

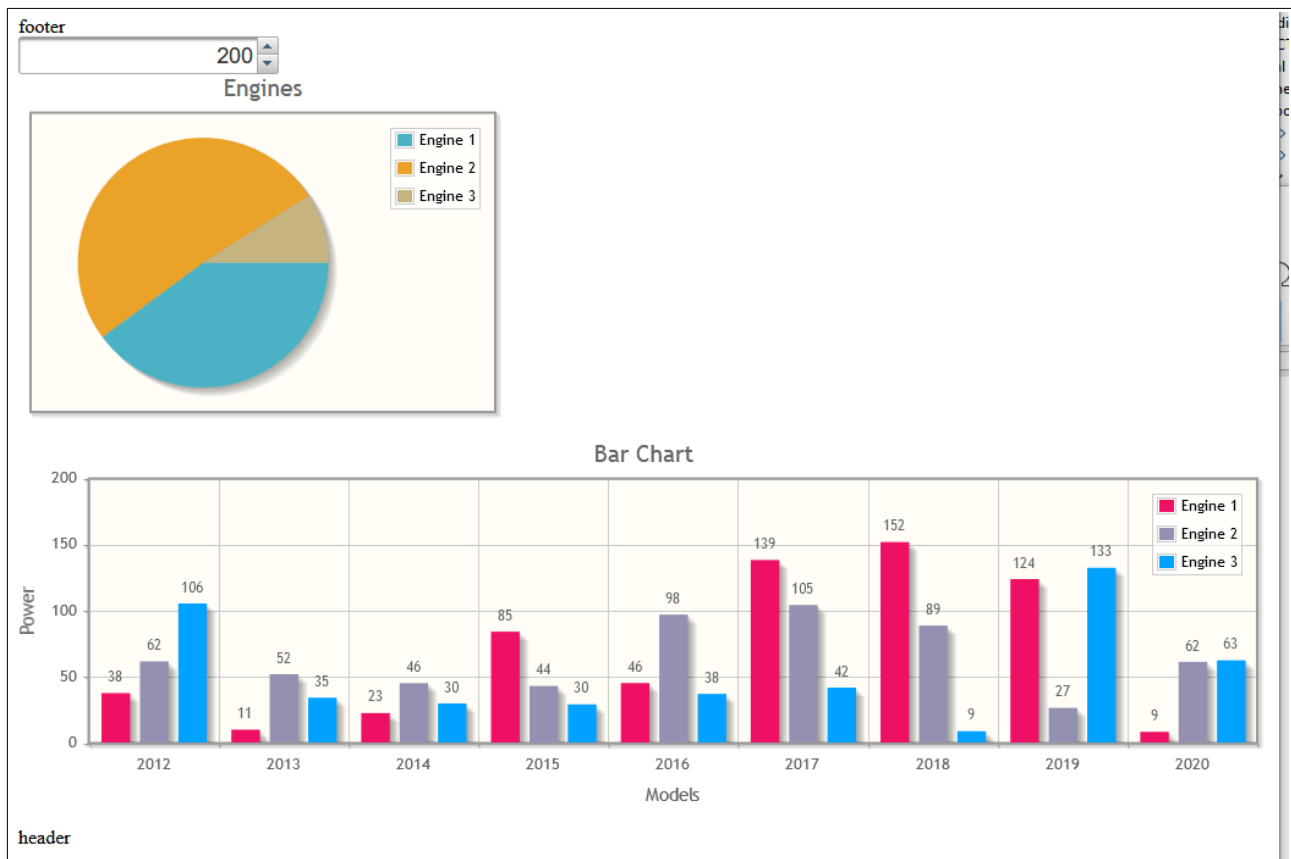
```
1 index.jsp
2 menu.jsp
3 META-INF\MANIFEST.MF
4 prime.xhtml
5 test.xhtml
6 WEB-INF\faces-config.xml
7 WEB-INF\lib\javax.faces-2.2.4.jar
8 WEB-INF\lib\primefaces-6.2.jar
9 WEB-INF\pages\test.xhtml
10 WEB-INF\template\footer.xhtml
11 WEB-INF\template\header.xhtml
12 WEB-INF\template\template.xhtml
13 WEB-INF\web.xml
```

Пребројано је 13 ставки.

