Session #5

LET'S MAKE A WEB APP

Welcome to Webex

How is it going with the homework?

Agenda for today

- Recap on Week #4 and homework
- A look on Azure
- Code Demo
- Dinner + Exercise break
- Webex again

Master Class #5

After this session (and the accompanying homework) you should know:

- *What Azure is and the possibilities it provides*
- *How to publish your web application as an App Service*
- *Using Azure Storage to maintain storage / Cosmos DB*
- *What is Cognitive Services about*
- *What are Azure Functions*

Introduction to Azure

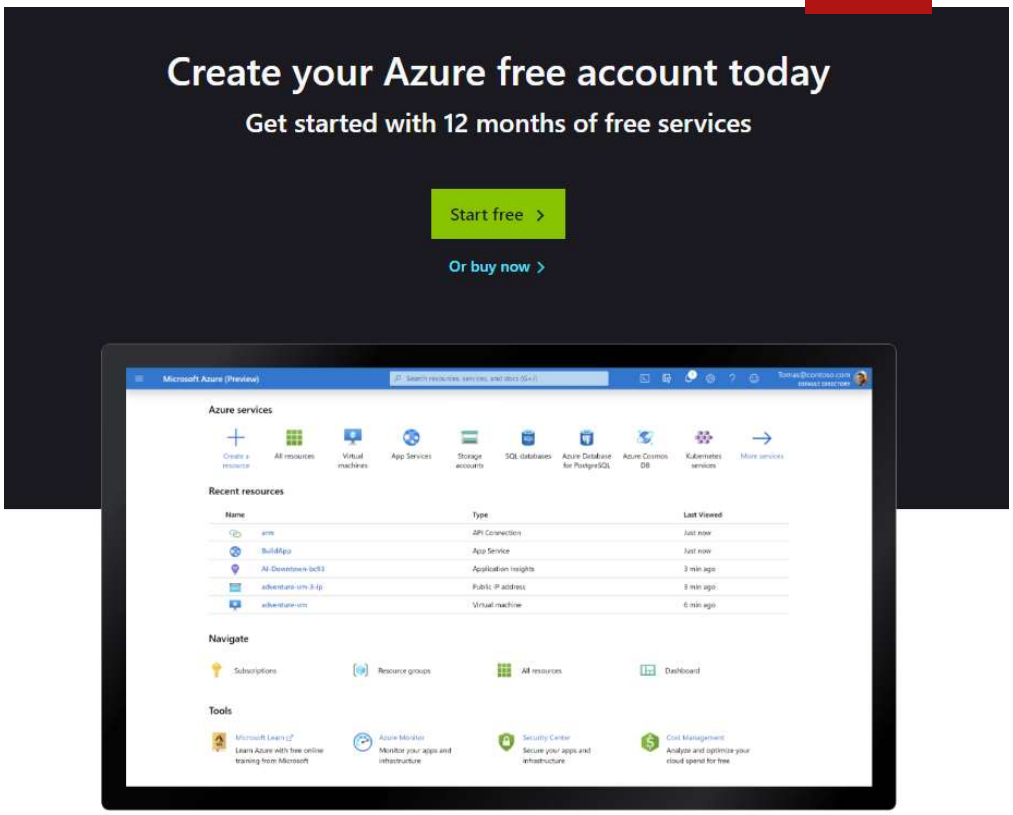
- Microsoft online services
- A bit like AWS
- Heroku meets Netlify meets AWS ++++

Many services

- App Services / Web Services
- Storage
- Databases
- Docker / Containers
- Virtual servers
- Azure Functions
- Cognitive Services
- Machine Learning Services
- Much, much more

