

## Model: Blank User

Name	Value
General	
Model time units	minutes
System Dynamics solver	
Differentiation Equations Method	Euler
Algebraic Equations Method	Modified Newton
Mixed Equations Method	RK45+Newton
Absolute accuracy	1.0E-5
Time accuracy	1.0E-5
Relative accuracy	1.0E-5
Fixed time step	0.001
Advanced	
Java package name	blank_user
File Name	/Users/hlawren8/Models/Disease Predominance Models/Blank User/Blank User.alp

## Agent Type: Main

Name	Value
Agent in flowcharts	
Use in flowcharts as	Agent
Dimensions and movement	
Speed	(10 : MPS)
Rotate animation towards movement	true
Rotate vertically as well (along Z-axis)	false
Space and network	
Space Type	Continuous
Dynamic: Width	500
Dynamic: Height	500
Dynamic: z Height	0
Layout Type	User-defined
Layout Type Apply On Startup	true
Network type	User-defined
Network Type Apply On Startup	true
Enable steps	false
Advanced Java	
Generic	false
Advanced	
Logging	true
Auto-create datasets	true
AOC_DATASETS_UPDATE_TIME_PROPERTIES	- Recurring Event Properties
Limit the number of data samples	false



Name	Value
x	0.0
y	-150.0
Rotation	0.0

## Function: navigate

Description: used to allow user to navigate between views. Used by nav bars

Name	Value
General	
Return type:	Just action (returns nothing)
Show at runtime	true
Show name	true
Function body	
Body	<pre>selectedViewArea = viewArea; viewArea.navigateTo(); groupMainMenu.setPos( viewArea.getX(), viewArea.getY() ); //if (viewArea == viewHome) { //groupControls.setY( viewArea.getY() ); //}</pre>
Advanced	
Access type	default
System dynamics units	false
Description	
Description	used to allow user to navigate between views. Used by nav bars

## Arguments:

Name	Type
viewArea	ViewArea

## Function: setPAMess

Name	Value
General	
Return type	String
Return type:	Returns value
Show at runtime	true
Show name	true
Function body	
Body	<pre>if (num &lt; 1) return "Patient not sick";  else if (num &lt; 3) return "No physical activity limitations";  else if (num &lt; 5) return "Physical activity slightly limited";  else if (num &lt; 7) return "Significant physical activity limitation";  return "Discomfort during all physical activity";</pre>
Advanced	
Access type	default
System dynamics units	false

## Arguments:

Name	Type
num	double

## Function: setComfMess

Name	Value
General	
Return type	String
Return type:	Returns value
Show at runtime	true
Show name	true
Function body	
Body	<pre>if (num &lt; 1)   return "Patient not sick"; else if (num &lt;= 6)   return "Comfortable at rest";  return "discomfort/symptoms at rest";</pre>
Advanced	
Access type	default
System dynamics units	false

## Arguments:

Name	Type
num	double

## Function: setActMess

Name	Value
General	
Return type	String
Return type:	Returns value
Show at runtime	true
Show name	true
Function body	
Body	<pre>if (num == 0)   return "Patient not sick";  else if (num &lt; 3)   return "No symptoms with ordinary activity";  else if (num &lt; 5)   return "Fatigue, palpitation, and dyspnea with ordinary physical activity";  else if (num &lt; 7)   return "Fatigue, palpitation, and dyspnea with less than ordinary physical activity";  return "Discomfort during all physical activity";</pre>
Advanced	
Access type	default
System dynamics units	false

## Arguments:

Name	Type
------	------

## Arguments:

Name	Type
num	double

## Function: setPatFuncCap

Name	Value
General	
Return type	String
Return type:	Returns value
Show at runtime	true
Show name	true
Function body	
Body	<pre> if (num == 0)   return "Patient not sick";  else if (num &lt;= 2)   return "Function Capacity I";  else if (num &lt;= 4)   return "Function Capacity II";  else if (num &lt;= 6)   return "Function Capacity III";  return "Function Capacity IV"; </pre>
Advanced	
Access type	default
System dynamics units	false

