Spring Day 5 230306

File Upload

1. pom.xml 의존성 추가

   commons-fileupload / commons-io

```xml
</dependency>
<!-- https://mvnrepository.com/artifact/commons-fileupload/commons-fileupload -->
<dependency>
    <groupId>commons-fileupload</groupId>
    <artifactId>commons-fileupload</artifactId>
    <version>1.5</version>
</dependency>
<!-- https://mvnrepository.com/artifact/commons-io/commons-io -->
<dependency>
    <groupId>commons-io</groupId>
    <artifactId>commons-io</artifactId>
    <version>2.11.0</version>
</dependency>
```

2. servlet-context.xml

```xml
<!-- Resolves views selected for rendering by @Controllers to .jsp resources in 1
<beans:bean class="org.springframework.web.servlet.view.InternalResourceViewResol
    <beans:property name="prefix" value="/WEB-INF/views/" />
    <beans:property name="suffix" value=".jsp" />
</beans:bean>

<context:component-scan base-package="com.carshop.*" />

<beans:bean id="multipartResolver"
    class="org.springframework.web.multipart.commons.CommonsMultipartResolver">
    <beans:property name="maxUploadSize" value="10240000"/>
</beans:bean>

</beans:beans>
```

3. JSPs

```jsp
<%@ page language="java" contentType="text/html; charset=UTF-8"
  pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>File Upload</title>
```

```
  </head>
<body>
  <form method="post" enctype="multipart/form-data">
  이름 : <input type="text" name="name"/>
  사진 : <input type="file" name="fileImage" />
  <input type="submit" value="전송"/>

  </form>
</body>
</html>
```

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>
<p> 파일업로드 성공
</body>
</html>
```

4 Controller

!!주의 사진이 저장되는 위치를 윈도우만 고려하지 말고 추후 업로드할 cafe24 의 운영체제인 리눅스를 고려하여 정하자.

```java
public MultipartFile getCarimage() {
    return carimage;
}

public void setCarimage(MultipartFile carimage) {
    this.carimage = carimage;
}

public CarDTO(String cid, String cname, String cprice, Strin

    this.cid = cid;
    this.cname = cname;
    this.cprice = cprice;
    this.ccate = ccate;
    this.cdesc = cdesc;
    this.carimage = carimage;
}
```

```java
package com.carshop.controller;

import java.io.File;
import java.util.List;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.ModelAttribute;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestParam;
import org.springframework.web.multipart.MultipartFile;

@Controller
public class CarController {

  @Autowired
  private CarService carService;

  @RequestMapping("/cars")
  public String CarList(Model model) {
    List<CarDTO> list = carService.getAllCarList();
    model.addAttribute("carList",list);
    return "cars";
  }

  @GetMapping("/{ccate}")
  public String requestCarsByCategory(@PathVariable("ccate") String carCategory, Model model) {
    List<CarDTO> carsByCategory = carService.getCarListByCategory(carCategory);
    model.addAttribute("carList", carsByCategory);
    return "cars";
  }

  @GetMapping("/car")
  public String requestCarById(@RequestParam("id") String carId, Model model) {
```

```java
    CarDTO carById = carService.getCarById(carId);
    model.addAttribute("car", carById);

    return "car";
  }

  @GetMapping("/admin/add")
  public String requestAddCarForm(@ModelAttribute("NewCar") CarDTO car) {

    return "addCar";
  }

  @PostMapping("/admin/add")
  public String submitAddNewCar(@ModelAttribute("NewCar") CarDTO car) {

    MultipartFile carimage = car.getCarimage();

    String saveName = carimage.getOriginalFilename();
    File saveFile = new File("C:\\upload", saveName);

    if (carimage != null && !carimage.isEmpty()) {
      try {
        carimage.transferTo(saveFile);
      } catch (Exception e) {
        throw new RuntimeException("차량 이미지 업로드가 실패했습니다.");
      }
    }

    carService.setNewCar(car);
    return "redirect:/cars";
  }

  @ModelAttribute
  public void addAttributes(Model model) {
    model.addAttribute("addTitle", "신규 차량 등록");
  }