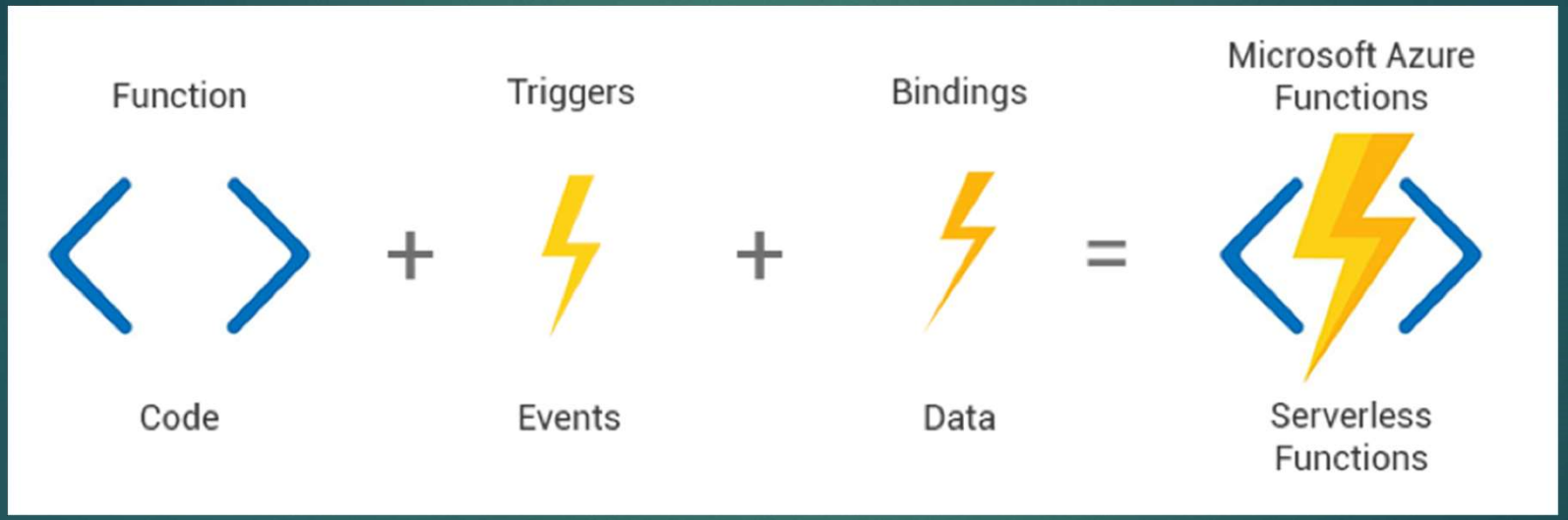
azure.microsoft.com

- Create account
- Free stuff forever
- More free stuff for 1 year
- $200 credit for paid stuff



Azure App Services

Azure Functions



Azure Cognitive Services

Infuse your apps, websites, and bots with human-like intelligence

Vision

Object, scene, and activity detection

Face recognition and identification

Celebrity and landmark recognition

Emotion recognition

Text and handwriting recognition (OCR)

Video metadata, audio, and keyframe extraction and analysis

Explicit or offensive content moderation

Custom image recognition

Speech

Speech transcription (Speech-to-text)

Speech Synthesis (Text-to-speech)

