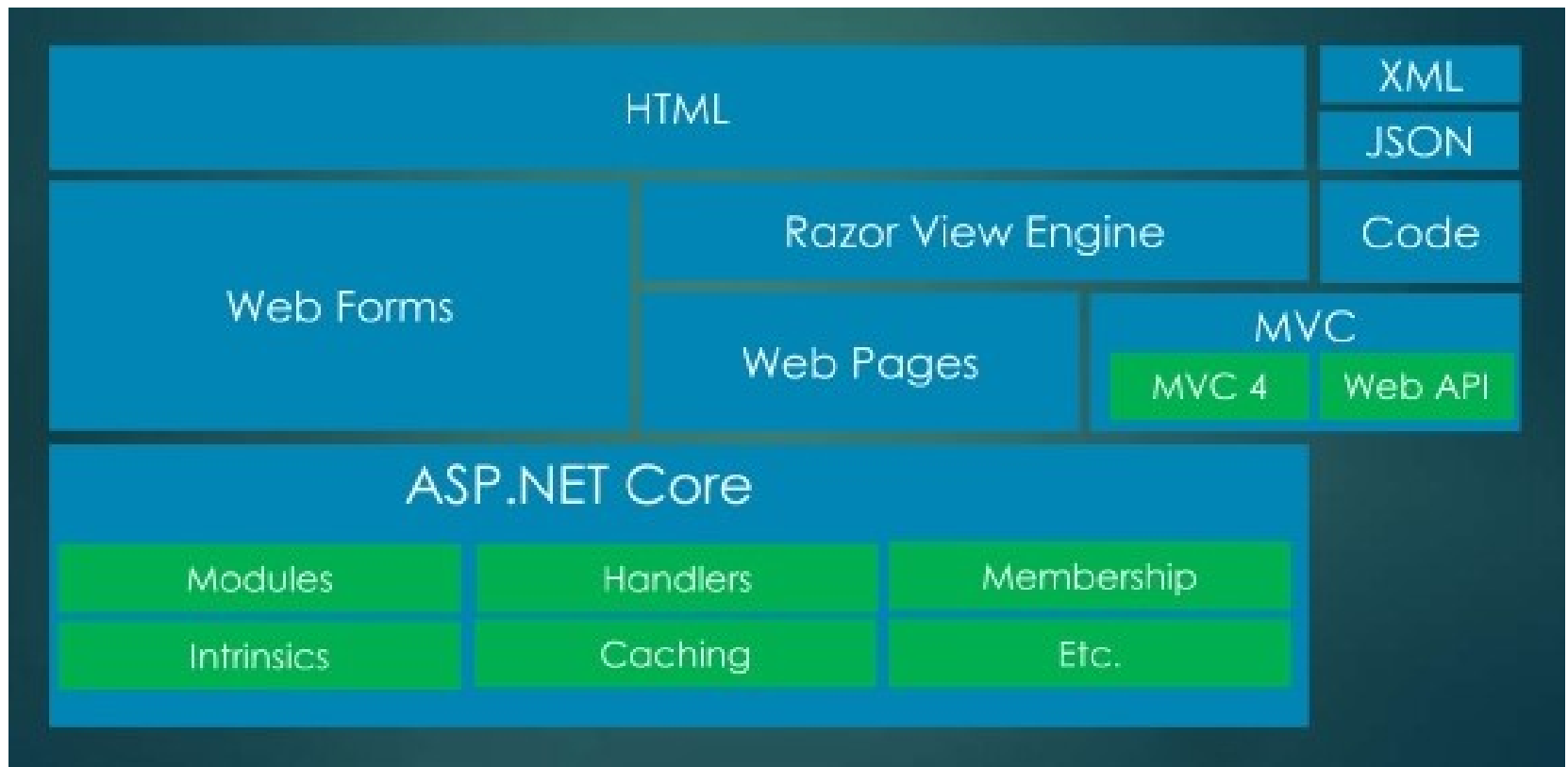


ASP .NET WEB API

