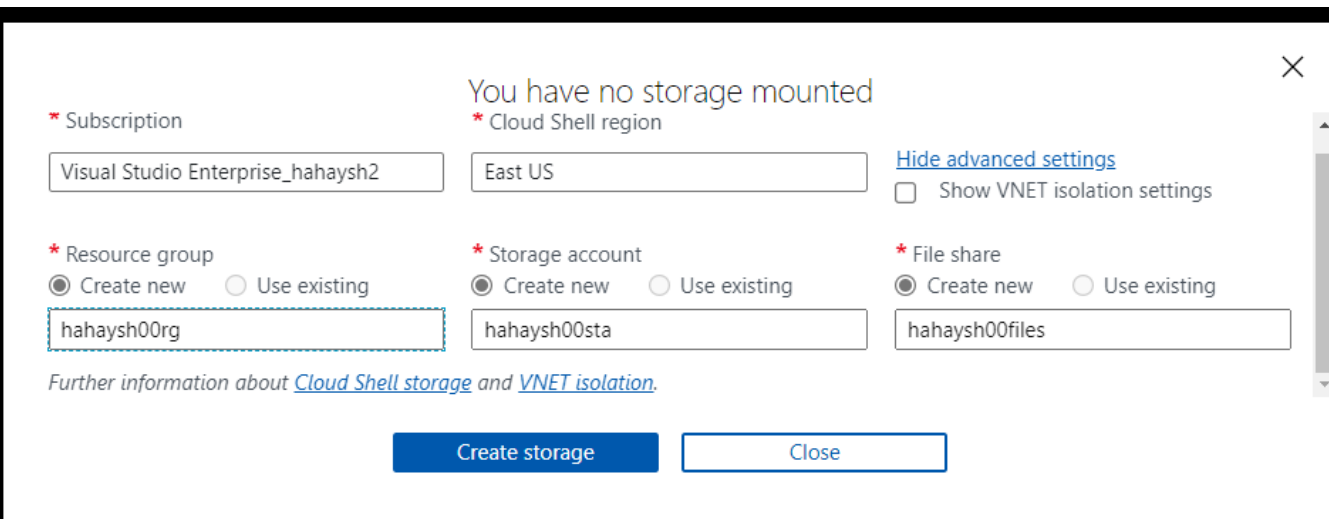
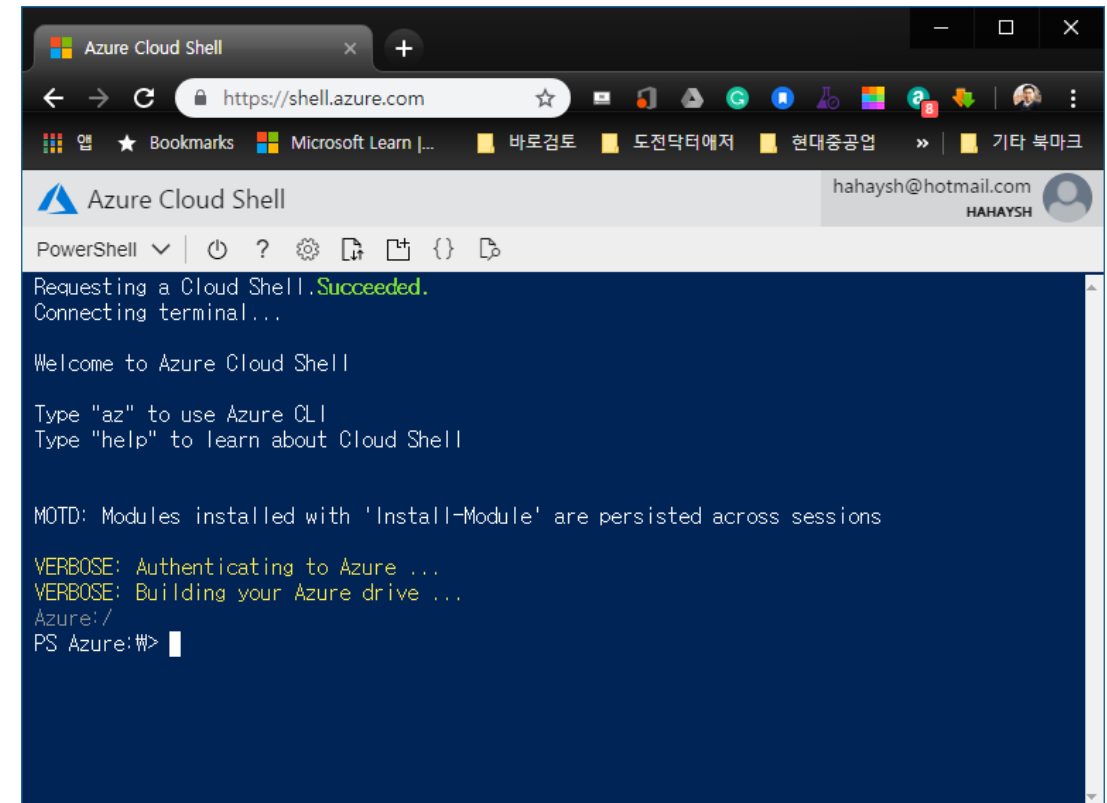
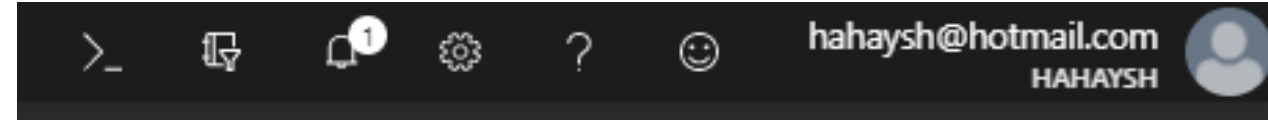
Azure Cloud Shell