Real-time speech translation

Speaker identification and verification

Custom Speech models for transcription and translation

Custom voice

Language

Language detection

Text sentiment analysis

Key phrase extraction

Entity recognition

Spell checking

Explicit or offensive text content moderation, PII detection

Text translation

Customizable text translation

Contextual language understanding

Knowledge

Q&A extraction from unstructured text

Knowledge base creation from collections of Q&As

Semantic matching for knowledge bases

Customizable content personalization learning

Search

Ad-free web, news, image, and video search results

Trends for video, news

Image identification, classification and knowledge extraction

Identification of similar images and products

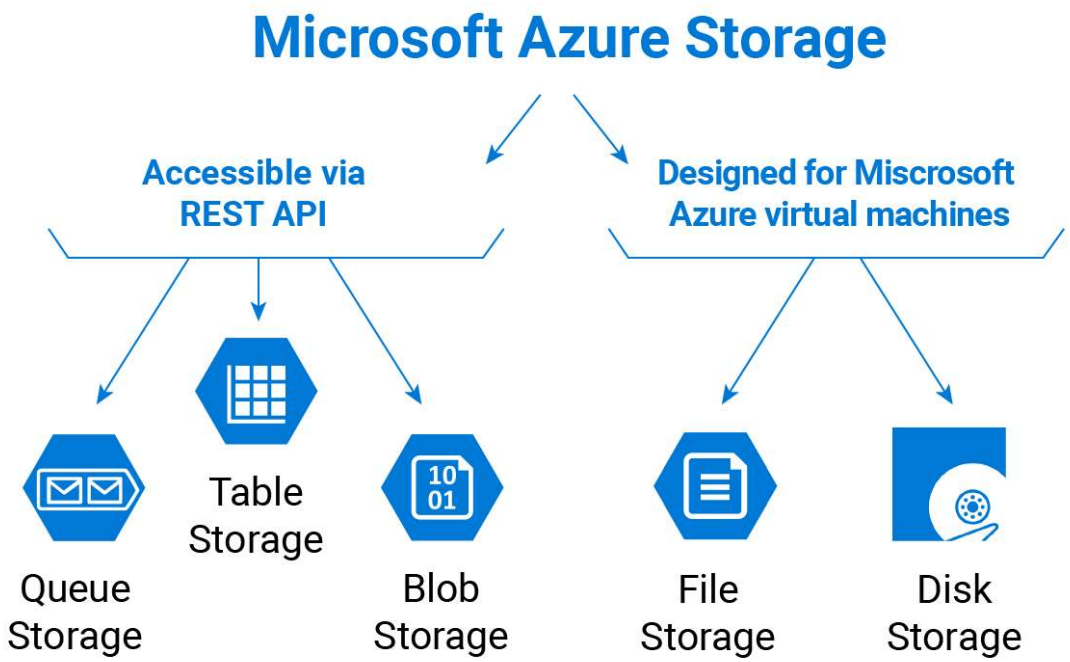
Named entity recognition and classification

