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1  <?xml version="1.0" encoding="UTF-8"?>
2
3  <?import javafx.geometry.Insets?>
4  <?import javafx.scene.control.Button?>
5  <?import javafx.scene.control.CheckBox?>
6  <?import javafx.scene.control.Label?>
7  <?import javafx.scene.control.ScrollPane?>
8  <?import javafx.scene.control.Separator?>
9  <?import javafx.scene.control.TextField?>
10 <?import javafx.scene.control.Tooltip?>
11 <?import javafx.scene.layout.AnchorPane?>
12 <?import javafx.scene.layout.ColumnConstraints?>
13 <?import javafx.scene.layout.GridPane?>
14 <?import javafx.scene.layout.HBox?>
15 <?import javafx.scene.layout.RowConstraints?>
16 <?import javafx.scene.layout.VBox?>
17 <?import javafx.scene.text.Font?>
18
19 <AnchorPane fx:id="rootAnchor" prefHeight="500.0"
  xmlns="http://javafx.com/javafx/10.0.1" xmlns:fx="http://javafx.com/fxml/1"
  fx:controller="hyperDap.guiPres.views.honoursMainView.HonoursMainController">
20   <children>
21     <ScrollPane fx:id="rootScroll" fitToWidth="true" hbarPolicy="NEVER"
      layoutY="0.3333333432674408" pannable="true" AnchorPane.bottomAnchor="0.0"
      AnchorPane.leftAnchor="0.0" AnchorPane.rightAnchor="0.0"
      AnchorPane.topAnchor="0.0">
22       <content>
23         <VBox fx:id="bigBox" alignment="TOP_CENTER" spacing="10.0">
24           <children>
25             <Label fx:id="generatorLabel" text="Data Generation">
26               <font>
27                 <Font size="14.0" />
28               </font>
29             </Label>
30             <GridPane alignment="TOP_CENTER" hgap="10.0" vgap="5.0">
31               <columnConstraints>
32                 <ColumnConstraints halignment="CENTER" hgrow="SOMETIMES"
33                   minWidth="10.0" />
34                 <ColumnConstraints hgrow="SOMETIMES" minWidth="10.0" />
35                 <ColumnConstraints halignment="CENTER" hgrow="SOMETIMES"
36                   minWidth="10.0" />
37               </columnConstraints>
38               <rowConstraints>
39                 <RowConstraints minHeight="20.0" prefHeight="30.0"
40                   vgrow="SOMETIMES" />
41                 <RowConstraints minHeight="20.0" prefHeight="30.0"
42                   vgrow="SOMETIMES" />
43                 <RowConstraints minHeight="20.0" prefHeight="30.0"
44                   vgrow="SOMETIMES" />
45                 <RowConstraints minHeight="20.0" prefHeight="30.0"
46                   vgrow="SOMETIMES" />
47               </rowConstraints>
48               <children>
49                 <Label text="Base" />
50                 <TextField fx:id="baseField" onAction="#execute"
51                   promptText="Where the data starts." text="0.0"
52                   GridPane.columnIndex="1">
53                   <tooltip>
54                     <Tooltip text="The first xValue in the data i.e. where
55                       it starts." />
56                   </tooltip></TextField>
57                 <Button fx:id="baseRandButton" mnemonicParsing="false"
58                   onAction="#baseDefault" text="Default"
59                   GridPane.columnIndex="2" />
60                 <Label text="Step" GridPane.rowIndex="1" />
61                 <TextField fx:id="stepField" onAction="#execute"
62                   promptText="The distance between data points." text="1.0"
63                   GridPane.columnIndex="1" GridPane.rowIndex="1">
64                   <tooltip>
65                     <Tooltip text="The distance between data points on the
66                       x-axis." />
67                   </tooltip></TextField>

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54         <Button fx:id="stepRandButton" mnemonicParsing="false"