## BOOKS APP MENU

[Prime](#)  
[Test](#)

[Menu](#)  
[Index](#)



100

- src
  - bean
    - FileListingBean.java
  - org.unibl.etf.prime
    - ChartModel.java

- WebContent
  - META-INF
  - WEB-INF
    - lib
      - javax.faces-2.2.4.jar
      - primefaces-6.2.jar
    - pages
      - test.xhtml
    - template
      - footer.xhtml
      - header.xhtml
      - template.xhtml
  - faces-config.xml
  - web.xml
  - index.jsp
  - menu.jsp
  - prime.xhtml
  - test.xhtml

## web.xml

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://xmlns.jcp.org/xml/ns/javaee" xsi:schemaLocation=
3 <display-name>048_IP_Predavanja ETF JSF PRIME</display-name>
4 <welcome-file-list>
5 <welcome-file>index.html</welcome-file>
6 <welcome-file>index.htm</welcome-file>
7 <welcome-file>index.jsp</welcome-file>
8 <welcome-file>default.html</welcome-file>
9 <welcome-file>default.htm</welcome-file>
10 <welcome-file>default.jsp</welcome-file>
11 </welcome-file-list>
12 <servlet>
13 <servlet-name>Faces Servlet</servlet-name>
14 <servlet-class>javax.faces.webapp.FacesServlet</servlet-class>
15 <load-on-startup>1</load-on-startup>
16 </servlet>
17 <servlet-mapping>
18 <servlet-name>Faces Servlet</servlet-name>
19 <url-pattern>/faces/*</url-pattern>
20 </servlet-mapping>
21 <context-param>
22 <description>State saving method: 'client' or 'server' (=default). See JSF Specification 2.5.2</description>
23 <param-name>javax.faces.STATE_SAVING_METHOD</param-name>
24 <param-value>client</param-value>
25 </context-param>
26 <context-param>
27 <param-name>javax.servlet.jsp.jstl.fmt.localizationContext</param-name>
28 <param-value>resources.application</param-value>
29 </context-param>
30 <listener>
31 <listener-class>com.sun.faces.config.ConfigureListener</listener-class>
32 </listener>
33 </web-app>
```

## menu.jsp

```
1 <%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>
2 <!DOCTYPE html>
3 <html>
4 <head>
5 <meta charset="UTF-8">
6 <title>Books Application API Menu</title>
7 </head>
8 <body>
9 <h3>BOOKS APP MENU</h3>
10 <dl>
11 <dd><a href='${pageContext.request.contextPath}/faces/prime.xhtml'>Prime</a></dd>
12 <dd><a href='${pageContext.request.contextPath}/faces/test.xhtml'>Test</a></dd>
13 </dl>
14 <br>
15 <dl>
16 <dd><a href='${pageContext.request.contextPath}/menu.jsp'>Menu</a></dd>
17 <dd><a href='${pageContext.request.contextPath}/index.jsp'>Index</a></dd>
18 </dl>
19 </body>
20 </html>
```

```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <faces-config
3     xmlns="http://xmlns.jcp.org/xml/ns/javaee"
4     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
5     xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-facesconfig_2_2.xsd"
6     version="2.2">
7
8 </faces-config>
9

```

prime.xhtml

```

1 <html xmlns="http://www.w3.org/1999/xhtml"
2     xmlns:h="http://java.sun.com/jsf/html"
3     xmlns:f="http://java.sun.com/jsf/core"
4     xmlns:p="http://primefaces.org/ui">
5
6 <h:head>
7 </h:head>
8
9 <h:body>
10     <p:spinner />
11 </h:body>
12 </html>

```

test.xhtml