Knowledge acquisition for named entities

Search query autosuggest

Ad-free custom search engine creation

Azure Storage

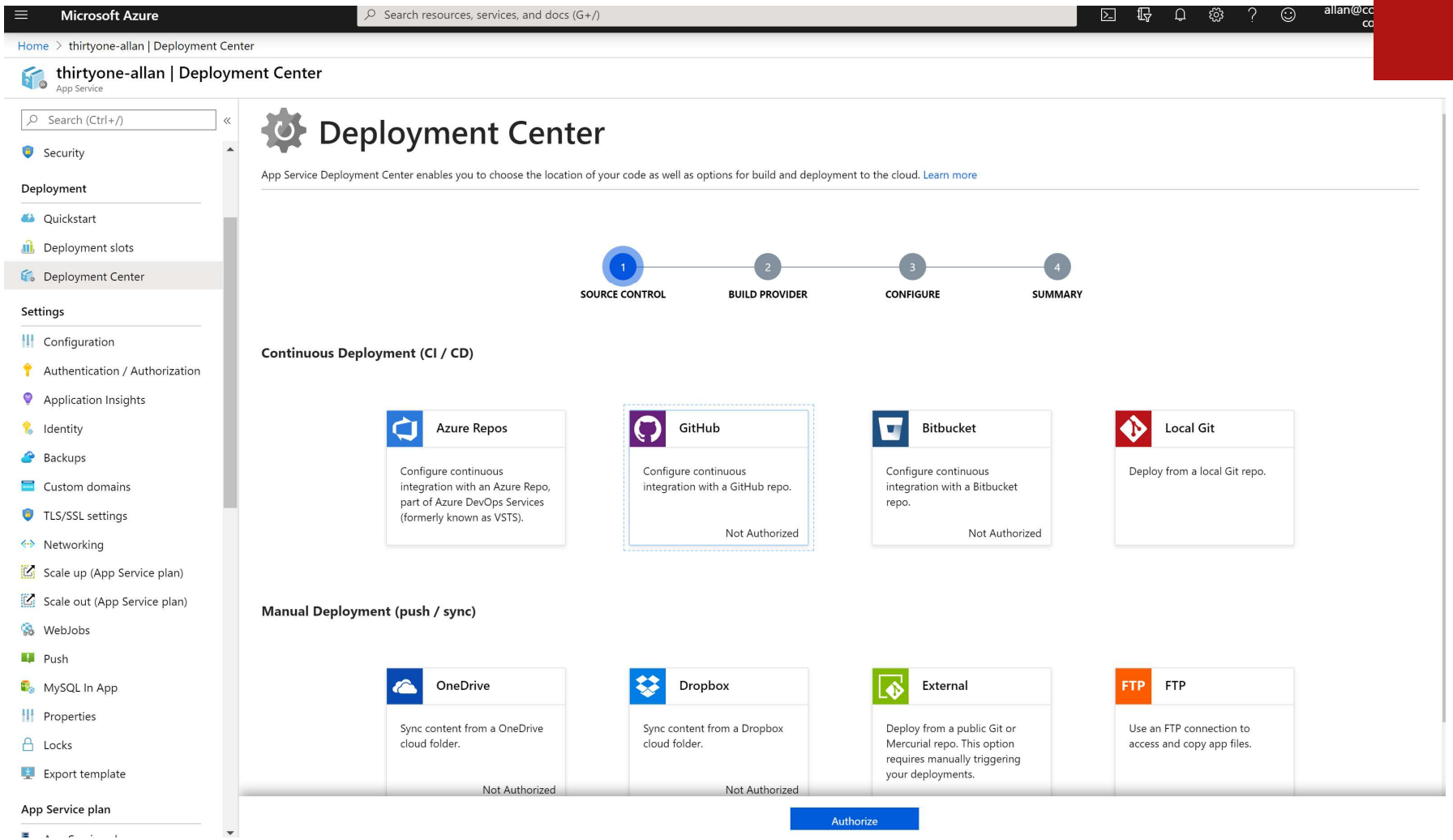


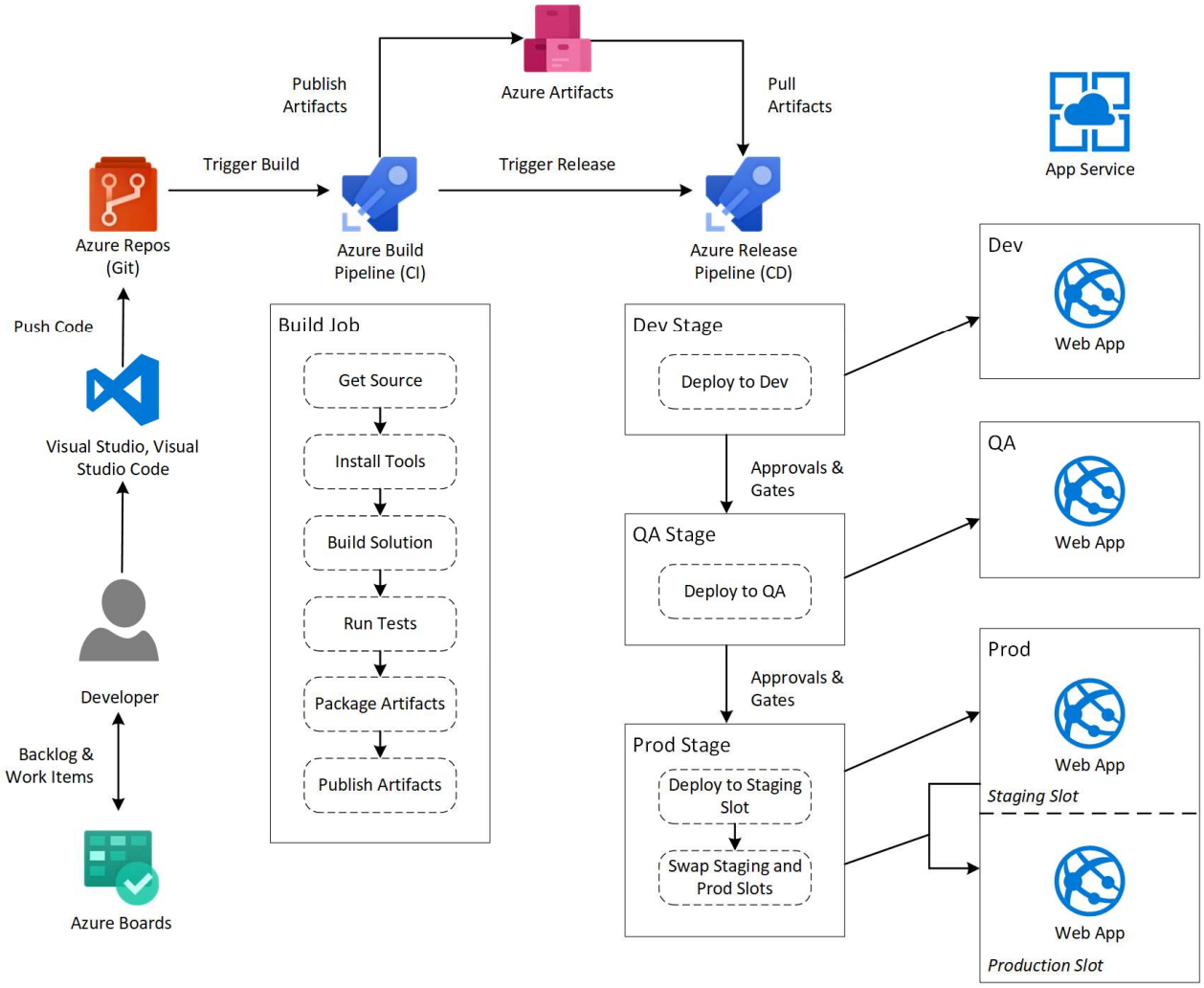
Code time

Session 5 – Part 2

Alternative options: Deploy from Github

- Can be configured in app fairly simple
- Or you can use Azure Dev Ops to setup a more advanced build & deploy pipeline


Microsoft Azure
Search resources, services, and docs (G+/)
Home > thirtyone-allan | Deployment Center
thirtyone-allan | Deployment Center
App Service
Search (Ctrl+/)
Security
Deployment
Quickstart
Deployment slots
Deployment Center
Settings
Configuration
Authentication / Authorization
Application Insights
Identity
Backups
Custom domains
TLS/SSL settings
Networking
Scale up (App Service plan)
Scale out (App Service plan)
WebJobs
Push
MySQL In App
Properties
Locks
Export template
App Service plan
Deployment Center
App Service Deployment Center enables you to choose the location of your code as well as options for build and deployment to the cloud. Learn more
1 SOURCE CONTROL
2 BUILD PROVIDER
3 CONFIGURE
4 SUMMARY
Continuous Deployment (CI / CD)
Azure Repos
