Spring JFreeCharts

# #1 Add method in IShipmentTypeDao

**public List<Object[]> getShipmentCountByMode();**

# #2 Implement method in DaoImpl

**public List<Object[]> getShipmentCountByMode() {**

**String hql=" select shipmentMode,count(shipmentMode) "**

**+" from " + ShipmentType.class.getName()**

**+" group by shipmentMode ";**

**List<Object[]> list=(List<Object[]>)ht.find(hql);**

**return list;**

**}**

# #3 Copy method to IService and code for ServiceImpl

# #4 Define util class

**-------------\*\*\*-------------\*\*---------------**

**package com.app.util;**

**import java.io.File;**

**import java.io.IOException;**

**import java.util.List;**

**import org.jfree.chart.ChartFactory;**

**import org.jfree.chart.ChartUtils;**

**import org.jfree.chart.JFreeChart;**

**import org.jfree.data.general.DefaultPieDataset;**

**import org.springframework.stereotype.Component;**

**@Component**

**public class ShipmentTypeUtil {**

**public void generatePie(String path,List<Object[]> data) {**

**//data should be converted to DataSet**

**DefaultPieDataset dataset=new DefaultPieDataset();**

**for(Object[] ob:data) {**

**dataset.setValue(ob[0].toString(), new Double(ob[1].toString()));**

**}**

**//dataset should be converted to JFreeChart**

**// using ChartFactory**

**JFreeChart chart=ChartFactory.createPieChart3D("Shipment Type Mode", dataset, true, true, false);**

**//JFreeChart should be converted to Image**

**//using ChartUtils**

**try {**

**ChartUtils.saveChartAsJPEG(new File(path+"/resources/images/shipmentA.jpg"), chart, 400, 400);**

**} catch (IOException e) {**

**e.printStackTrace();**

**}**

**}**

**}**

**-----------------------------------------**

# #5 Make HAS-A relation between Controller and Util and define Export Data into Chart method

# \*\* in Controller class add

**@Autowired**

**private ServletContext context;**

**@Autowired**

**private ShipmentTypeUtil util;**

# \*\* define this method

**@RequestMapping("/charts")**

**public String showCharts() {**

**String path=context.getRealPath("/");**

**List<Object[]> list=service.getShipmentCountByMode();**

**System.out.println(path);**

**util.generatePie(path, list);**

**return "ShipmentTypeReports";**

**}**

# ------JSP: ShipmentTypeReports.jsp ---------

**<img src="../resources/images/shipmentA.jpg" />**

**-----------------------------------------**

# onetime setup:- for Images/CSS/JS files In AppConfig

**public class AppConfig**

**implements WebMvcConfigurer{**

**//all other methods**

**@Override**

**public void addResourceHandlers(ResourceHandlerRegistry registry) {**

**registry.addResourceHandler("/resources/\*\*")**

**.addResourceLocations("/resources/");**

**}**

**----------------------------------------**

**-> create folder resources under webapp**

**-> create folder images under resources**