```

1 <html xmlns="http://www.w3.org/1999/xhtml"
2     xmlns:ui="http://xmlns.jcp.org/jsf/facelets"
3     xmlns:h="http://xmlns.jcp.org/jsf/html"
4     xmlns:f="http://xmlns.jcp.org/jsf/core">
5
6 <h:head>
7 </h:head>
8 <h:body>
9     <ui:composition template="/WEB-INF/template/template.xhtml">
10         <ui:define name="header">
11             <ui:include src="/WEB-INF/template/header.xhtml"></ui:include>
12         </ui:define>
13         <ui:define name="content">
14             <ui:include src="/WEB-INF/pages/test.xhtml"></ui:include>
15         </ui:define>
16         <ui:define name="footer">
17             <ui:include src="/WEB-INF/template/footer.xhtml"></ui:include>
18         </ui:define>
19     </ui:composition>
20 </h:body>
21 </html>

```

## template.xhtml

```
1 <html xmlns="http://www.w3.org/1999/xhtml"
2     xmlns:ui="http://java.sun.com/jsf/facelets"
3     xmlns:h="http://java.sun.com/jsf/html"
4     xmlns:f="http://java.sun.com/jsf/core"
5     xmlns:p="http://primefaces.org/ui">
6 <h:head>
7   <title><ui:insert name="title">Default title</ui:insert></title>
8 </h:head>
9
10 <body>
11
12 <div id="footer">
13   <ui:insert name="footer">
14     <!-- include your footer file or uncomment the include below and create footer.xhtml in this directory -->
15     <ui:include src="footer.xhtml"/>
16   </ui:insert>
17 </div>
18
19
20 <div id="content">
21   <ui:insert name="content">
22     Content area. See comments below this line in the source.
23     <!-- include your content file or uncomment the include below and create content.xhtml in this directory -->
24     <!-- <div> -->
25     <!-- <ui:include src="content.xhtml"/> -->
26     <!-- </div> -->
27   </ui:insert>
28 </div>
29
30 <div id="header">
31   <ui:insert name="header">
32     <!-- include your header file or uncomment the include below and create header.xhtml in this directory -->
33     <ui:include src="header.xhtml"/>
34   </ui:insert>
35 </div>
36
37 </body>
38
39 </html>
40
```

## footer.xhtml

```
1 <html xmlns="http://www.w3.org/1999/xhtml"
2     xmlns:ui="http://java.sun.com/jsf/facelets"
3     xmlns:h="http://java.sun.com/jsf/html"
4     xmlns:f="http://java.sun.com/jsf/core">
5   <ui:composition>
6     footer
7   </ui:composition>
8 </html>
9
```

## header.xhtml

```
1 <html xmlns="http://www.w3.org/1999/xhtml"
2     xmlns:ui="http://java.sun.com/jsf/facelets"
3     xmlns:h="http://java.sun.com/jsf/html"
4     xmlns:f="http://java.sun.com/jsf/core">
5   <ui:composition>
6     header
7   </ui:composition>
8 </html>
9
```

```

1 <html xmlns="http://www.w3.org/1999/xhtml"
2   xmlns:ui="http://java.sun.com/jsf/facelets"
3   xmlns:h="http://java.sun.com/jsf/html"
4   xmlns:f="http://java.sun.com/jsf/core"
5   xmlns:p="http://primefaces.org/ui">
6 <ui:composition>
7   <h:form>
8     <p:spinner id="spinner" value="#{chartModel.max}">
9       <f:ajax execute="@this" render="bar"></f:ajax>
10    </p:spinner>
11    <p:poll interval="3" update="pie" />
12    <p:chart id="pie" type="pie" model="#{chartModel.livePieModel}"
13      style="width:400px;height:300px" />
14    <p:poll interval="3" update="bar" />
15    <p:chart id="bar" type="bar" model="#{chartModel.liveBarModel}"
16      style="height:300px"></p:chart>
17  </h:form>
18 </ui:composition>
19 </html>

```

## ChartModel.java

