

Team Big Data

U-tification

Software Bill of Materials

Date: 12/14/2022

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David DeGirolamo

Git Repository: <https://github.com/JosephArmas/cecs-491A-Team-Big-Data>

Version History

Version	Date	Author	Changes
2	12/14/2022	Joseph Armas	Refactored tables, Removed Integrated Development, Implement required testing libraries and adapter, maps api, JavaScript Ajax library and Chart library.
1	12/10/2022	Joseph Armas	Initial Draft

Backend

Name	Version
.NET (runtime)	6.0

.NET Libraries

Name	Version
Microsoft.VisualStudio.TestTools.UnitTesting	1.0.0
NUnit3TestAdapter	4.3.1
MSTest.TestAdapter	3.0.0
MSTest.TestFramework	3.0.0
Microsoft.Data.SqlClient	5.0.1
MySql.Data.MySqlClient	8.0.31
System.Threading.Task	4.3.0
System.Security.Cryptography	4.3.0
System.Security.Principal	4.3.0
System	4.3.0
System.Collections.Generic	4.3.0
System.Linq	4.3.0
System.Text	4.3.0
System.Threading.Task	4.3.0
System.Data.Common	4.3.0
System.Diagnostics	4.3.0

NETStandard.Library	2.0.3
System.Collections	4.3.0
System.Collections.Concurrent	4.3.0
System.Collections.Immutable	7.0.0
System.Collections.NonGeneric	4.3.0
System.Collections.Specialized	4.3.0
System.ComponentModel	4.3.0
System.ComponentModel.Annotations	6.0.0
System.ComponentModel.EventBasedAsync	4.3.0
System.ComponentModel.Primitives	4.3.0
System.ComponentModel.TypeConverter	4.3.0
System.Configurations	7.0.0
System.Console	4.3.1
System.Data.Common	4.3.0
System.Data.DataSetExtensions	4.6.0
System.Diagnostics.Contracts	4.3.0
System.Diagnostics.Debug	4.3.0
System.Diagnostics.DiagnosticsSource	7.0.0
System.Diagnostics.EventLog	7.0.0
System.Diagnostics.FileVersionInfo	4.3.0
System.Diagnostics.Process	4.3.0
System.Diagnostics.StackTrace	4.3.0
System.Diagnostics.TextWriterTraceListener	4.3.0
System.Diagnostics.Tools	4.3.0
System.Diagnostics.TraceSource	4.3.0
System.Diagnostics.Tracing	4.3.0
System.Drawing.Common	7.0.0
System.Drawing.Primitives	7.0.0
System.Formats.Asn1	7.0.0
System.Globalization	4.3.0

System.Globalization.Calendars	4.3.0
System.Globalization.Extensions	4.3.0
System.IO	4.3.0
System.IO.Compression	4.3.0
System.IO.Compression.FileSystem	4.3.0
System.IO.Compression.ZipFile	4.3.0
System.IO.FileSystem	4.3.0
System.IO.FileSystem.AccessControl	6.0.0
System.IO.FileSystem.DriveInfo	4.3.1
System.IO.FileSystem.Primitives	4.3.0
System.IO.Watcher	4.3.0
System.IO.IsolatedStorage	4.3.0
System.IO.MemoryMappedFiles	4.3.0
System.IO.Pipelines	7.0.0
System.IO.Pipes	4.3.0
System.IO.Pipes.AccessControl	6.0.0
System.IO.UnmanagedMemoryStream	4.3.0
System.Linq	4.3.0
System.Linq.Expressions	4.3.0
System.Linq.Parallel	4.3.0
System.Linq.Queryable	4.3.0
System.Memory	4.5.5
System.Net.Http	4.3.4
System.Net.Json	7.0.0
System.Net.NameResolution	4.3.0
System.Net.NetworkInformation	4.3.0
System.Net.Ping	4.3.0
System.Net.Primitives	4.3.1
System.Net.Requests	4.3.0
System.Net.Security	4.3.2