- Cloud Shell 아이콘

- Azure Portal 상단 Cloud Shell 아이콘

- Shell 전용 사이트 접속

- <https://shell.azure.com/>
- 구독 선택



Azure Cloud Shell

- Bash 또는 PowerShell 선택
 - 우선 PowerShell 선택
 - 구독 선택 후 저장소 만들기 클릭
- PowerShell 로 작업
 - [Sample command]
 - Get-AzSubscription : 구독 가지고 오기
 - Get-AzResourceGroup : 리소스 정보 가지고 오기
- Bash 로 셸 전환 후 CLI로 작업
 - az account list : 구독 가지고 오기
 - az resource list : 리소스 정보 가지고 오기

Azure Cloud Shell

- 편집기 사용

- 파일만들기 : `touch test.txt`
- 편집기 실행 : `code .`

Install Azure PowerShell Module

- PowerShell모듈 설치

- Install-Module -Name Az -AllowClobber
- PowerShell ISE 를 관리자 권한을 실행
- Get-Module -ListAvailable -Name Az*

- PowerShell에서 연결된 Azure계정을 확인

- Connect-AzAccount
- Get-AzSubscription
- Select-AzSubscription -SubscriptionId 7e063fe4-a07a-4ff3-b0d6-766fcc58da7e

- 리소스 그룹 하나 만들어보기(워밍업)

- New-AzResourceGroup -Name hahaysh01rg -Location EastUS2
- Get-AzResourceGroup #포탈에서도 만들어진거 확인

Install Azure CLI

- 다운로드 & 설치

- <https://docs.microsoft.com/ko-kr/cli/azure/install-azure-cli?view=azure-cli-latest>

- DOS창에서 계정 연결

- Az login
- az account list
- az account set --subscription <value of the subscription id property>

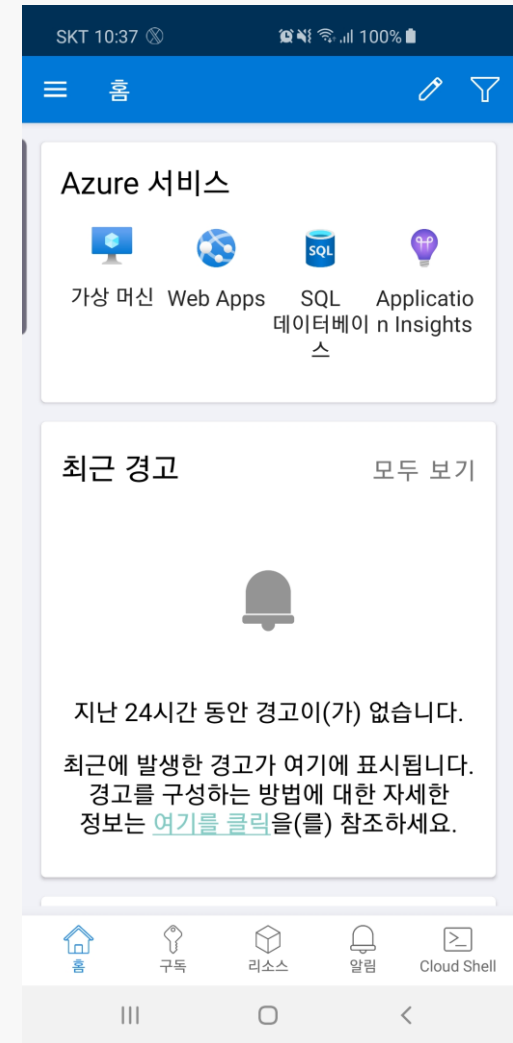
- 리소스 그룹 하나 만들어보기(워밍업)

