

# MVC COURSE



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# Agenda

**Web URL's**

**Routing**

**Global.asax – route flow**

**Defining routes**

**Demos**

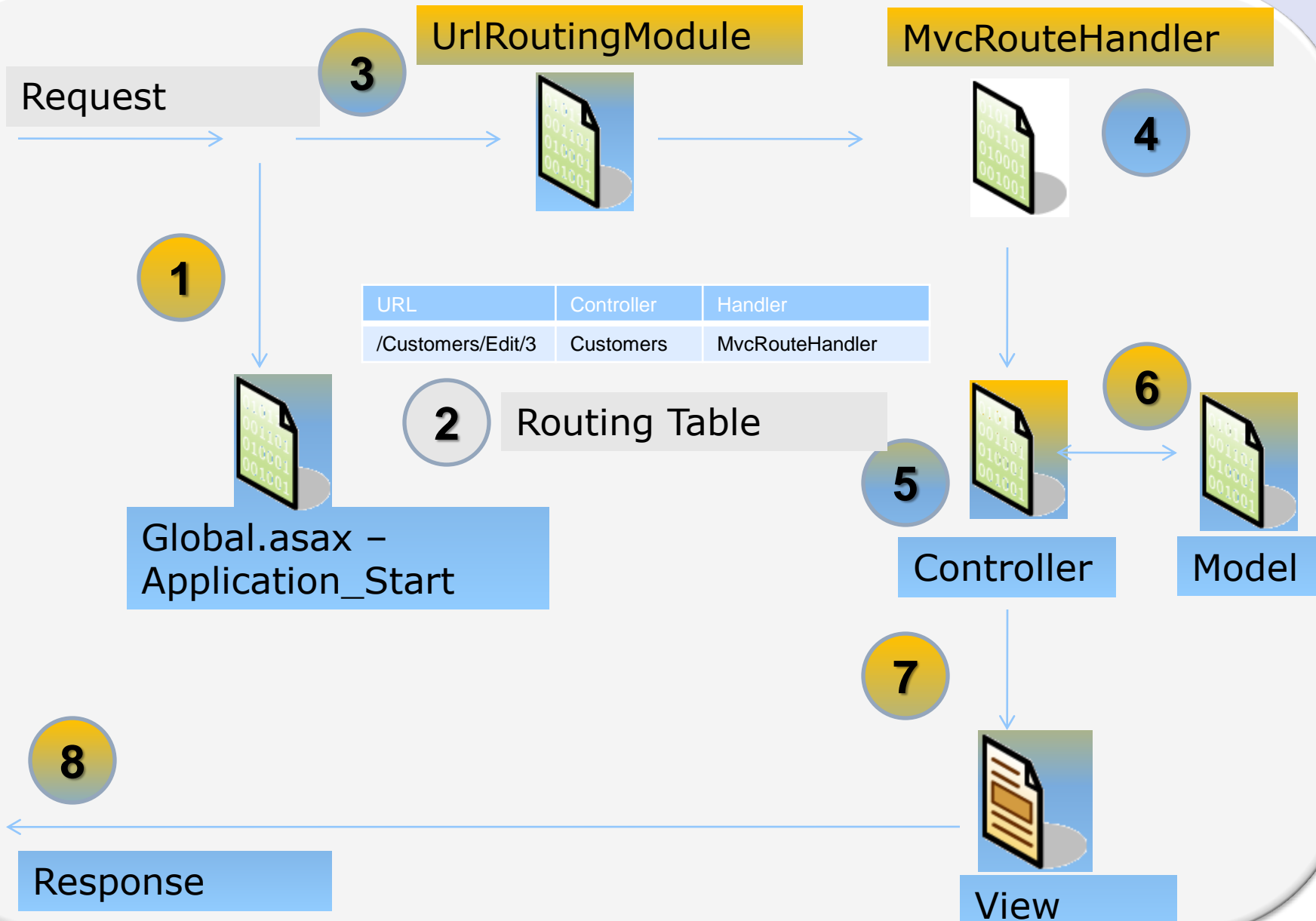
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# Implementing URL design

- Need to have a mechanism to map incoming URLs to actual resources
- **URL rewriting**
- **Routing**

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# ASP.NET MVC App Execution



# Routing

- Introduced because of the way ASP.NET MVC works
- Rather than being handled by a page handler each request needs to be routed to a specific **action method** of a specific **controller** class
- URL rewriting would not achieve this
- Routing in ASP.NET is general, though, and can be used to route to other resources, e.g. Web Forms

# Routing

- Routing provides "clean" URLs
- URL is mapped to a route handler
- Extra level of indirection
- Handlers can be changed without impacting URL
- URL can be changed without impacting handler
- URL Example

Example <http://www.mysite.com/Home/ProductList>

# Comparing URL Rewriting and routing

- Rewriting
  - Maps one URL to another URL
  - Applies to incoming requests only
- Routing
  - Maps URL to a resource
  - Resource can be a piece of code
  - Doesn't actually rewrite URL
  - Bidirectional - routing engine can generate URL to use to access a resource using same mapping rules

# Defining routes

- Define in **RegisterRoutes** static method in **Global.asax**
- Method called in **Application\_Start** event handler
- Registers routes in the **RouteTable**



# Catch-all route

- Pattern matches any number of segments
- Put this route last
- It will match any URL which has not matched any other route

```
routes.MapRoute(  
    "Catchall", // Route name  
    "{*url}", // Sample URL: Home/Index/3/4  
    new  
    {  
        controller = "Home",  
        action = "PageNotFound"  
    } // Parameter defaults  
);
```

# Web Forms

- Routing was introduced to allow MVC to work
- However, the routing engine is not exclusive to MVC
- Can use routing in Web Forms applications
- Maps URLs to pages
- Allows URL design for Web Forms

```
routes.MapPageRoute(  
    "SearchRoute", // Route name  
    "search/{searchterm}", // URL  
    "~/Search.aspx" // Web forms page to handle it  
);
```

# Demos

```
routes.MapRoute(  
    "Search", // Route name  
    "search", // Sample URL: /search  
    new  
    {  
        controller = "Search",  
        action = "Index"  
    } // Parameter defaults  
);
```

# Demos

```
routes.MapRoute(  
    "SearchResults", // Route name  
    "search/{target}", // Sample URL: /search/lcds  
    new  
    {  
        controller = "Search",  
        action = "Results",  
    } // Parameter defaults  
);
```

# Demos

```
routes.MapRoute(  
    "News", // Route name  
    "news", // Sample URL: /news  
    new  
    {  
        controller = "News",  
        action = "Index"  
    } // Parameter defaults  
);
```

# Demos

```
routes.MapRoute(  
    "ProductList", // Route name  
    "products", // Sample URL: /products  
    new  
    {  
        controller = "Product",  
        action = "List",  
    } // Parameter defaults  
);
```

# Demos

```
routes.MapRoute(  
    "ProductHome", // Route name  
    "{target}", // Sample URL: /lcds  
    new  
    {  
        controller = "Product",  
        action = "Summary",  
    } // Parameter defaults  
);
```

# Demos

```
routes.MapRoute(  
    "ProductDetailsWithFormat", // Route name  
    "{target}/{action}-{format}",  
    new  
    { controller = "Product",  
      }, // Parameter defaults  
    new  
    { action = "^features$|^techspecs$",  
      format = "^json$|^xml$" } // Constraints  
);
```



# Questions



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