## Arguments:

Name	Type
num	double

## Function: setPatObjAssessment

Name	Value
General	
Return type	String
Return type:	Returns value
Show at runtime	true
Show name	true
Function body	
Body	<pre> if (num == 0)   return "Patient not sick";  else if (num &lt;= 2)   return "Objective Assessment A";  else if (num &lt;= 4)   return "Objective Assessment B";  else if (num &lt;= 6)   return "Objective Assessment C";  return "Objective Assessment D"; </pre>
Advanced	
Access type	default

Name	Value
System dynamics units	false

## Arguments:

Name	Type
num	double

## Function: setEvMess

Name	Value
General	
Return type	String
Return type:	Returns value
Show at runtime	true
Show name	true
Function body	
Body	<pre> if (num &lt; 1) return "Patient not sick";  else if (num &lt; 3) return "No objective evidence of cardiovascular disease";  else if (num &lt; 5) return "Objective evidence of slight cardiovascular disease";  else if (num &lt; 7) return "Objective evidence of moderately severe cardiovascular disease";  return "Objective evidence of severe cardiovascular disease"; </pre>
Advanced	
Access type	default
System dynamics units	false

## Arguments:

Name	Type
num	double

## Function: setComfMess2

Name	Value
General	
Return type	String
Return type:	Returns value
Show at runtime	true
Show name	true
Function body	
Body	<pre> if (num &lt; 1) return "Patient not sick";  else if (num &lt;= 4) return "Comfortable at rest";  else if (num &lt;= 6) return "Comfortable only at rest";  return "discomfort/symptoms at rest"; </pre>
Advanced	

Name	Value
Access type	default
System dynamics units	false

## Arguments:

Name	Type
num	double

## Function: setActMess2

Name	Value
General	
Return type	String
Return type:	Returns value
Show at runtime	true
Show name	true
Function body	
Body	<pre> if (num == 0) return "Patient not sick";  else if (num &lt; 3) return "No symptoms or limitations with ordinary activity";  else if (num &lt; 5) return "Slight limitations and mild symptoms with ordinary physical activity";  else if (num &lt; 7) return "Significant limitation and symptoms with ordinary physical activity";  return "Severe limitations physical activity"; </pre>
Advanced	
Access type	default
System dynamics units	false

## Arguments:

Name	Type
num	double

## Function: setNyhCStages

Name	Value
General	
Return type:	Just action (returns nothing)
Show at runtime	true
Show name	true
Function body	
Body	<pre> if (patient.ejectionFraction &gt; 55 &amp;&amp; (patient.bp_systolic &lt; 120 &amp;&amp; patient.bp_diastolic &lt; 80)) { // green setFuncCap(1); setObjAssessment(1); objAssessment = 1; functCap = 1; } else if (patient.ejectionFraction &gt; 55    (patient.bp_systolic &lt; 120 &amp;&amp; patient.bp_diastolic &lt; 80) &amp;&amp; </pre>

Name	Value
	<pre> (patient.ejectionFraction &gt; 40)    (patient.bp_systolic &lt; 130 &amp;&amp;  patient.bp_diastolic &lt; 80)) { // lime green setFuncCap(2); setObjAssessment(2); objAssessment = 2; functCap = 2; } else if (patient.ejectionFraction &gt; 40 &amp;&amp; (patient.bp_systolic &lt; 130 &amp;&amp;  patient.bp_diastolic &lt; 80)) { // yellow setFuncCap(3); setObjAssessment(3); objAssessment = 3; functCap = 3; } else if (patient.ejectionFraction &gt; 40    (patient.bp_systolic &lt; 130 &amp;&amp;  patient.bp_diastolic &lt; 80)) { // gold setFuncCap(4); setObjAssessment(4); objAssessment = 4; functCap = 4; } else if (patient.ejectionFraction &gt; 35 &amp;&amp; (patient.bp_systolic &lt; 140 &amp;&amp;  patient.bp_diastolic &lt; 90)) { // orange setFuncCap(5); setObjAssessment(5); objAssessment = 5; functCap = 5; } else if (patient.ejectionFraction &gt; 35    (patient.bp_systolic &lt; 140     patient.bp_diastolic &lt; 90)) { // dark orange setFuncCap(6); setObjAssessment(6); objAssessment = 6; functCap = 6; } else if (patient.ejectionFraction &lt; 35 &amp;&amp; (patient.bp_systolic &gt;= 140     patient.bp_diastolic &gt;= 90)) { // red setFuncCap(7); setObjAssessment(7); objAssessment = 7; functCap = 7; } else { // dark red setFuncCap(8); setObjAssessment(8); objAssessment = 8; functCap = 8; } } </pre>
Advanced	
Access type	default
System dynamics units	false

