Spring Professional Exam Tutorial v5.0

Question 09

Question 09 - What are some of the parameter types for a controller method?

▶ `WebRequest, NativeWebRequest` – Access to HTTP request details, parameters, also request and session attributes, without direct use of the Servlet API

▶ `javax.servlet.ServletRequest` - object to provide client request information, allows access to parameters, attributes and other request details without direct use of Spring Interfaces

▶ `javax.servlet.ServletResponse` – object created by servlet container, passed to service method of servlet, used by servlet to send a response to the client

▶ `javax.servlet.http.HttpSession` – allows access to session information and attributes, also enforces HTTP session for request

▶ `javax.servlet.http.PushBuilder` - Servlet 4.0 push builder API for programmatic HTTP/2 resource pushes, allows resources to be delivered in advance by the server, resulting in a faster load time

Question 09 - What are some of the parameter types for a controller method?

▶ `java.security.Principal` - currently authenticated user

▶ `HttpMethod` - HTTP method used for request, one of `GET, HEAD, POST, PUT, PATCH, DELETE, OPTIONS, TRACE`

▶ `java.util.Locale` - request locale, determined by the most specific `LocaleResolver` available

▶ `java.util.TimeZone + java.time.ZoneId` - time zone associated with the current request, as determined by a `LocaleContextResolver`.

▶ `java.io.InputStream, java.io.Reader` – allows access to raw request body as exposed by the Servlet API

▶ `java.io.OutputStream, java.io.Writer` – allows to create raw response as exposed by the Servlet API

Question 09 - What are some of the parameter types for a controller method?

- `HttpEntity<B>` - container object that exposes request headers and body, body is converted with usage of `HttpMessageConverter`

- `java.util.Map, org.springframework.ui.Model, org.springframework.ui.ModelMap` – used to expose data to templates as part of view rendering

- `RedirectAttributes` – specify attributes to use in case of redirect, regular attributes will be added to query string and flash attributes will be kept temporarily until end of request, flash attributes are kept typically in the session and are removed immediately after request is completed

- `Errors, BindingResult` – used to gain access to form validation and binding data results, can be used with `@ModelAttribute, @RequestBody` or `@RequestPart` argument, `Errors` and `BindingResult` argument must be declared immediately after the validated method argument

Question 09 - What are some of the parameter types for a controller method?

▶ `SessionStatus` + **class-level** `@SessionAttributes` – useful for multi step form processing, `@SessionAttributes` allows to keep `@ModelAttribute` objects between requests and `SessionStatus` allows to clean session variables when form processing is done

▶ `UriComponentsBuilder` – used to build URLs relative to current scheme, host, port, contextPath etc.

▶ Any other argument – if a method argument is not matched against types defined before, and it is a simply type, it is treated as `@RequestParam`, if it is a complex type, it is treated as `@ModelAttribute`