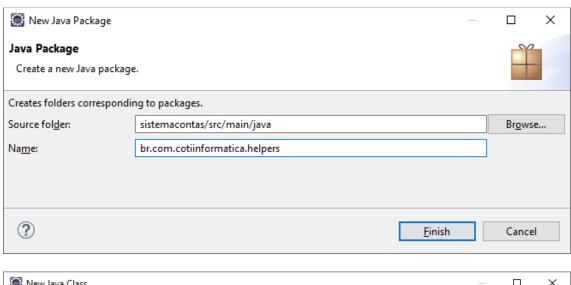
Desenvolvimento web com Spring MVC.

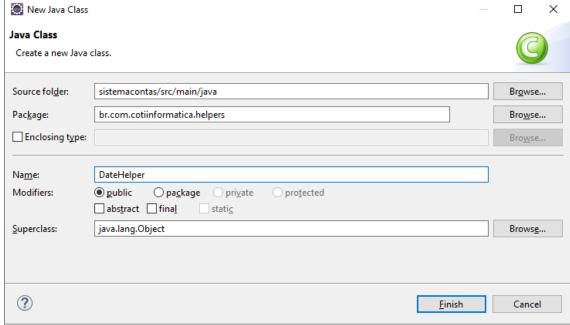
Aula 13

Tarefa:

Fazer com que a página de consulta já possa abrir exibindo as contas cadastradas para o mês atual (do primeiro ao ultimo dia do mês atual).

Criando uma classe auxiliar para retornar as das do primeiro dia do mês atual e do último dia do mês atual:





package br.com.cotiinformatica.helpers;
import java.text.SimpleDateFormat;
import java.util.Calendar;
import java.util.Date;
import java.util.GregorianCalendar;

public class DateHelper {



```
public static String getFirstDayOfMonth() {
           Calendar calendar = Calendar.getInstance();
           Date dataIni = new GregorianCalendar
                 (calendar.get(Calendar.YEAR),
                   calendar.get(Calendar.MONTH), 1).getTime();
           return new SimpleDateFormat("yyyy-MM-dd").format(dataIni);
      }
     public static String getLastDayOfMonth() {
           Calendar calendar = Calendar.getInstance();
           Date dataFim = new GregorianCalendar
                 (calendar.get(Calendar.YEAR),
                  calendar.get(Calendar.MONTH),
                       calendar.getActualMaximum
                       (Calendar.DAY_OF_MONTH)).getTime();
           return new SimpleDateFormat("yyyy-MM-dd").format(dataFim);
      }
}
/controller/ConsultaContasController.java
Programando para que a página já abra carregando as contas do mês atual.
package br.com.cotiinformatica.controller;
import java.text.SimpleDateFormat;
import java.util.Date;
import java.util.List;
import javax.servlet.http.HttpServletRequest;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
import org.springframework.web.servlet.ModelAndView;
import br.com.cotiinformatica.dtos.UsuarioDTO;
import br.com.cotiinformatica.entities.Conta;
import br.com.cotiinformatica.helpers.DateHelper;
import br.com.cotiinformatica.models.ConsultaContasModel;
import br.com.cotiinformatica.repositories.ContaRepository;
@Controller
public class ConsultaContasController {
```



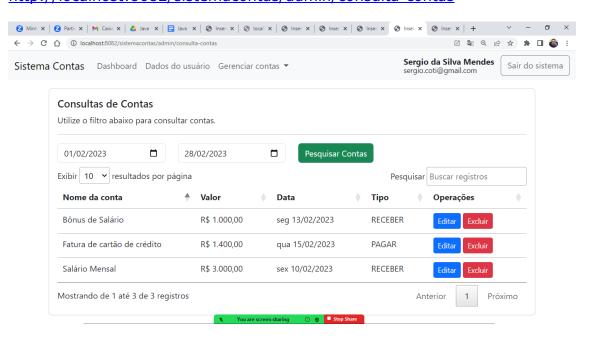
```
@Autowired //inicialização automática (injeção de dependência)
private ContaRepository contaRepository;
@RequestMapping(value = "/admin/consulta-contas")
public ModelAndView consultaContas(HttpServletRequest request) {
      //WEB-INF/views/admin/consulta-contas.jsp
     ModelAndView modelAndView
                  = new ModelAndView("admin/consulta-contas");
     ConsultaContasModel model = new ConsultaContasModel();
     try {
           model.setDataIni(DateHelper.getFirstDayOfMonth());
           model.setDataFim(DateHelper.getLastDayOfMonth());
            List<Conta> contas = obterConsultaDeContas
                                   (model, request);
           modelAndView.addObject("contas", contas);
      }
      catch(Exception e) {
           modelAndView.addObject("mensagem",
                  "Falha ao consultar contas: "
                  + e.getMessage());
      }
     modelAndView.addObject("model", model);
      return modelAndView;
}
@RequestMapping(value = "/admin/consultar-contas",
method = RequestMethod.POST)
public ModelAndView consultarContas
      (ConsultaContasModel model, HttpServletRequest request) {
     ModelAndView modelAndView = new ModelAndView
                              ("admin/consulta-contas");
     try {
           List<Conta> contas = obterConsultaDeContas
                                   (model, request);
           modelAndView.addObject("contas", contas);
      }
```