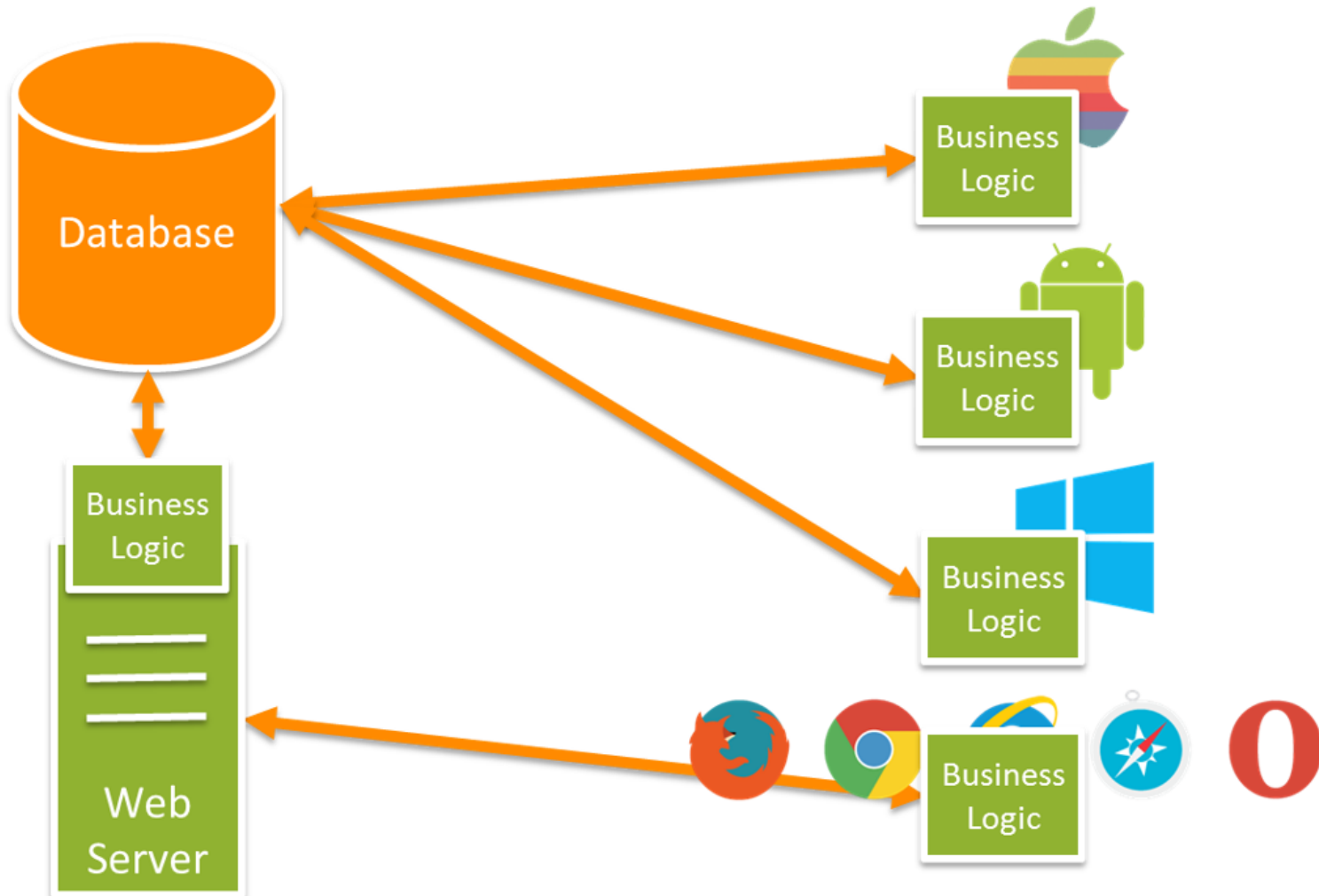
What is Web API?