## Function: progressionRate

Name	Value
General	
Return type	String
Return type:	Returns value
Show at runtime	true
Show name	true
Function body	



Name	Value
Body	<pre>double val = PatientProgSlider.value;  if (val == 1) return "Stable"; else if (val == 2) return "Slightly worsening"; else if (val == 3) return "Moderately deteriorating"; else return "Severely deteriorating";</pre>
Advanced	
Access type	default
System dynamics units	false

## Function: setFuncCap

Name	Value
General	
Return type:	Just action (returns nothing)
Show at runtime	true
Show name	true
Function body	
Body	<pre>setPAMess(stage); setComfMess(stage); setActMess(stage); setPatFuncCap(stage);</pre>
Advanced	
Access type	default
System dynamics units	false

### Arguments:

Name	Type
stage	double

## Function: setObjAssessment

Name	Value
General	
Return type:	Just action (returns nothing)
Show at runtime	true
Show name	true
Function body	
Body	<pre>setEvMess(stage); setComfMess2(stage); setActMess2(stage); setPatObjAssessment(stage);</pre>
Advanced	
Access type	default
System dynamics units	false

### Arguments:

Name	Type
stage	double

## Function: determineEFRange

Name	Value
General	
Return type	double
Return type:	Returns value
Show at runtime	true
Show name	true
Function body	
Body	return 0;
Advanced	
Access type	default
System dynamics units	false

## Function: determineBPRange

Name	Value
General	
Return type	double
Return type:	Returns value
Show at runtime	true
Show name	true
Function body	
Body	double val = patient.ejectionFraction;  if (val > 55) return 1;  return 0;
Advanced	
Access type	default
System dynamics units	false

## Event: refreshNYHC

Name	Value
General	
Logging	true
Rate	(1 : PER_MINUTE)
Trigger type	Rate
Show at runtime	true
Show name	true
Action	
Action	setNyhcStages()

## Variable: selectedViewArea

Description: used to set the current view area in the simulation. Used by nav bars

Name	Value
General	
Initial value	viewHome
Type	ViewArea
Show at runtime	true

Name	Value
Show name	true
Advanced	
Access type	public
Constant	false
Save in snapshot	true
System dynamics units	false
Description	
Description	used to set the current view area in the simulation. Used by nav bars

## Variable: objAssessment

Name	Value
General	
Initial value	0
Type	double
Show at runtime	true
Show name	true
Advanced	
Access type	public
Constant	false
Save in snapshot	true
System dynamics units	false

## Variable: functCap

Description: measures the stage of CHF according to the

Name	Value
General	
Initial value	0
Type	double
Show at runtime	true
Show name	true
Advanced	
Access type	public
Constant	false
Save in snapshot	true
System dynamics units	false
Description	
Description	measures the stage of CHF according to the

## Variable: efRate

Name	Value
General	
Initial value	0
Type	double
Show at runtime	true
Show name	true

Name	Value
Advanced	
Access type	public
Constant	false
Save in snapshot	true
System dynamics units	false

## Variable: bpsRate

Name	Value
General	
Initial value	0
Type	double
Show at runtime	true
Show name	true
Advanced	
Access type	public
Constant	false
Save in snapshot	true
System dynamics units	false

## Variable: bpdRate

Name	Value
General	
Initial value	0
Type	double
Show at runtime	true
Show name	true
Advanced	
Access type	public
Constant	false
Save in snapshot	true
System dynamics units	false

## Text: text30

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Text	
Text	Functions
Appearance	
Color	black
Alignment	LEFT
Position and size	

Name	Value
x	370.0
y	1330.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Rounded Rectangle: roundRectangle2

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Appearance	
Fill color	new Color(255, 209, 132)
Line color	black
Line width	1.0
Line style	SOLID
Position and size	
x	330.0
Width	160.0
y	1040.0
Height	320.217
Rotation	0.0
Radius	10.0
Advanced	
Show name	false

## Text: text31

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Text	
Text	Variables
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	590.0
y	1390.0
z	0.0
Rotation	0.0