Desenvolvimento web com Spring MVC.

```
catch(Exception e) {
                 modelAndView.addObject("mensagem",
                 "Falha ao consultar contas: " + e.getMessage());
           }
           modelAndView.addObject("model", model);
           return modelAndView;
     }
     private List<Conta> obterConsultaDeContas(ConsultaContasModel
           model, HttpServletRequest request) throws Exception {
           //capturar os dados do usuário gravado em sessão
           UsuarioDTO usuarioDto = (UsuarioDTO) request.getSession()
                                   .getAttribute("usuario");
           //capturar as datas selecionadas no formulário
           Date dataIni = new SimpleDateFormat
                 ("yyyy-MM-dd").parse(model.getDataIni());
           Date dataFim = new SimpleDateFormat
                 ("yyyy-MM-dd").parse(model.getDataFim());
           //consultar as contas do usuário no banco de dados
           return contaRepository.findByUsuarioAndData
           (usuarioDto.getIdUsuario(), dataIni, dataFim);
     }
}
```

http://localhost:8082/sistemacontas/admin/consulta-contas

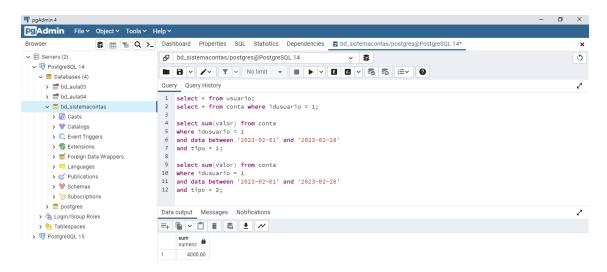


Desenvolvimento web com Spring MVC.

Aula 13

Desenvolvendo a página de dashboard:

Mostrar gráficos e totais na tela de apresentação do sistema.



Testando as consultas no banco de dados:

```
select * from usuario;
select * from conta where idusuario = 1;

select sum(valor) from conta
where idusuario = 1
and data between '2023-02-01' and '2023-02-28'
and tipo = 1;

select sum(valor) from conta
where idusuario = 1
and data between '2023-02-01' and '2023-02-28'
and tipo = 2;
```

/repositories/ContaRepository.java



Desenvolvimento web com Spring MVC.

```
java.sql.Date.valueOf(new SimpleDateFormat
            ("yyyy-MM-dd").format(dataFim)),
                 tipo
           };
           BigDecimal valor = jdbcTemplate.queryForObject
                  (query, params, BigDecimal.class);
            if(valor != null)
                 return valor.doubleValue();
           else
                 return 0;
}
Criando a página de dashboard:
/controller/DashboardController.java
package br.com.cotiinformatica.controller;
import java.text.SimpleDateFormat;
import java.util.Date;
import javax.servlet.http.HttpServletRequest;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.servlet.ModelAndView;
import br.com.cotiinformatica.dtos.UsuarioDTO;
import br.com.cotiinformatica.helpers.DateHelper;
import br.com.cotiinformatica.models.ConsultaContasModel;
import br.com.cotiinformatica.repositories.ContaRepository;
@Controller
public class DashboardController {
      @Autowired
     private ContaRepository contaRepository;
     @RequestMapping(value = "/admin/dashboard")
      public ModelAndView dashboard(HttpServletRequest request) {
           // WEB-INF/views/dashboard.jsp
           ModelAndView modelAndView
                 = new ModelAndView("admin/dashboard");
           try {
```

