



CS544 EA

# Applications

## Spring MVC: URI Templates

# URI Templates

- A URI Template is a URI-like string, containing one or more variable names. When you substitute values for these variables, the template becomes a URI.

The diagram illustrates the concept of URI Templates. It features a code snippet for a Spring MVC controller, two explanatory callouts, and a screenshot of a web browser showing the result of a URI substitution.

```
@Controller
public class HelloWorld {
    @GetMapping("/hello/{name}")
    public String Hello(@PathVariable String name, Model model) {
        model.addAttribute("name", name);
        return "helloView";
    }
}
```

**Annotations:**

- @PathVariable can be used to bind the variable to an input parameter** (points to `@PathVariable String name`)
- Parameter and variable name have to match** (points to `{name}` in the `@GetMapping` path)

**Browser Screenshot:**

The screenshot shows a Mozilla Firefox browser window titled "Hello World - Mozilla Firefox". The address bar displays the URL `localhost:8080/application06/hello/Michael`, which is highlighted with a red box. The page content displays "Hello Michael".

# Multiple Variables

```
@Controller
public class CustomerController {

    @RequestMapping(value="/customer/{customerId}/order/{orderId}")
    public String getOrder(@PathVariable long customerId,
                          @PathVariable long orderId, Model model) {
        // implementation ...
    }
}
```

Either directly on method level  
or combined from class and method

```
@Controller
@RequestMapping(value="/customer/{customerId}")
public class CustomerController {

    @RequestMapping(value="/order/{orderId}")
    public String getOrder(@PathVariable long customerId,
                          @PathVariable long orderId, Model model) {
        // implementation ...
    }
}
```

# Regex and Path Patterns

```
// Regular Expression Matching
@RequestMapping(value="/email/{user:\w+}@{host:\w+}.{tld:\w+}")
public void getInfo(@PathVariable String user,
    @PathVariable String host, @PathVariable String tld) {
    // implementation ...
}
```

```
// Ant-Style path patterns
@RequestMapping(value="/customer/*/order/{orderId}")
public void getOrder(@PathVariable long orderId, Model model) {
    // implementation ...
}
```