Name	Value
Advanced	
Show in	2D only
Show name	false

## Rounded Rectangle: roundRectangle5

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Appearance	
Fill color	lightCyan
Line color	black
Line width	1.0
Line style	SOLID
Position and size	
x	510.0
Width	230.0
y	1180.0
Height	240.007
Rotation	0.0
Radius	10.0
Advanced	
Show name	false

## Rounded Rectangle: roundRectangle1

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Appearance	
Fill color	lemonChiffon
Line color	black
Line width	1.0
Line style	SOLID
Position and size	
x	510.0
Width	120.0
y	1090.0
Height	70.0
Rotation	0.0
Radius	10.0
Advanced	
Show name	false

## Text: text33

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Text	
Text	Agents
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	540.0
y	1130.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text34

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Text	
Text	Variables
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	590.0
y	1390.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text35

Name	Value
General	
Show at runtime	true
Lock	false

Name	Value
Embedded icon	false
Public	true
Text	
Text	Functions
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	370.0
y	1330.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Rectangle: rectangle43

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Appearance	
Fill color	lightBlue
Line color	new Color(136, 199, 217)
Line width	1.0
Line style	SOLID
Position and size	
x	690.0
Width	340.0
y	370.0
Height	280.0
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false

## Text: text32

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true



Name	Value
Text	
Text	Congestive Heart Failure Progression Rates
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	730.0
y	390.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: progression

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Text	
Text	Stable
Dynamic: Text	progressionRate()
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	860.0
y	430.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text36

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Text	
Text	Sliders for conditions that worsen CHF. A good place to start when looking at hazard values.
Appearance	

Name	Value
Color	black
Alignment	LEFT
Position and size	
x	1120.0
y	-110.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text104

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Text	
Text	Previous version of the simulation. Vars and functions will have descriptions if the code may be useful.
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	1080.0
y	-260.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text105

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Text	
Text	In limbo attributes also would be good to look at for HRs
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	2180.0

Name	Value
y	-760.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Group: groupMainMenu1

Description: allows user to change view in simulation. buttons are coded on click

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Position and size	
x	0.0
y	840.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false
Description	
Description	allows user to change view in simulation. buttons are coded on click

## Rectangle: rectangle13

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	lightBlue
Line color	new Color(136, 199, 217)
Line width	1.0
Line style	SOLID
Position and size	
x	690.0
Width	100.0
y	0.0
Height	50.899
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	

Name	Value
On click	navigate( viewHome );
Show name	false

## Rectangle: rectangle14

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	new Color(136, 199, 217)
Line color	new Color(136, 199, 217)
Line width	1.0
Line style	SOLID
Position and size	
x	790.0
Width	129.774
y	0.0
Height	50.899
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
On click	navigate( viewLogic );
Show name	false

## Rectangle: rectangle15

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	lightBlue
Line color	new Color(136, 199, 217)
Line width	1.0
Line style	SOLID
Position and size	
x	0.0
Width	690.0
y	0.0
Height	50.899
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
Show name	false

## Text: text27

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	Home
Appearance	
Color	royalBlue
Dynamic: Color	selectedViewArea == viewHome ? royalBlue : darkGray
Alignment	LEFT
Position and size	
x	710.0
y	16.0
z	0.0
Rotation	0.0
Advanced	
Show name	false

## Text: text28

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	CHF Patient
Appearance	
Color	darkGray
Alignment	LEFT
Position and size	
x	34.114
y	16.224
z	0.0
Rotation	0.0
Advanced	
Show name	false

## Text: text65

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	

Name	Value
Text	Logic
Appearance	
Color	darkGray
Alignment	LEFT
Position and size	
x	829.333
y	16.334
z	0.0
Rotation	0.0
Advanced	
Show name	false

## Rectangle: rectangle17

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	lightBlue
Line color	new Color(136, 199, 217)
Line width	1.0
Line style	SOLID
Position and size	
x	920.0
Width	149.774
y	0.0
Height	50.899
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
On click	navigate( patient.viewPatient );
Show name	false

## Text: text67

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	Patient
Appearance	
Color	royalBlue
Alignment	LEFT
Position and size	

Name	Value
x	960.0
y	16.0
z	0.0
Rotation	0.0
Advanced	
Show name	false

## Group: OAGraphGroup

Description: All three variables change based off of stage. The various messages change based off of the current CHF stage