Configure continuous integration with an Azure Repo, part of Azure DevOps Services (formerly known as VSTS).
GitHub
Configure continuous integration with a GitHub repo.
Not Authorized
Bitbucket
Configure continuous integration with a Bitbucket repo.
Not Authorized
Local Git
Deploy from a local Git repo.
Manual Deployment (push / sync)
OneDrive
Sync content from a OneDrive cloud folder.
Not Authorized
Dropbox
Sync content from a Dropbox cloud folder.
Not Authorized
External
Deploy from a public Git or Mercurial repo. This option requires manually triggering your deployments.
FTP
FTP
Use an FTP connection to access and copy app files.
Authorize


Publish Artifacts
Azure Artifacts
Pull Artifacts
App Service
Trigger Build
Trigger Release
Azure Repos (Git)
Azure Build Pipeline (CI)
Azure Release Pipeline (CD)
Push Code
Build Job
Get Source
Install Tools
Build Solution
Run Tests
Package Artifacts
Publish Artifacts
Dev Stage
Deploy to Dev
Approvals & Gates
QA Stage
Deploy to QA
Approvals & Gates
Prod Stage
Deploy to Staging Slot
Swap Staging and Prod Slots
Dev
Web App
QA
Web App
Prod
Web App
Staging Slot
Web App
Production Slot
Visual Studio, Visual Studio Code
Developer
Backlog & Work Items
Azure Boards

