

# Building an educational game with .NET Core and Unity

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# Why CSharpWars?

- Gamification to teach basic C# knowledge in school
- Learn the Unity Game Engine
- Play with the Microsoft Compiler Platform (Roslyn)
- Play with .NET Core 3
- Play with Azure DevOps Pipelines and Docker
- Use Test Driven Development

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# What is CSharpWars?

- *Robots on arena (15x15)*
- Robots take *turns* (simultaneously)
- Robots can *move* around the grid (walk, turn, teleport)
- Robots can *attack* other robots (melee, ranged)
- Robots can *see* part of the arena (vision)
- A turn is scripted using C# (Roslyn)
- A robot runs a *single script* every two seconds
- A robot has a *limited* amount of *health* and *stamina*

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Robot Arena



HTTP API



SQL Database



Processing Middleware

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# Demo



- Register as a player
- Select a pre-defined script
- Create your robot
- Watch your robot struggle

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<https://github.com/Djohnnie>

<https://github.com/Djohnnie/CSharpWars-TechDaysFinland-2020>



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