ConsultaContasModel model



```
= new ConsultaContasModel();
                   model.setDataIni(DateHelper.getFirstDayOfMonth());
                   model.setDataFim(DateHelper.getLastDayOfMonth());
                   UsuarioDTO usuarioDto = (UsuarioDTO)
                   request.getSession().getAttribute("usuario");
                   Date dataIni = new SimpleDateFormat
                         ("yyyy-MM-dd").parse(model.getDataIni());
                   Date dataFim = new SimpleDateFormat
                         ("yyyy-MM-dd").parse(model.getDataFim());
                   //enviar as informações para a página
                   modelAndView.addObject("model", model);
                   modelAndView.addObject("total contas receber",
                   contaRepository.sumByUsuarioAndData(usuarioDto.getId
                   Usuario(), dataIni, dataFim, 1));
                   modelAndView.addObject("total_contas_pagar",
                   contaRepository.sumByUsuarioAndData(usuarioDto.getId
                   Usuario(), dataIni, dataFim, 2));
            catch(Exception e) {
                   modelAndView.addObject("mensagem", "Falha ao
                         carregar dashboard: " + e.getMessage());
            }
            return modelAndView;
      }
}
Desenhando a página de Dashboard:
/WEB-INF/views/admin/dashboard.jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
   pageEncoding="ISO-8859-1"%>
<%@ taglib uri="http://www.springframework.org/tags/form" prefix="form" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/fmt" prefix="fmt" %>
<!DOCTYPE html>
<html>
<head>
      <meta charset="ISO-8859-1">
      <title>Insert title here</title>
      <!-- CDN da folha de estilos CSS do bootstrap -->
      <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-</pre>
            alpha1/dist/css/bootstrap.min.css" rel="stylesheet" />
```



```
<style>
              label.error { color: #df4759; }
              input.error, textarea.error { border: 2px solid #df4759; }
</head>
<body>
       <!-- menu superior da aplicação -->
       <jsp:include page="/WEB-INF/views/admin/components/navbar.jsp"></jsp:include>
       <div class="container mt-3">
              <div class="card">
                      <div class="card-body">
                             <h5>Dashboard</h5>
                             Seja bem vindo ao sistema de gestão de contas.
                             <hr/>
                             <div class="mb-2">
                                     <strong>${mensagem}</strong>
                             </div>
                             <form id="form_consulta"</pre>
                             action="filtrar-dashboard" method="post">
                                     <div class="row mb-2">
                                            <div class="col-md-3">
                                                    <form:input type="date"</pre>
                                                    path="model.dataIni" id="dataIni"
                                                    name="dataIni" class="form-
                                                    control"/>
                                            </div>
                                            <div class="col-md-3">
                                                    <form:input type="date"</pre>
                                                    path="model.dataFim" id="dataFim"
                                                    name="dataFim" class="form-
                                                    control"/>
                                            </div>
                                            <div class="col-md-6">
                                                    <input type="submit" class="btn</pre>
                                                    btn-success"
                                                    value="Filtrar Resultados"/>
                                            </div>
                                     </div>
                             </form>
                             <div class="row mt-3 mb-3">
                                     <div class="col-md-5">
                                            <div class="alert alert-success mb-2">
                                                    <div class="row">
                                                           <div class="col-md-8">
                                                                  Total de contas
                                                                   a receber:
                                                           </div>
                                                           <div class="col-md-4">
                                                                   <strong>
                                                           <fmt:formatNumber
                                                                  value="${total contas
                                                                   receber}"
                                                                   type="currency"/>
                                                                   </strong>
```