```

1 package org.unibl.etf.prime;
2
3 import java.io.Serializable;
4
5 import javax.annotation.PostConstruct;
6 import javax.faces.bean.ManagedBean;
7
8 import org.primefaces.model.chart.Axis;
9 import org.primefaces.model.chart.AxisType;
10 import org.primefaces.model.chart.BarChartModel;
11 import org.primefaces.model.chart.ChartSeries;
12 import org.primefaces.model.chart.PieChartModel;
13
14 @ManagedBean
15 public class ChartModel implements Serializable {
16
17     /**
18      *
19      */
20     private static final long serialVersionUID = 1L;
21     private PieChartModel livePieModel;
22     private BarChartModel liveBarModel;
23     private Integer max = 200;
24
25     @PostConstruct
26     public void init() {
27         initLivePieModel();
28         initLiveBarModel();
29     }

```

```
public PieChartModel getLivePieModel() {  
    int random1 = (int) (Math.random() * 1000);  
    int random2 = (int) (Math.random() * 1000);  
    int random3 = (int) (Math.random() * 1000);  
  
    livePieModel.getData().put("Engine 1", random1);  
    livePieModel.getData().put("Engine 2", random2);  
    livePieModel.getData().put("Engine 3", random3);  
  
    livePieModel.setTitle("Engines");  
    livePieModel.setLegendPosition("ne");  
  
    return livePieModel;  
}
```

```
private BarChartModel initLiveBarModel() {  
    liveBarModel = new BarChartModel();  
    return liveBarModel;  
}  
  
private void initLivePieModel() {  
    livePieModel = new PieChartModel();  
  
    livePieModel.set("Engine 1", 54);  
    livePieModel.set("Engine 2", 32);  
    livePieModel.set("Engine 3", 35);  
}  
  
public Integer getMax() {  
    return max;  
}  
  
public void setMax(Integer max) {  
    this.max = max;  
}
```



```

46 public BarChartModel getLiveBarModel() {
47
48     ChartSeries engine1 = new ChartSeries();
49     engine1.setLabel("Engine 1");
50     engine1.set("2012", 100 * Math.random());
51     engine1.set("2013", 44 * Math.random());
52     engine1.set("2014", 150 * Math.random());
53     engine1.set("2015", 90 * Math.random());
54     engine1.set("2016", 80 * Math.random());
55     engine1.set("2017", 160 * Math.random());
56     engine1.set("2018", 200 * Math.random());
57     engine1.set("2019", 180 * Math.random());
58     engine1.set("2020", 200 * Math.random());
59
60     ChartSeries engine2 = new ChartSeries();
61     engine2.setLabel("Engine 2");
62     engine2.set("2012", 135 * Math.random());
63     engine2.set("2013", 120 * Math.random());
64     engine2.set("2014", 52 * Math.random());
65     engine2.set("2015", 60 * Math.random());
66     engine2.set("2016", 110 * Math.random());
67     engine2.set("2017", 135 * Math.random());
68     engine2.set("2018", 120 * Math.random());
69     engine2.set("2019", 180 * Math.random());
70     engine2.set("2020", 200 * Math.random());
71
72     ChartSeries engine3 = new ChartSeries();
73     engine3.setLabel("Engine 3");
74     engine3.set("2012", 145 * Math.random());
75     engine3.set("2013", 160 * Math.random());
76     engine3.set("2014", 70 * Math.random());
77     engine3.set("2015", 30 * Math.random());
78     engine3.set("2016", 130 * Math.random());
79     engine3.set("2017", 125 * Math.random());
80     engine3.set("2018", 110 * Math.random());
81     engine3.set("2019", 180 * Math.random());
82     engine3.set("2020", 200 * Math.random());
83
84     liveBarModel.addSeries(engine1);
85     liveBarModel.addSeries(engine2);
86     liveBarModel.addSeries(engine3);
87     liveBarModel.setTitle("Bar Chart");
88     liveBarModel.setLegendPosition("ne");
89
90     Axis xAxis = liveBarModel.getAxis(AxisType.X);
91     xAxis.setLabel("Models");
92
93     Axis yAxis = liveBarModel.getAxis(AxisType.Y);
94     yAxis.setLabel("Power");
95     yAxis.setMin(0);
96     yAxis.setMax(max);
97     liveBarModel.setShowPointLabels(true);
98     liveBarModel.setSeriesColors("ed1065, 9490b2, 00a1ff");
99     return liveBarModel;
100 }

```