System.Net.Sockets	4.3.0
System.Net.WebSockets.WebClient	4.3.2
System.Net.WebHeaderCollections	4.3.0
System.Net.WebSockets	4.3.0
System.Net.WebSockets.Client	4.3.2
System.Numerics.Vectors	4.5.0
System.ObjectModel	4.3.0
System.Reflection	4.3.0
System.Reflection.DispatchProxy	5.0.0
System.Reflection.Emit	4.7.0
System.Reflection.Emit.ILGeneration	4.7.0
System.Emit.Lightweight	4.7.0
System.Reflection.Extensions	4.3.0
System.Reflection.Metadata	7.0.0
System.Reflection.Primitives	4.3.0
System.Reflection.TypeExtensions	4.7.0
System.Resources.Reader	4.3.0
System.Resources.ResourceManager	4.3.0
System.Resources.Writer	4.3.0
System.Runtime	4.3.1
System.Runtime.CompilerServices.Unsafe	7.0.0
System.Runtime.CompilerServices.VisualC	4.3.0
System.Runtime.Extensions	4.3.1
System.Runtime.Handles	4.3.0
System.Runtime.InteropServices	4.3.0
System.Runtime.InteropServices.RuntimeInformation	4.3.0
System.Runtime.Loader	4.3.0
System.Runtime.Numerics	4.3.0
System.Runtime.Serialization	7.0.0
System.Runtime.Serialization.Formatters	4.3.0

System.Runtime.Serialization.Json	4.3.0
System.Runtime.Serialization.Primitive	4.3.0
System.Runtime.Serialization.Xml	4.3.0
System.Security.AccessControl	6.0.2
System.Security.Claims	4.3.0
System.Security.Cryptography.Algorithms	4.3.1
System.Security.Cryptography.Cng	6.0.0
System.Security.Cryptography.Csp	6.0.0
System.Security.Cryptography.Encoding	4.3.0
System.Security.Cryptography.OpenSsl	6.0.0
System.Security.Cryptography.Primitives	4.3.0
System.Security.Cryptography.X509Certificates	4.3.2
System.Security.Cryptography.Xml	7.0.0
System.Security.Principal.Windows	6.0.0
System.Security.SecureString	4.3.0
System.ServiceProcess.ServiceController	7.0.0
System.Text.Encoding	4.3.0
System.Text.Encoding.CodePages	7.0.0
System.Text.Encoding.Extensions	4.3.0
System.Text.Encoding.Web	7.0.0
System.Text.Json	7.0.0
System.Text.RegularExpressions	4.3.1
System.Threading	4.3.0
System.Threading.Channels	7.0.0
System.Threading.Overlapped	4.3.0
System.Threading.Tasks	4.3.0
System.Threading.Tasks.Dataflow	7.0.0
System.Threading.Tasks.Extensions	4.5.4
System.Threading.Tasks.Parallel	4.3.0
System.Threading.Thread	4.3.0

System.Threading.ThreadPool	4.3.0
System.Threading.Timer	4.3.0
System.Xml.ReaderWriter	4.3.1
System.Xml.XDocument	4.3.0
System.Xml.XmlDocument	4.3.0
System.Xml.XmlSerializer	4.3.0
System.Xml.XPath	4.3.0
System.Xml.XPath.XDocument	4.3.0

Microsoft.AspNetCore	2.2.0
Microsoft.AspNetCore.Antiforgery	2.2.0
Microsoft.AspNetCore.Authentication	2.2.0
Microsoft.AspNetCore.Authentication.Abstractions	2.2.0
Microsoft.AspNetCore.Authentication.Cookies	2.2.0
Microsoft.AspNetCore.Authentication.Core	2.2.0
Microsoft.AspNetCore.OAuth	2.2.0
Microsoft.AspNetCore.Authorization	7.0.0
Microsoft.AspNetCore.Authorization.Policy	2.2.0
Microsoft.AspNetCore.Components	7.0.0
Microsoft.AspNetCore.Components.Authorization	7.0.0
Microsoft.AspNetCore.Components.Forms	7.0.0
Microsoft.AspNetCore.Components.Server	7.0.0
Microsoft.AspNetCore.Components.Web	7.0.0
Microsoft.AspNetCore.Connections.Abstractions	7.0.0
Microsoft.AspNetCore.CookiePolicy	2.2.8
Microsoft.AspNetCore.Cors	2.2.0
Microsoft.AspNetCore.Cryptography.Internal	7.0.0
Microsoft.AspNetCore.Cryptogrphahy.Key	7.0.0
Microsoft.AspNetCore.DataProtection	7.0.0
Microsoft.AspNetCore.DataProtection.Abstractions	2.2.0