- az group create --name hahaysh02rg --location EastUS2
- az group list
- az group list --query "[?name=='hahaysh02rg']"

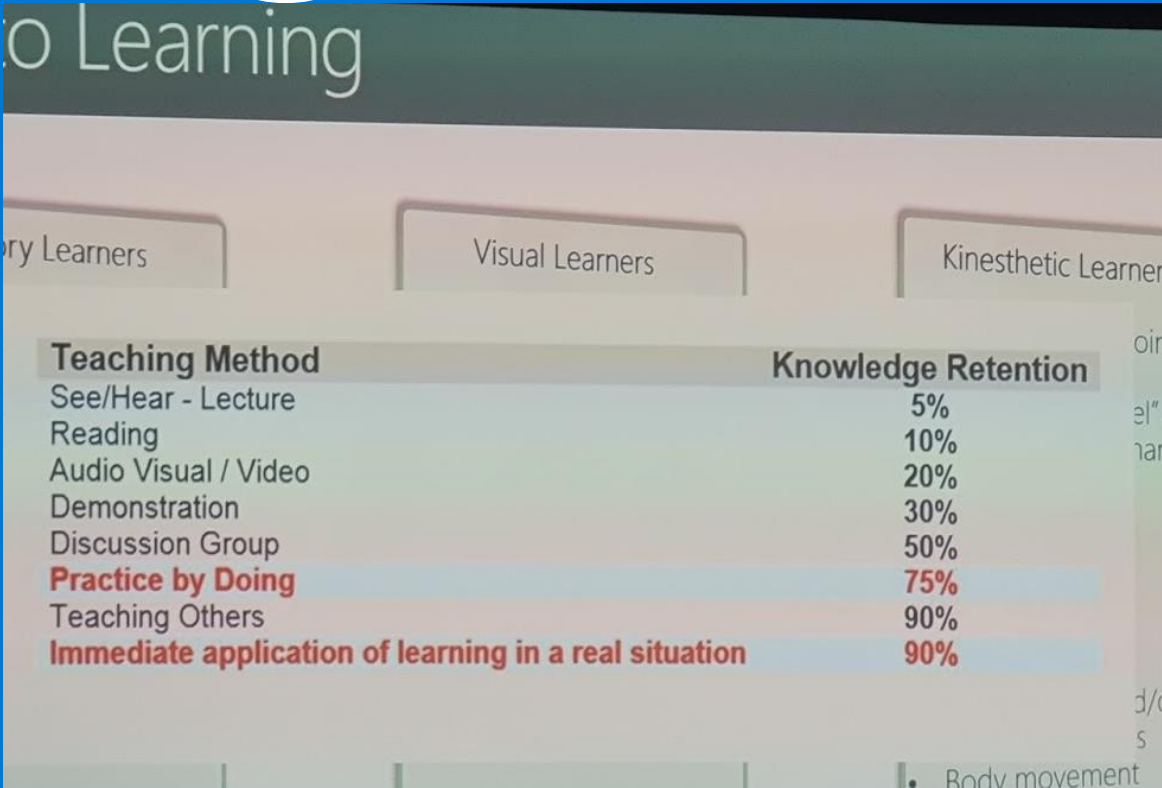
Warm-up :
Azure Mobile App 사용하기

Azure Mobile App

- 앱스토어에서 "Microsoft Azure" 검색
- Windows 10
 - <https://portal.azure.com/app/download>



“백문이 불여일 코딩”



Learning

Teaching Method	Knowledge Retention
See/Hear - Lecture	5%
Reading	10%
Audio Visual / Video	20%
Demonstration	30%
Discussion Group	50%
Practice by Doing	75%
Teaching Others	90%
Immediate application of learning in a real situation	90%

Body movement