Student assignments

SHOW NOW OR SHARE LATER

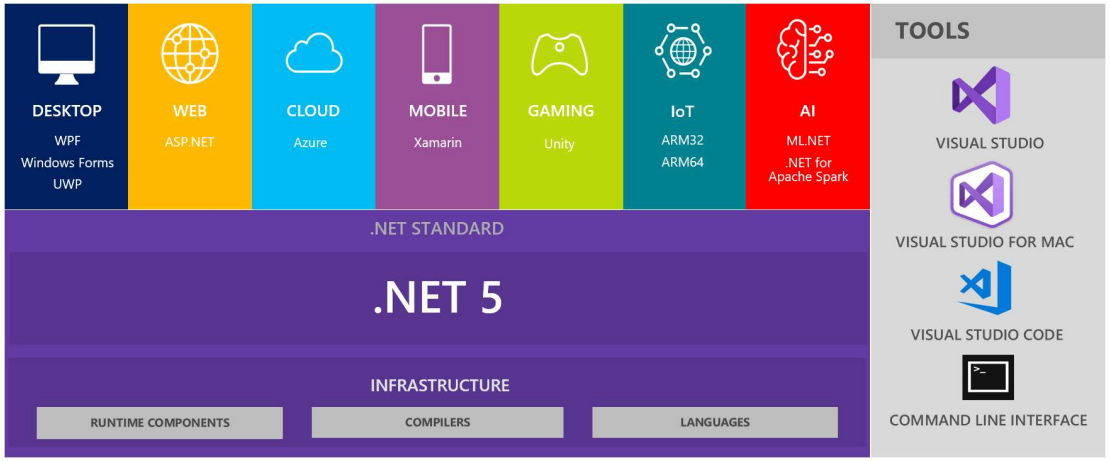
Future development ideas

- Game clean-up
- Error handling
- Better computer AI
- Multiplayer mode
- Bot (Slack?) mode
- Slack enabled (to start multiplayer games)
- "Kahoot" mode
- React based UI
- Responsive UI
- Topscore list
- Xamarin Android based game
- [your idea goes here]

Hackathon

When the world returns to ‘normal’ let’s meet and have a final hackathon where we bring the ideas to life – and build an awesome game for the portfolios.

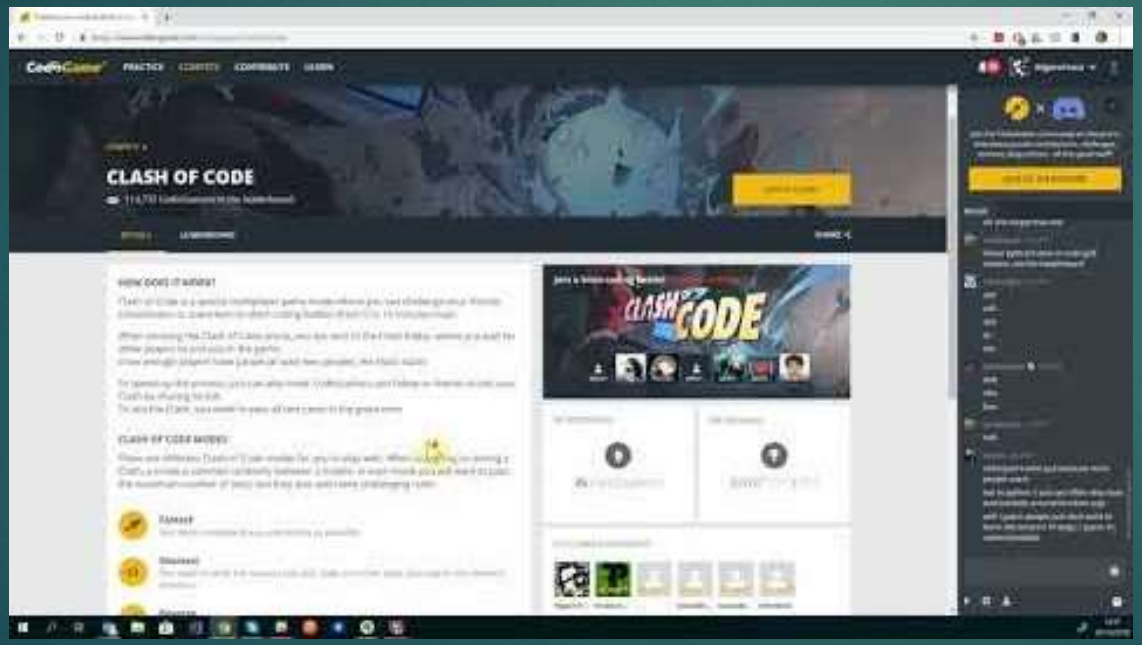
.NET – A unified platform



.NET Future

Practice

- Play CodingGame.com for practice!



Or build your own projects

- Use #dotnet channel to ask for help!
- Maybe implement your favorite card game?

Evaluation

- Evaluation link will (probably) be mailed out

Course certificates

- Soon ready – you will receive them digitally

Thanks

- Thanks to Sherry and MICROSOFT for hosting
- Thanks to Mentors for helping
- Thanks to students for attending