Microsoft.AspNetCore.DataProtection.Extensions	7.0.0
Microsoft.AspNetCore.Diagnostics	2.2.0
Microsoft.AspNetCore.Diagnostics.HealthChecks	2.2.0
Microsoft.AspNetCore.HostFiltering	2.2.0
Microsoft.AspNetCore.Hosting	2.2.7
Microsoft.AspNetCore.Hosting.Abstractions	2.2.0
Microsoft.AspNetCore.Hosting.Server.Abstractions	2.2.0
Microsoft.AspNetCore.Html.Abstractions	2.2.0
Microsoft.AspNetCore.Http	2.2.2
Microsoft.AspNetCore.Http.Abstractions	2.2.0
Microsoft.AspNetCore.Http.Connections	1.1.0
Microsoft.AspNetCore.Http.Connections.Common	7.0.0
Microsoft.AspNetCore.Http.Extensions	2.2.0
Microsoft.AspNetCore.Http.Features	6.0.0
Microsoft.AspNetCore.HttpOverrides	2.2.0
Microsoft.AspNetCore.HttpsPolicy	2.2.0
Microsoft.AspNetCore.Identity	2.2.0
Microsoft.AspNetCore.Localization	2.2.0
Microsoft.AspNetCore.Localization.Routing	2.2.0
Microsoft.AspNetCore.Metadata	7.0.0
Microsoft.AspNetCore.Mvc	2.2.0
Microsoft.AspNetCore.Mvc.Abstractions	2.2.0
Microsoft.AspNetCore.Mvc.ApiExplorer	2.2.0
Microsoft.AspNetCore.Mvc.Core	2.2.5
Microsoft.AspNetCore.Mvc.Cors	2.2.0
Microsoft.AspNetCore.Mvc.DataAnnotations	2.2.0
Microsoft.AspNetCore.Mvc.Formatters.Json	2.2.0
Microsoft.AspNetCore.Mvc.Formatters.Xml	2.2.0
Microsoft.AspNetCore.Mvc.Localization	2.2.0
Microsoft.AspNetCore.Mvc.Razor	2.2.0

Microsoft.AspNetCore.Mvc.RazorPages	2.2.5
Microsoft.AspNetCore.Mvc.TagHelpers	2.2.0
Microsoft.AspNetCore.Mvc.ViewFeatures	2.2.0
Microsoft.AspNetCore.Razor	2.2.0
Microsoft.AspNetCore.Razor.Runtime	2.2.0
Microsoft.AspNetCore.ResponseCaching	2.2.0
Microsoft.AspNetCore.ResponseCaching.Abstractions	2.2.0
Microsoft.AspNetCore.ResponseCachingCompression	2.2.0
Microsoft.AspNetCore.Rewrite	2.2.0
Microsoft.AspNetCore.Routing	2.2.2
Microsoft.AspNetCore.Routing.Abstractions	2.2.0
Microsoft.AspNetCore.Server.HttpSys	2.2.6
Microsoft.AspNetCore.Server.IIS	2.2.6
Microsoft.AspNetCore.Server.IISIntegration	2.2.1
Microsoft.AspNetCore.Server.Kestrel	2.2.0
Microsoft.AspNetCore.Server.Kestrel.Core	2.2.0
Microsoft.AspNetCore.Server.Kestrel.Transport.Quic	6.0.0
Microsoft.AspNetCore.Server.Kestrel.Transport.Sockets	2.2.1
Microsoft.AspNetCore.Session	2.2.0
Microsoft.AspNetCore.SignalR	1.0.0
Microsoft.AspNetCore.SignalR.Common	7.0.0
Microsoft.AspNetCore.SignalR.Core	1.1.0
Microsoft.AspNetCore.SignalR.Protocols.Json	7.0.0
Microsoft.AspNetCore.StaticFiles	2.2.0
Microsoft.AspNetCore.WebSockets	2.2.1
Microsoft.AspNetCore.WebUtilities	2.2.0
Microsoft.CSharp	4.7.0
Microsoft.Extensions.Caching.Abstractions	7.0.0
Microsoft.Extensions.Caching.Memory	7.0.0
Microsoft.Extensions.Configuration	7.0.0