onAction="#stepDefault" text="Default"
GridPane.columnIndex="2" GridPane.rowIndex="1" />
55         <Label text="Length" GridPane.rowIndex="2" />
56         <TextField fx:id="lengthField" onAction="#execute"
promptText="The number of data points." text="50"
GridPane.columnIndex="1" GridPane.rowIndex="2">
57             <tooltip>
58                 <Tooltip text="The number of data points." />
59             </tooltip></TextField>
60         <Button fx:id="lengthRandButton" mnemonicParsing="false"
onAction="#lengthDefault" text="Default"
GridPane.columnIndex="2" GridPane.rowIndex="2" />
61         <Label text="Precision" GridPane.rowIndex="3" />
62         <TextField fx:id="precisionField" layoutX="136.0"
layoutY="83.0" onAction="#execute" promptText="Used to
ignore Noise" text="0.01" GridPane.columnIndex="1"
GridPane.rowIndex="3">
63             <tooltip>
64                 <Tooltip text="Ths number is used to cut away noise,
(set to 0.01)." />
65             </tooltip>
66         </TextField>
67         <Button fx:id="precisionRandButton" layoutX="380.0"
layoutY="83.0" mnemonicParsing="false"
onAction="#precisionDefault" text="Default"
GridPane.columnIndex="2" GridPane.rowIndex="3" />
68     </children>
69     <padding>
70         <Insets left="10.0" right="10.0" />
71     </padding>
72 </GridPane>
73 <Separator prefWidth="200.0">
74     <padding>
75         <Insets bottom="5.0" left="20.0" right="20.0" top="5.0" />
76     </padding>
77 </Separator>
78 <Label text="Functions to be Generated">
79     <font>
80         <Font size="14.0" />
81     </font>
82 </Label>
83 <HBox alignment="TOP_CENTER" spacing="10.0">
84     <children>
85         <GridPane hgap="10.0">
86             <columnConstraints>
87                 <ColumnConstraints halignment="LEFT" hgrow="SOMETIMES"
minWidth="10.0" />
88                 <ColumnConstraints halignment="LEFT" hgrow="SOMETIMES"
minWidth="10.0" />
89             </columnConstraints>
90             <rowConstraints>
91                 <RowConstraints minHeight="20.0" prefHeight="30.0"
vgrow="SOMETIMES" />
92                 <RowConstraints minHeight="20.0" prefHeight="30.0"
vgrow="SOMETIMES" />
93                 <RowConstraints minHeight="20.0" prefHeight="30.0"
vgrow="SOMETIMES" />
94                 <RowConstraints minHeight="20.0" prefHeight="30.0"
vgrow="SOMETIMES" />
95             </rowConstraints>
96             <children>
97                 <Label text="y= a " GridPane.columnIndex="1" />
98                 <Label text="y= a*x + b" GridPane.columnIndex="1"
GridPane.rowIndex="1" />
99                 <Label text="y= a*x^2 + b*x + c"
GridPane.columnIndex="1" GridPane.rowIndex="2" />
100                 <CheckBox fx:id="didi1" mnemonicParsing="false"
text="Constant" />
101                 <CheckBox fx:id="didi2" mnemonicParsing="false"
text="Linear" GridPane.rowIndex="1" />
102                 <CheckBox fx:id="didi3" mnemonicParsing="false"

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103         text="Square" GridPane.rowIndex="2" />
104         <CheckBox fx:id="didi4" mnemonicParsing="false"
105         text="Cubic" GridPane.rowIndex="3" />
106         <Label text="y= a*x^3 + b*x^2 + c*x + d"
107         GridPane.columnIndex="1" GridPane.rowIndex="3" />
108     </children>
109 </GridPane>
110 <GridPane hgap="10.0">
111     <columnConstraints>
112         <ColumnConstraints halignment="LEFT" hgrow="SOMETIMES"
113         minWidth="10.0" />
114         <ColumnConstraints halignment="LEFT" hgrow="SOMETIMES"
115         minWidth="10.0" />
116     </columnConstraints>
117     <rowConstraints>
118         <RowConstraints minHeight="20.0" prefHeight="30.0"
119         vgrow="SOMETIMES" />
120         <RowConstraints minHeight="10.0" prefHeight="30.0"