  @GetMapping("/login")
  public String loginMethod() {

    return "login";
  }

  @GetMapping("/loginfailed")
  public String loginfailedMethod() {

    return "login";
  }

  @GetMapping("/logout")
  public String logoutMethod() {

    return "login";
  }

}
```

```jsp
<%@ page language="java" contentType="text/html; charset=UTF-8"
  pageEncoding="UTF-8"%>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>

<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Car Detail</title>
</head>
<body>
```

```
<%@ include file="header.jsp" %>


  <div class="alert alert-dark">
    <div class="container">
      <h1>차량 상세 보기</h1>
    </div>
  </div>


  <div class="container">
    <div class="row" align="center">

      <h3>${car.cid}</h3>
      <p>${car.cname}
      <p>${car.cprice} 만원
      <p>${car.ccate}
      <p>${car.cdesc}



    </div>
  </div>


<%@ include file="footer.jsp" %>
</body>
</html>
```

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
  pageEncoding="UTF-8"%>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>

<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Car List</title>
</head>
<body>
<%@ include file="header.jsp" %>


  <div class="alert alert-dark">
    <div class="container">
      <h1>차량 보기 (홍길동)</h1>
    </div>
  </div>


  <div class="container">
    <div class="row" align="center">

    <c:forEach items="${carList}" var="car">
      <div class = "col-md-4">
        <img src="<c:url value="C:\\upload\\${car.getCarimage().getOriginalFilename()}"/>" style="width:60%"/>
        <h3>${car.cid}</h3>
        <p>${car.cname}
        <p>${car.cprice} 만원
        <p><a href="<c:url value="/car?id=${car.cid}"/>" class="btn btn-primary" role="button">상세보기 &raquo;</a></p>
      </div>

    </c:forEach>

    </div>
  </div>
```

```
<%@ include file="footer.jsp" %>
</body>
</html>
```

addCar.jsp

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>
<%@ taglib uri="http://www.springframework.org/tags/form" prefix="form"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>자동차 등록</title>
</head>
<body>
<%@ include file="header.jsp" %>


  <div class="alert alert-dark">
    <div class="container">
      <h1>차량 등록</h1>
    </div>
  </div>


  <form:form modelAttribute="NewCar"
          action="./add?${_csrf.parameterName}=${_csrf.token}"
              class="form-horizontal"
              method = "post"
              enctype="multipart/form-data">
  <fieldset>
  <legend>${addTitle}</legend>
  자동차 ID : <form:input path="cid" class="form-control"/>
  자동차 이름 : <form:input path="cname" class="form-control"/>
  자동차 가격 : <form:input path="cprice" class="form-control"/>
  자동차 카테고리 : <form:input path="ccate" class="form-control"/>
  자동차 소개 : <form:textarea path="cdesc" cols="50" rows="2" class="form-control"/>
  자동차 사진 : <form:input path="carimage" type="file" class="form-control"/>
  <input type="submit" class="btn btn-primary" value="등록"/>


  </fieldset>
  </form:form>



<%@ include file="footer.jsp" %>
</body>
</html>
```

carDTO.java

```
package com.carshop.controller;

import org.springframework.web.multipart.MultipartFile;

public class CarDTO {
```

```java
    private String cid, cname, cprice, ccate, cdesc;
    private MultipartFile carimage;

    public String getCid() {
      return cid;
    }

    public void setCid(String cid) {
      this.cid = cid;
    }

    public String getCname() {
      return cname;
    }

    public void setCname(String cname) {
      this.cname = cname;
    }

    public String getCprice() {
      return cprice;
    }

    public void setCprice(String cprice) {
      this.cprice = cprice;
    }

    public String getCcate() {
      return ccate;
    }

    public void setCcate(String ccate) {
      this.ccate = ccate;
    }

    public String getCdesc() {
      return cdesc;
    }

    public void setCdesc(String cdesc) {
      this.cdesc = cdesc;
    }

    public MultipartFile getCarimage() {
      return carimage;
    }

    public void setCarimage(MultipartFile carimage) {
      this.carimage = carimage;
    }

    public CarDTO(String cid, String cname, String cprice, String ccate, String cdesc) {

      this.cid = cid;
      this.cname = cname;
      this.cprice = cprice;
      this.ccate = ccate;
      this.cdesc = cdesc;
      this.carimage = carimage;
    }

    public CarDTO() {

    }


}
```

Exception

Validation