

DEPARTMENT OF COMPUTER GRAPHICS AND INTERACTION

practice 1 - Introduction

WA2

Program cvičení

- Organization of practices
- Environment setup
 - Google
 - Microsoft
- Basics

Google + J2EE

Google Cloud

- Google offers lot of services (mail, calendar, documents ...) to individuals and companies (Google Apps).
- The services can be accessed externaly through API.
- If existing services are not satisfactory companies can buy third party solutions (Google App Marketpalce) or create their own (Google AppEngine).
- The existing services can be used through API, extended and interconnected.

Google AppEngine

- Scalable web server with datastore
- Subset of J2EE servlets, JSPs (no EJBs)
- Schemaless datastore based on BigTable
- Additional libraris for accessing Google APIs

Practices on Google AppEngine

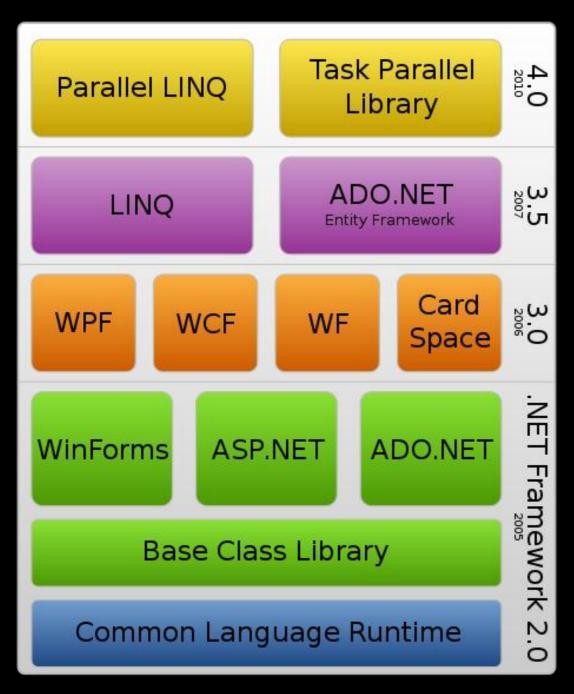
- Environment setup (Eclipse + AppEngine plugin)
- Servlets and JSPs
- REST and Google APIs
- Persistence (working with datastore)

Practices on J2EE

- Servlets and JSPs
- Persistence (JDO)
- EJBs

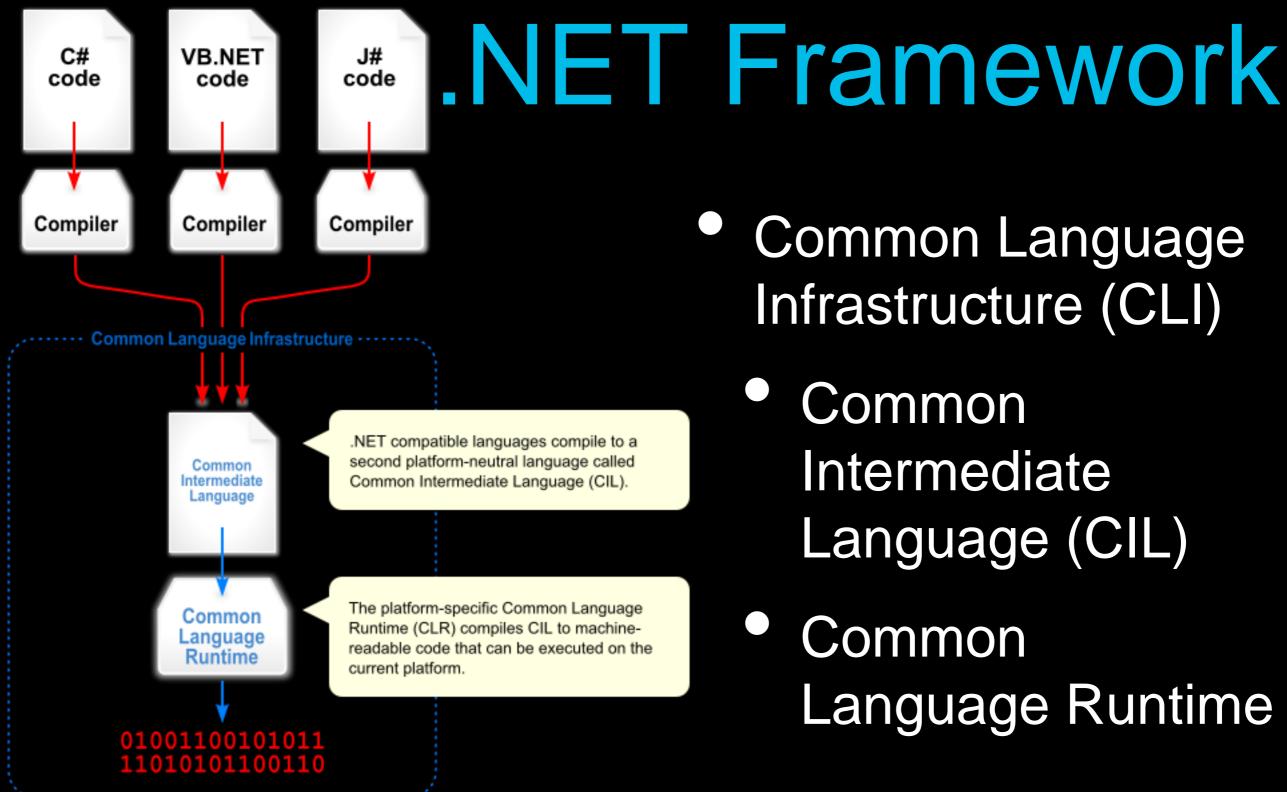
Windows Azure + .NET

.NET Framework



credit: wikipedia

- SW framework
- large library
- several programming languages: C#, J#, VB.NET ...
- several platforms: desktop, PDA, Phone 7, Silverlight



