C#

History/Origins

- Microsoft
- Anders Hejlsberg
 - Lead language designer
- Designed for Microsoft's .Net framework
- COOL
 - C-like Object Oriented Language
- Official release in 2000
- Family of C Language
 - \bigcirc C++++ \rightarrow C#
 - o C sharp note in music
- Most recent release in 2024



C# – What is it?

- Microsoft technologies #1 language
 - Most popular language for the .Net
 - o SQL Server, Azure, Visual Studio Code
- Practical and purposeful
 - "Whenever someone goes, why is this feature there? It's not just because I thought it was fun, it's because it solves this, this and this problem."
 - Anders Heilsberg
- Thoroughly documented
 - o C# Docs
- Active community
 - of learners and experienced developers alike



Applications/Uses of C#

Databases

- ADO.NET and Visual C# .NET primarily
 - Used for Microsoft SQL Servers

Applications

- Mobile, desktop, and web
- Best suited for Microsoft applications, but highly versatile

C# Web Services

- Similar script design as ASP.NET
- Needs UCL for cross-platform use (XML)

Game Development

- Highly compatible and efficient
- Used for A/V and AI components



Would we use C#, and why?

- Heavily dependent on project type and destination
 - More efficient for .NET projects
- High prevalence with game development
 - o Backbone for game engines, cross-platform uses

- Database Developer job descriptions
- Top language of software I've used before
 - SQL Server, SQL Azure Database, MSBI stack
- Deeper understanding of interacting with databases beyond SQL queries
 - Create a web API that uses a database



Questions?