</div>

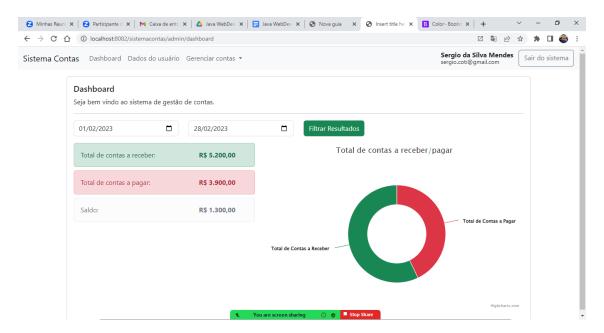
```
</div>
                                     </div>
                                     <div class="alert alert-danger mb-2">
                                            <div class="row">
                                                    <div class="col-md-8">
                                                           Total de contas a
                                                           pagar:
                                                    </div>
                                                    <div class="col-md-4">
                                                           <strong>
                                                    <fmt:formatNumber
                                                    value="${total_contas_pagar}
                                                    " type="currency"/>
                                                           </strong>
                                                    </div>
                                            </div>
                                     </div>
                                     <div class="alert alert-light mb-2">
                                            <div class="row">
                                                    <div class="col-md-8">
                                                           Saldo:
                                                    </div>
                                                    <div class="col-md-4">
                                                           <strong>
                                                    <fmt:formatNumber
                                                    value="${total_contas_recebe
                                                    r - total_contas_pagar}"
                                                    type="currency"/>
                                                           </strong>
                                                    </div>
                                            </div>
                                     </div>
                             </div>
                             <div class="col-md-7">
                                     <div id="grafico"></div>
                             </div>
                      </div>
              </div>
       </div>
</div>
<!-- CDN do arquivo javascript do bootstrap -->
<script src="https://cdn.jsdelivr.net/npm/bootstrap</pre>
       @5.3.0-alpha1/dist/js/bootstrap.bundle.min.js"></script>
<!-- CDN do arquivo javascript do JQuery -->
<script src="https://code.jquery.com/jquery-3.6.3.min.js"></script>
<!-- CDN dos arquivos da biblioteca JQuery Validation -->
<script src="https://cdnjs.cloudflare.com/ajax/libs/jquery-</pre>
       validate/1.19.5/jquery.validate.min.js"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/jquery-</pre>
       validate/1.19.5/additional-methods.min.js"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/jquery-</pre>
       validate/1.19.5/localization/messages_pt_BR.min.js"></script>
<!-- CDN dos arquivos da biblioteca Highcharts -->
<script src="https://code.highcharts.com/highcharts.js"></script>
```



Desenvolvimento web com Spring MVC.

```
<script>
              $(document).ready(function() {
                      $("#form_consulta").validate({
                              rules: {
                                      'dataIni' : {    required: <mark>true</mark> },
                                     'dataFim' : { required: true }
                              }
                      });
                      var dados = [];
                      dados.push(['Total de Contas a Pagar', ${total_contas_pagar}]);
                      dados.push(['Total de Contas a Receber',
                                     ${total_contas_receber}]);
                      new Highcharts.Chart({
                              chart: { type : 'pie', renderTo: 'grafico' },
                              title: { text : 'Total de contas a receber/pagar' },
                              plotOptions: {
                                     pie: { innerSize: '60%' }
                              },
                              series: [ { data: dados } ],
                              colors: ['#dc3545', '#198754']
                      });
              })
       </script>
</body>
</html>
```

http://localhost:8082/sistemacontas/admin/dashboard





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Desenvolvimento web com Spring MVC.

No controlador, vamos criar um método para consultar os valores do dashboard por um período de datas diferente:

```
package br.com.cotiinformatica.controller;
import java.text.SimpleDateFormat;
import java.util.Date;
import javax.servlet.http.HttpServletRequest;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
import org.springframework.web.servlet.ModelAndView;
import br.com.cotiinformatica.dtos.UsuarioDTO;
import br.com.cotiinformatica.helpers.DateHelper;
import br.com.cotiinformatica.models.ConsultaContasModel;
import br.com.cotiinformatica.repositories.ContaRepository;
@Controller
public class DashboardController {
       @Autowired
       private ContaRepository contaRepository;
       @RequestMapping(value = "/admin/dashboard")
       public ModelAndView dashboard(HttpServletRequest request) {
              // WEB-INF/views/dashboard.jsp
              ModelAndView modelAndView = new ModelAndView("admin/dashboard");
              try {
                      ConsultaContasModel model = new ConsultaContasModel();
                      model.setDataIni(DateHelper.getFirstDayOfMonth());
                      model.setDataFim(DateHelper.getLastDayOfMonth());
                      UsuarioDTO usuarioDto = (UsuarioDTO) request.getSession()
                             .getAttribute("usuario");
                      Date dataIni = new SimpleDateFormat
                             ("yyyy-MM-dd").parse(model.getDataIni());
                      Date dataFim = new SimpleDateFormat
                             ("yyyy-MM-dd").parse(model.getDataFim());
                      //enviar as informações para a página
                      modelAndView.addObject("model", model);
                      modelAndView.addObject("total_contas_receber",
                             contaRepository.sumByUsuarioAndData
                             (usuarioDto.getIdUsuario(), dataIni, dataFim, 1));
```