121         vgrow="SOMETIMES" />
122         <RowConstraints minHeight="20.0" prefHeight="30.0"
123         vgrow="SOMETIMES" />
124         <RowConstraints minHeight="20.0" prefHeight="30.0"
125         vgrow="SOMETIMES" />
126     </rowConstraints>
127     <children>
128         <Label text="y=a*exp(b*x + c) + d"
129         GridPane.columnIndex="1" />
130         <Label text="Random Numbers" GridPane.columnIndex="1"
131         GridPane.rowIndex="1" />
132         <Label text="A point without derivative"
133         GridPane.columnIndex="1" GridPane.rowIndex="2" />
134         <CheckBox fx:id="didi5" mnemonicParsing="false"
135         text="Exponential" />
136         <CheckBox fx:id="didi6" mnemonicParsing="false"
137         text="Random" GridPane.rowIndex="1" />
138         <CheckBox fx:id="didi7" mnemonicParsing="false"
139         text="Bias" GridPane.rowIndex="2">
140             <tooltip>
141                 <Tooltip text="Simulates a Sensor being
142                 &quot;knocked&quot; off true." />
143             </tooltip></CheckBox>
144         <CheckBox fx:id="didi8" mnemonicParsing="false"
145         text="Noise" GridPane.rowIndex="3">
146             <tooltip>
147                 <Tooltip text="Data points will be spread about
148                 0.01 around their value in a gaussian
149                 distribution." />
150             </tooltip></CheckBox>
151         <Label text="Random Discrepancies"
152         GridPane.columnIndex="1" GridPane.rowIndex="3" />
153     </children>
154 </GridPane>
155 </children>
156 </HBox>
157 <Separator prefWidth="200.0">
158     <padding>
159         <Insets bottom="5.0" left="20.0" right="20.0" top="5.0" />
160     </padding>
161 </Separator>
162 <Label text="Display">
163     <font>
164         <Font size="14.0" />
165     </font>
166 </Label>
167 <GridPane hgap="10.0">
168     <columnConstraints>
169         <ColumnConstraints halignment="LEFT" hgrow="SOMETIMES"
170         minWidth="10.0" />
171         <ColumnConstraints halignment="LEFT" hgrow="SOMETIMES"
172         minWidth="10.0" prefWidth="100.0" />
173         <ColumnConstraints halignment="LEFT" hgrow="SOMETIMES"
174         minWidth="10.0" />

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152         </columnConstraints>
153     <rowConstraints>
154         <RowConstraints minHeight="20.0" prefHeight="30.0"
            vgrow="SOMETIMES" />
155     </rowConstraints>
156     <children>
157         <Button fx:id="executeButton" mnemonicParsing="false"
            onAction="#execute" text="Execute" />
158         <HBox alignment="CENTER_RIGHT" prefHeight="100.0"
            prefWidth="200.0" spacing="10.0" GridPane.columnIndex="2" />
159     </children>
160 </GridPane>
161 <VBox fx:id="graphBox" />
162 <HBox alignment="CENTER_LEFT" spacing="10.0">
163     <children>
164         <Button fx:id="executeButton2" mnemonicParsing="false"
            onAction="#execute" text="Execute" />
165     </children>
166 </HBox>
167 <Separator prefWidth="200.0">
168     <padding>
169         <Insets bottom="5.0" left="20.0" right="20.0" top="5.0" />
170     </padding>
171 </Separator>
172 <Button fx:id="exitButton" mnemonicParsing="false"
    onAction="#terminate" prefHeight="25.0" prefWidth="279.0"
    text="Exit" />
173 <Separator prefWidth="200.0">
174     <padding>
175         <Insets bottom="5.0" left="20.0" right="20.0" top="5.0" />
176     </padding>
177 </Separator>
178 </children>
179 <padding>
180     <Insets bottom="10.0" left="10.0" right="10.0" top="10.0" />
181 </padding>
182 </VBox>
183 </content>
184 </ScrollPane>
185 </children>
186 </AnchorPane>
187

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