- **API** – “Application Programming Interface”
- Frameworks that makes it easy to build **HTTP services**
- Platform for building **RESTFUL** applications on the .NET framework using ASP.NET stack
- WCF → Care about transport flexibility
- Web API → Care about HTTP

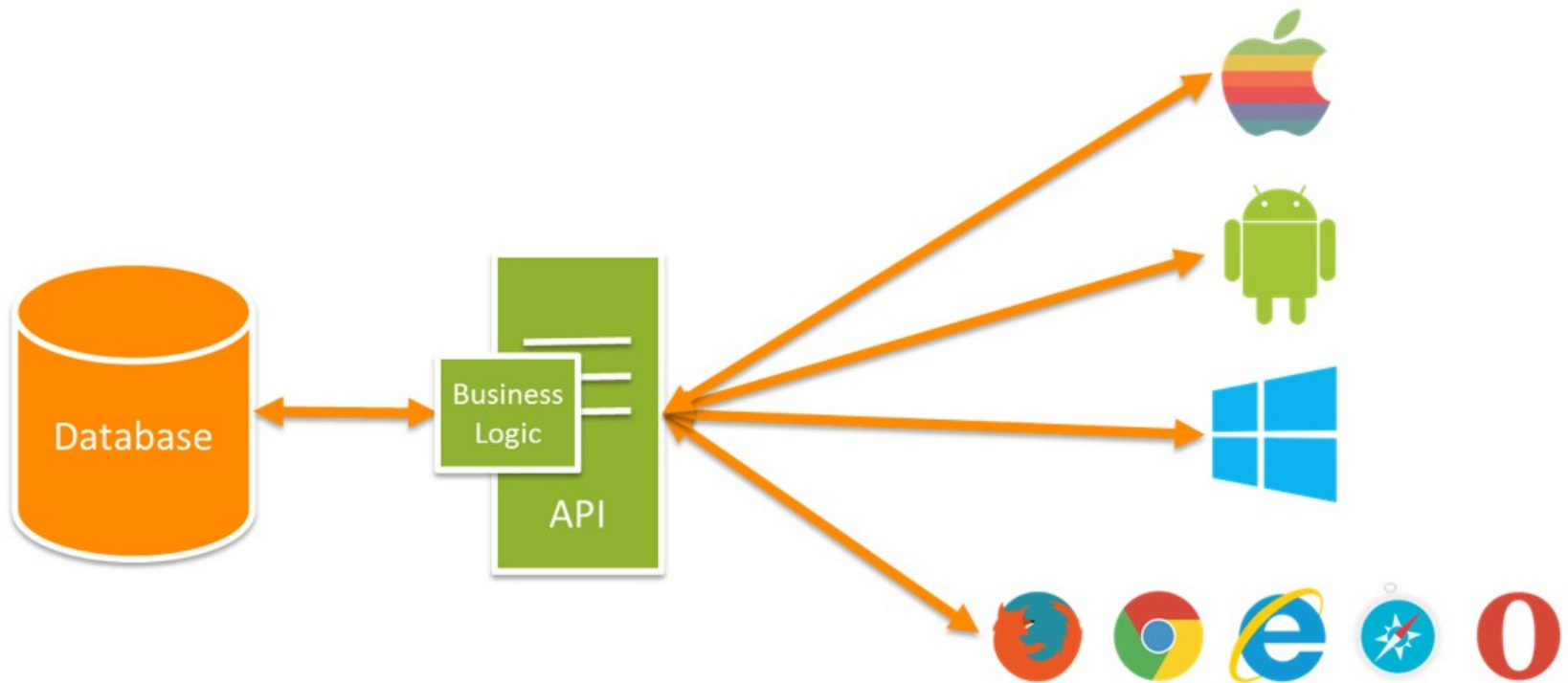
Web API is part of ASP.NET



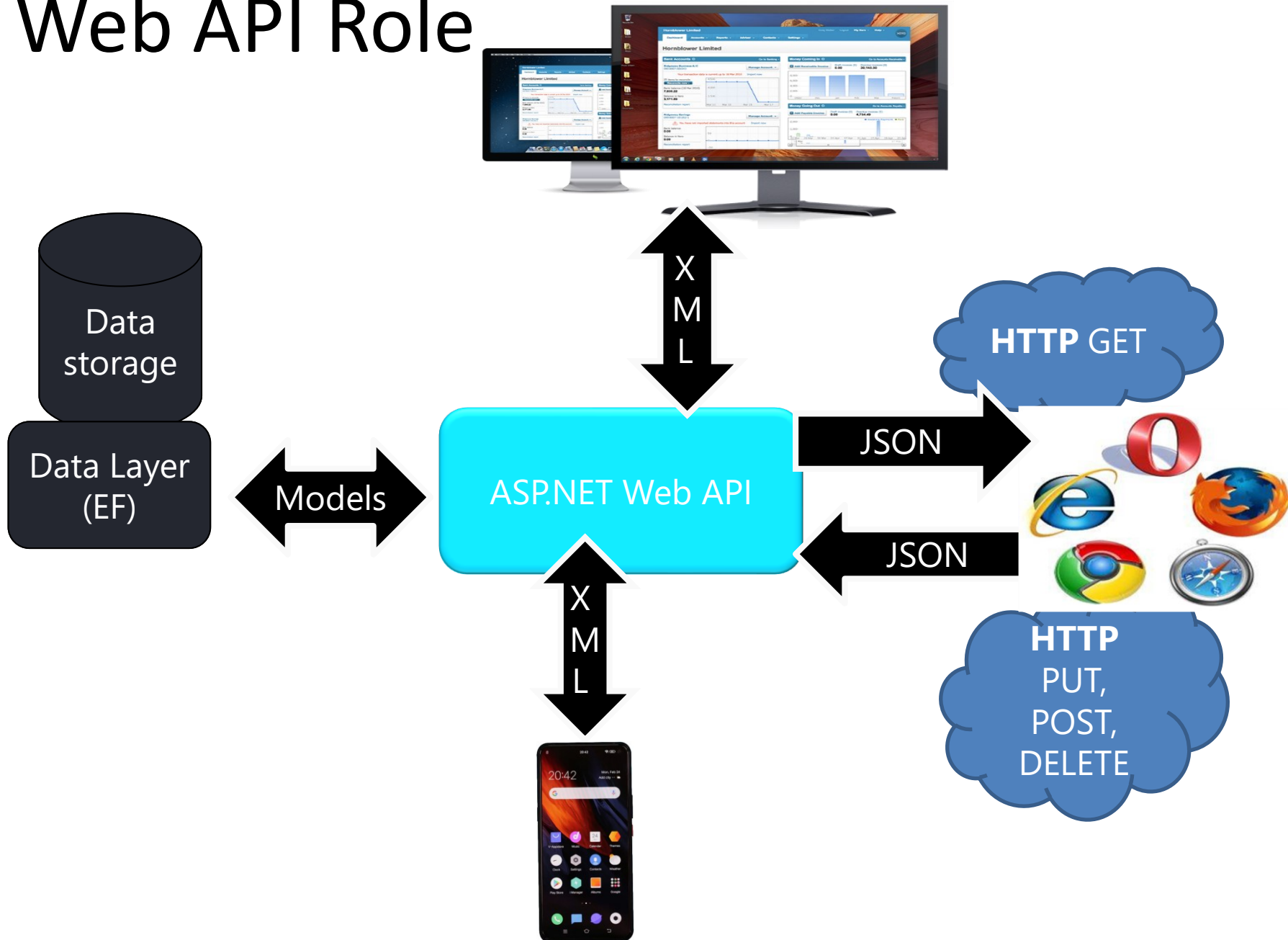
Why Web API?



Why Web API?



Web API Role



Web API Features (1)

- Modern **HTTP** Programming Model
 - Access to strongly typed HTTP object model
- Content Negotiation
 - Client and server work together to determine right format for data
 - Provide default support for **JSON**, **XML** and Form URL-encoded formats
 - We can add our own formats and change content negotiation strategy

Web API Features (2)

- Query Composition
 - Support automatic **paging** and **sorting**
 - Support querying via the **OData URL** conventions
- Model Binding and Validation
 - Combine **HTTP** data in **POCO** models
 - **Data validation** via attributes
 - Supports the same model binding and validation infrastructure as **ASP.NET MVC**

Web API Features (3)

- **Routes** (mapping between **URIs** and code)
 - Full set of routing capabilities supported within **ASP.NET (MVC)**
- **Filters**
 - Easily decorates **Web API** with additional validation (authorization, CORS(Cross Origin Resource Sharing))
- **Testability**
- **IoC** and **dependency injection** support
- Flexible hosting (**IIS**, **Azure**, **self-hosting**)

References

- <https://blogs.msdn.microsoft.com/martinkearn/2015/01/05/introduction-to-rest-and-net-web-api/>