}

Treinamento - Java WebDeveloper Sexta-feira, 10 de Fevereiro de 2023

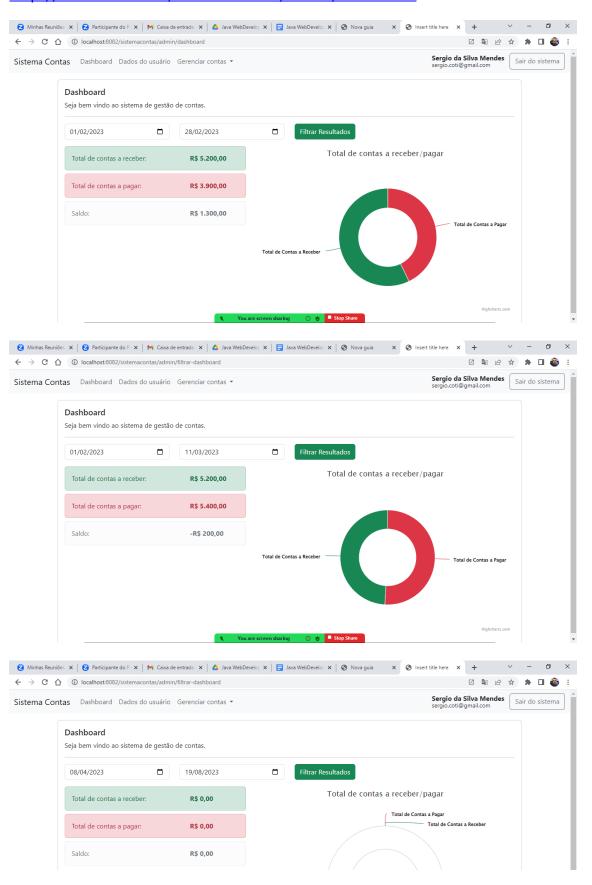
```
modelAndView.addObject("total_contas_pagar",
                      contaRepository.sumByUsuarioAndData
                      (usuarioDto.getIdUsuario(), dataIni, dataFim, 2));
       catch(Exception e) {
              modelAndView.addObject
              ("mensagem", "Falha ao carregar dashboard: " + e.getMessage());
       }
       return modelAndView;
}
@RequestMapping(value = "/admin/filtrar-dashboard",
method = RequestMethod.POST)
public ModelAndView filtrarDashboard(ConsultaContasModel model,
                                    HttpServletRequest request) {
       ModelAndView modelAndView = new ModelAndView("admin/dashboard");
       try {
              UsuarioDTO usuarioDto = (UsuarioDTO) request.getSession()
                      .getAttribute("usuario");
              Date dataIni = new SimpleDateFormat
                      ("yyyy-MM-dd").parse(model.getDataIni());
              Date dataFim = new SimpleDateFormat
                      ("yyyy-MM-dd").parse(model.getDataFim());
              //enviar as informações para a página
              modelAndView.addObject("model", model);
              modelAndView.addObject("total_contas_receber",
                             contaRepository.sumByUsuarioAndData
                             (usuarioDto.getIdUsuario(), dataIni, dataFim, 1));
              modelAndView.addObject("total_contas_pagar",
                             contaRepository.sumByUsuarioAndData
                             (usuarioDto.getIdUsuario(), dataIni, dataFim, 2));
       catch(Exception e) {
              modelAndView.addObject("mensagem",
                      "Falha ao carregar dashboard: " + e.getMessage());
       }
       return modelAndView;
}
```



Desenvolvimento web com Spring MVC.

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http://localhost:8082/sistemacontas/admin/dashboard





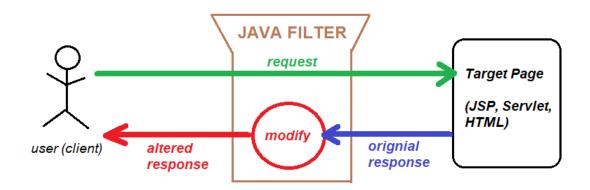
Desenvolvimento web com Spring MVC.