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Position and size	
x	300.0
y	660.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false
Description	
Description	All three variables change based off of stage. The various messages change based off of the current CHF stage

## Time Color Chart: chart3

Name	Value
General	
Time	model time units
Time window	100
Lock	false
Public	true
Data update	
Analysis auto update	true
ANALYSIS_UPDATE_TIME_PROPERTIES	- Recurring Event Properties
Dataset Samples To Keep	100
Appearance	
Bars relative width	0.8
Labels horizontal position	DEFAULT
Label format	Model time units
Labels Text Color	darkGray
Chart Area Grid Color	darkGray
Position and size	
x	-250.0

Name	Value
Width	360.0
y	-120.0
Height	240.0
Legend	
Show legend	true
Legend size	60.0
Legend text color	black
Chart area	
Chart Area: X Offset	30.0
Chart Area: Width	300.0
Chart Area: Y Offset	30.0
Chart Area: Height	120.0
Chart Area: Background Color	white
Chart area border color	black
Advanced	
Time window moves	Continuously
Show name	false
Logging	true

## Color Mappings:

Color	Expression
new Color(173, 213, 86)	1
new Color(213, 242, 57)	2
new Color(249, 241, 118)	3
gold	4
new Color(255, 179, 52)	5
new Color(255, 141, 52)	6
new Color(247, 96, 96)	7
new Color(251, 48, 48)	8

## Plot Items:

Title	Type	Dataset / Value
Physical Activity Limitation	value	objAssessment
Comfort at Rest	value	objAssessment
Symptoms with Ordinary Activity	value	objAssessment

## Text: text61

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	objective evidence
Dynamic: Text	setEvMess(objAssessment)
Appearance	
Color	black



Name	Value
Alignment	LEFT
Position and size	
x	90.0
y	-80.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text62

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	comfort at rest
Dynamic: Text	setComfMess2(objAssessment)
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	90.0
y	-40.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text63

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	physical activity limitation
Dynamic: Text	setActMess2(objAssessment)
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	90.0
y	0.0
z	0.0

Name	Value
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text66

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	ACC Heart Failure Stages
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	-220.0
y	-110.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text69

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	patient objective assessment
Dynamic: Text	setPatObjAssessment(objAssessment)
Appearance	
Color	black
Alignment	RIGHT
Position and size	
x	90.0
y	-110.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Group: groupMainMenu

Description: allows user to change view in simulation. buttons are coded on click

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Position and size	
x	0.0
y	0.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false
Description	
Description	allows user to change view in simulation. buttons are coded on click

## Rectangle: rectangle29

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	new Color(136, 199, 217)
Dynamic: Fill Color	selectedViewArea == viewHome ? new Color(136, 199, 217) : lightBlue
Line color	new Color(136, 199, 217)
Line width	1.0
Line style	SOLID
Position and size	
x	690.0
Width	100.0
y	0.0
Height	50.899
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
On click	navigate( viewHome );
Show name	false

## Rectangle: rectangle30

Name	Value
General	
Show at runtime	true
Lock	false

Name	Value
Public	true
Appearance	
Fill color	lightBlue
Dynamic: Fill Color	selectedViewArea == viewLogic ? new Color(136, 199, 217) : lightBlue
Line color	new Color(136, 199, 217)
Line width	1.0
Line style	SOLID
Position and size	
x	790.0
Width	129.774
y	0.0
Height	50.899
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
On click	navigate( viewLogic );
Show name	false

## Rectangle: rectangle31

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	lightBlue
Line color	new Color(136, 199, 217)
Line width	1.0
Line style	SOLID
Position and size	
x	0.0
Width	690.0
y	0.0
Height	50.899
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
Show name	false

## Text: text79

Name	Value
General	
Show at runtime	true
Lock	false

Name	Value
Public	true
Text	
Text	Home
Appearance	
Color	darkGray
Dynamic: Color	selectedViewArea == viewHome ? darkGray : royalBlue
Alignment	LEFT
Position and size	
x	710.0
y	16.0
z	0.0
Rotation	0.0
Advanced	
Show name	false

## Text: text80

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	CHF Patient
Appearance	
Color	darkGray
Alignment	LEFT
Position and size	
x	34.114
y	16.224
z	0.0
Rotation	0.0
Advanced	
Show name	false