Microsoft.Extensions.Configuration.Abstractions	7.0.0
Microsoft.Extensions.Configuration.Binder	7.0.0
Microsoft.Extensions.Configuration.EnvironmentVariables	7.0.0
Microsoft.Extensions.Configuration.FileExtensions	7.0.0
Microsoft.Extensions.Configuration.Ini	7.0.0
Microsoft.Extensions.Configuration.Json	7.0.0
Microsoft.Extensions.Configuration.KeyPerFile	7.0.0
Microsoft.Extensions.Configuration.UserSecrets	7.0.0
Microsoft.Extensions.Configuration.Xml	7.0.0
Microsoft.Extensions.DependencyInjection	7.0.0
Microsoft.Extensions.DependencyInjection.Abstractions	7.0.0
Microsoft.Extensions.Diagnostics.HealthChecks	7.0.0
Microsoft.Extensions.Diagnostics.HealthChecks.Abstractions	7.0.0
Microsoft.Extensions.Features	7.0.0
Microsoft.Extensions.FileProviders.Abstractions	7.0.0
Microsoft.Extensions.FileProviders.Composite	7.0.0
Microsoft.Extensions.FileProviders.Embedded	7.0.0
Microsoft.Extensions.FileProviders.Physical	7.0.0
Microsoft.Extensions.FileSystemGlobbing	7.0.0
Microsoft.Extensions.Hosting	7.0.0
Microsoft.Extensions.Hosting.Abstractions	7.0.0
Microsoft.Extensions.Http	7.0.0
Microsoft.Extensions.Identity.Core	7.0.0
Microsoft.Extensions.Identity.Stores	7.0.0
Microsoft.Extensions.Localization	7.0.0
Microsoft.Extensions.Localization.Abstractions	7.0.0
Microsoft.Extensions.Logging	7.0.0
Microsoft.Extensions.Logging.Abstractions	7.0.0
Microsoft.Extensions.Logging.Configuration	7.0.0
Microsoft.Extensions.Logging.Console	7.0.0

Microsoft.Extensions.Logging.Debug	7.0.0
Microsoft.Extensions.Logging.EventLog	7.0.0
Microsoft.Extensions.Logging.EventSource	7.0.0
Microsoft.Extensions.Logging.TraceSource	7.0.0
Microsoft.Extensions.ObjectPool	7.0.0
Microsoft.Extensions.Options	7.0.0
Microsoft.Extensions.Options.ConfigurationsExtensions	7.0.0
Microsoft.Extensions.Options.DataAnnotations	7.0.0
Microsoft.Extensions.Primitives	7.0.0
Microsoft.Extensions.WebEncoders	7.0.0
Microsoft.JSInterop	7.0.0
Microsoft.Net.Http.Headers	2.2.8
Microsoft.VisualBasic	10.4.0
Microsoft.Win32.Primitives	4.3.0
Microsoft.Win32.Registry	6.0.0

Languages

Name	Version
HTML	5.0
CSS	3.0
JavaScript	6.0
C#	10
ECMAScript	11
TypeScript	4.9.3

DataStore

Name	Version
Microsoft Sql Server Management Studio	2019
Microsoft Sql Server	2019

Web Server

Name	Version
IIS Windows Server	10
Windows Server	2022

Web Browser

Name	Version
Google Chrome	108.0.5359.124

Cloud

Name
<ul style="list-style-type: none"> ● Amazon Web Service EC2 instance <ul style="list-style-type: none"> ○ Windows Server 2022 ○ T2.micro ○ 1Gb memory ○ 30gb storage ○ Ip 10.30.2.2 (publicly accessible) ● Relational Database Service

- Microsoft SQL Server 2019
- Db.m6i.xlarge
- 4 vCPU
- 16gb ram
- 200gb storage
- Ip 10.30.1.2 (not publicly accessible)

Map API

Name	Version
Maps Javascript API	3.50

JavaScript Ajax Library

Name	Version
Axios	1.2.1

JavaScript Chart Library

Name	Version
Charist.js	1.3.0