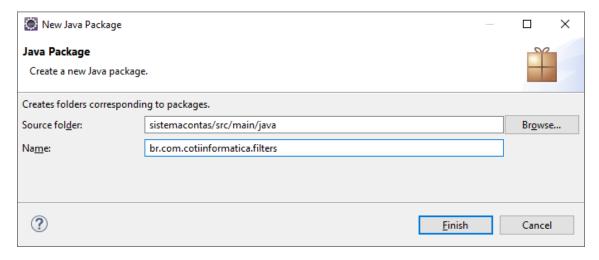
Aula 13

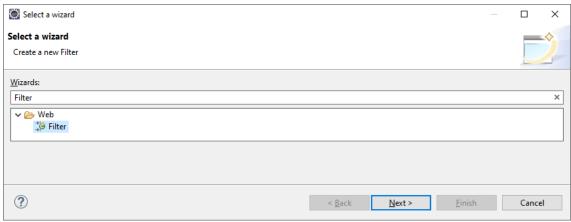
Filters

São componentes de aplicação Java que conseguem interceptar a navegação do usuário em uma aplicação. Vamos utilizar os filters para interceptar cada navegação feita pelo usuário e verificar se o mesmo tem permissão para acessar a página desejada.

Em resumo, todas as navegações deste sistema que acessam alguma página dentro de um diretório /**admin** só serão permitidas se o usuário tiver uma sessão criada no navegador (está autenticado).

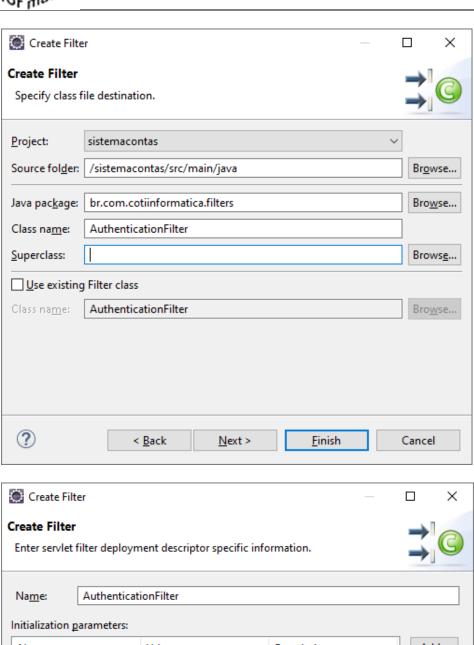








Aula 13





package br.com.cotiinformatica.filters;

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```
import java.io.IOException;
import javax.servlet.Filter;
import javax.servlet.FilterChain;
import javax.servlet.FilterConfig;
import javax.servlet.ServletException;
import javax.servlet.ServletRequest;
import javax.servlet.ServletResponse;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
public class AuthenticationFilter implements Filter {
       public AuthenticationFilter() {
       }
       public void destroy() {
       }
       //Método executado sempre que uma página/rota é acessada no sistema
       public void doFilter(ServletRequest request, ServletResponse response,
                      FilterChain chain)
                      throws IOException, ServletException {
              HttpServletRequest req = (HttpServletRequest) request;
              HttpServletResponse resp = (HttpServletResponse) response;
              //verificando se o usuário esta acessando uma página/rota
              //contida em /admin
              if(req.getServletPath().contains("admin/")) {
                      //verificar se o usuário não está autenticado (sessão)
                      if(req.getSession().getAttribute("usuario") == null) {
                             //redirecionar para a página inicial
                             //do sistema (autenticar)
                             resp.sendRedirect("/sistemacontas/");
                      }
              }
              chain.doFilter(request, response);
       public void init(FilterConfig fConfig) throws ServletException {
       }
}
```

Desenvolvimento web com Spring MVC.

Aula 13

Curiosidade:

O Filter fica mapeado no arquivo: /web.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app version="2.4" xmlns="http://java.sun.com/xml/ns/j2ee"</pre>
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xsi:schemaLocation="http://java.sun.com/xml/ns/j2ee
     http://java.sun.com/xml/ns/j2ee/web-app_2_4.xsd">
     <display-name>sistemacontas</display-name>
     <context-param>
           <param-name>contextClass</param-name>
           <param-value>
                 org.springframework.web.context.support
                  .AnnotationConfigWebApplicationContext
           </param-value>
     </context-param>
     <filter>
           <description>
           </description>
           <display-name>AuthenticationFilter</display-name>
           <filter-name>AuthenticationFilter</filter-name>
           <filter-class>
                 br.com.cotiinformatica.filters.AuthenticationFilter
           </filter-class>
     </filter>
     <filter-mapping>
           <filter-name>AuthenticationFilter</filter-name>
           <url-pattern>/*</url-pattern>
     </filter-mapping>
     tener>
           tener-class>
           org.springframework.web.context.ContextLoaderListener
     </listener-class>
     </listener>
     <servlet>
           <servlet-name>SpringDispatcher</servlet-name>
           <servlet-class>
                 org.springframework.web.servlet.DispatcherServlet
           </servlet-class>
           <init-param>
                  <param-name>contextClass</param-name>
                  <param-value>
                       org.springframework.web.context.support
                        .AnnotationConfigWebApplicationContext
```

Desenvolvimento web com Spring MVC.