Common Language Infrastructure (CLI)

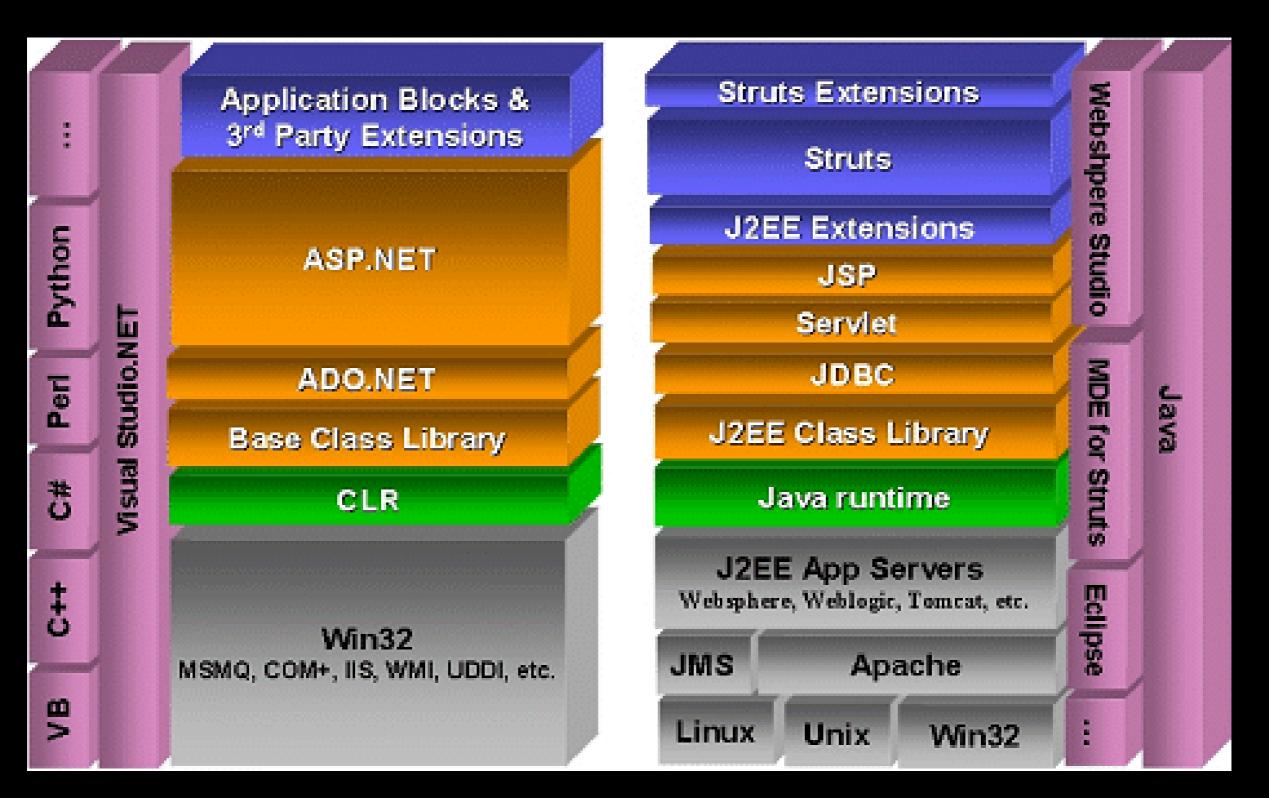
- Common Intermediate Language (CIL)
- Common Language Runtime

credit: wikipedia

ASP .NET

- Current MS solution for Dynamic Web
- Based on CLR -> Any .NET Language
- Web pages called Web Forms
- ASP.NET MVC Framework

ASP .NET



credit: Microsoft

Microsoft cloud

Windows Azure Platform

Cloud platform for cloud services hosted in Microsoft datacenters.



Windows Azure

Operating system for cloud services. Environment for development, hosting and management of services on Microsoft Azure platform.

Based on Windows Server 2008



SQL Azure

Relational database service for cloud environment.



AppFabric

Middleware that provides several cloud computing services: Access Control Service, AppFabric Applications, Service Bus, Caching, Integration.

Azure dev. Environmet software

- NET Framework 4.0
- Microsoft Visual Studio 2010
- ASP.NET MVC 2
- Windows Azure Tools For Microsoft Visual Studio 1.4
- IIS 7
- SQL Server Management Studio R2 EE

Cloud deployment and testing

- Freemium na http://www.netstudent.cz/Azure.aspx
 - Automatically deletes after 24 hours
- Azure Introductory Special account
 - Free for 3 months

Practices on Azure

- Introduction to .NET
- APIs of MS Live services
- Development of Windows Azure application
- Persistence in Windows Azure