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```
</param-value>
            </init-param>
            <init-param>
                  <param-name>contextConfigLocation</param-name>
                  <param-value>br.com.cotiinformatica</param-value>
            </init-param>
            <load-on-startup>1</load-on-startup>
      </servlet>
      <servlet-mapping>
            <servlet-name>SpringDispatcher</servlet-name>
            <url-pattern>/</url-pattern>
      </servlet-mapping>
      <session-config>
            <session-timeout>30</session-timeout>
      </session-config>
</web-app>
```

Enviando o trabalho para o GITHUB:

```
Samsung@DESKTOP-P9F6D9F MINGW64 ~/Desktop/COTI - Aulas/2023 - Java WebDeveloper SQS 18h as 22h (Início em 09.01)/workspace/sistemacontas (main)

$ git add .

Samsung@DESKTOP-P9F6D9F MINGW64 ~/Desktop/COTI - Aulas/2023 - Java WebDeveloper SQS 18h as 22h (Início em 09.01)/workspace/sistemacontas (main)

$ git commit -m 'Dashboard, filtros e customizações'

Samsung@DESKTOP-P9F6D9F MINGW64 ~/Desktop/COTI - Aulas/2023 - Java WebDeveloper SQS 18h as 22h (Início em 09.01)/workspace/sistemacontas (main)

$ git push -u origin main
```

```
MNXWW4//Uber/Samung/Desktop/COT: Aular/2021 Java WebDevolope 505 l8h as 22h (Inicio em 09.01) /workspace/sistemacontas

Samsung@DESKTOP-P9F609F MINGw64 ~/Desktop/COTI - Aulas/2023 - Java WebDeveloper
SQS 18h as 22h (Inicio em 09.01) /workspace/sistemacontas (main)
$ git add .

Samsung@DESKTOP-P9F609F MINGw64 ~/Desktop/COTI - Aulas/2023 - Java WebDeveloper SQS 18h as 22h (Inicio em 09.01) /workspace /sistemacontas (main)
$ git commit - m' 'Dashboard, filtros e customizações'
Imain afabil12] Dashboard, filtros e customizações
30 files changed, 704 insertions(+), 41 deletions(-)
create mode 100644 src/main/java/br/com/cotiinformatica/controller/ExclusaoContasController.java
create mode 100644 src/main/java/br/com/cotiinformatica/filters/AuthenticationFilter.java
create mode 100644 src/main/java/br/com/cotiinformatica/holeps/SdicacocontasModel.java
create mode 100644 target/classes/br/com/cotiinformatica/models/EdicacocontasModel.java
create mode 100644 target/classes/br/com/cotiinformatica/holeps/Sdatedelper.java
create mode 100644 target/classes/br/com/cotiinformatica/holeps/Sdatedelper.class
create mode 100644 target/classes/br/com/cotiinformatica/holeps/Sdatedelper.class
create mode 100644 target/classes/br/com/cotiinformatica/holeps/Sdatedelper.class
create mode 100644 target/classes/br/com/cotiinformatica/models/EdicacocontasModel.class

Samsung@DESKTOP-P9F609F MINGw64 ~/Desktop/COTI ~ Aulas/2023 ~ Java WebDeveloper SQS 18h as 22h (Inicio em 09.01)/workspace
/sistemacontas (main)

§ git push ~ u origin main
Enumerating objects: 100% (103/103), done.
Delta compression using up to 8 threads
Compressing objects: 100% (103/103), done.
Delta compression using up to 8 threads
Compressing objects: 100% (103/103), done.
Delta compression using up to 8 threads
Compressing objects: 100% (103/103), done.
Delta compression using up to 8 threads
Compressing objects: 100% (103/103), done.
Delta compression using up to 8 threads
Compression using up to 8 threads
Compression using up to 8 threads
Compression using up to 8 t
```