## Text: text81

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	Logic
Appearance	
Color	royalBlue
Dynamic: Color	selectedViewArea == viewLogic ? darkGray : royalBlue
Alignment	LEFT

Name	Value
Position and size	
x	827.0
y	16.0
z	0.0
Rotation	0.0
Advanced	
Show name	false

## Rectangle: rectangle23

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	lightBlue
Dynamic: Fill Color	selectedViewArea == patient.viewPatient ? new Color(136, 199, 217) : lightBlue
Line color	new Color(136, 199, 217)
Line width	1.0
Line style	SOLID
Position and size	
x	920.0
Width	149.774
y	0.0
Height	50.899
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
On click	navigate( patient.viewPatient );
Show name	false

## Text: text75

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	Patient
Appearance	
Color	royalBlue
Alignment	LEFT
Position and size	
x	960.0
y	16.0

Name	Value
z	0.0
Rotation	0.0
Advanced	
Show name	false

## Group: BPGraphGroup

Description: graph that displays the patients systolic and diastolic bp. The blocks of color are visible depending on the range of systolic and diastolic.

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Position and size	
x	220.0
y	200.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false
Description	
Description	graph that displays the patients systolic and diastolic bp. The blocks of color are visible depending on the range of systolic and diastolic.

## Rectangle: rectangle32

Name	Value
General	
Dynamic: Visible	( patient.bp_diastolic < 80 && patient.bp_systolic < 120 )
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	new Color(154, 205, 50, 100)
Line width	1.0
Line style	SOLID
Position and size	
x	-150.0
Width	291.333
y	-30.0
Height	34.0
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	

Name	Value
Show in	2D and 3D
Show name	false

## Rectangle: rectangle33

Name	Value
General	
Dynamic: Visible	( patient.bp_diastolic >= 90 && patient.bp_systolic >= 140 )
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	new Color(255, 0, 0, 58)
Line width	1.0
Line style	SOLID
Position and size	
x	-150.0
Width	291.333
y	-108.0
Height	43.0
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false

## Rectangle: rectangle34

Name	Value
General	
Dynamic: Visible	( patient.bp_diastolic < 80 && patient.bp_systolic < 120 )
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	new Color(154, 205, 50, 100)
Line width	1.0
Line style	SOLID
Position and size	
x	-150.0
Width	291.333
y	38.0
Height	35.0
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	



Name	Value
Show in	2D and 3D
Show name	false

## Rectangle: rectangle35

Name	Value
General	
Dynamic: Visible	( patient.bp_diastolic < 80 && patient.bp_systolic < 129 && patient.bp_systolic > 119 )
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	new Color(255, 255, 0, 64)
Line width	1.0
Line style	SOLID
Position and size	
x	-150.0
Width	291.333
y	38.0
Height	35.333
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false

## Rectangle: rectangle36

Name	Value
General	
Dynamic: Visible	( patient.bp_diastolic < 80 && patient.bp_systolic < 130 && patient.bp_systolic > 119 )
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	new Color(255, 255, 0, 64)
Line width	1.0
Line style	SOLID
Position and size	
x	-150.0
Width	291.333
y	-48.0
Height	18.333
z	0.0
Z-Height	10.0
Rotation	0.0

Name	Value
Advanced	
Show in	2D and 3D
Show name	false

## Rectangle: rectangle37

Name	Value
General	
Dynamic: Visible	( patient.bp_diastolic < 90 && patient.bp_systolic > 129 && patient.bp_systolic < 140 )
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	new Color(255, 165, 0, 123)
Line width	1.0
Line style	SOLID
Position and size	
x	-150.0
Width	291.0
y	-65.0
Height	17.0
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false

## Rectangle: rectangle38

Name	Value
General	
Dynamic: Visible	( patient.bp_diastolic < 90 && patient.bp_systolic > 129 && patient.bp_systolic < 140 )
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	new Color(255, 165, 0, 123)
Line width	1.0
Line style	SOLID
Position and size	
x	-150.0
Width	291.333
y	20.0
Height	17.333
z	0.0
Z-Height	10.0

Name	Value
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false

## Rectangle: rectangle39

Name	Value
General	
Dynamic: Visible	( patient.bp_diastolic >= 90 && patient.bp_systolic >= 140 )
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	new Color(255, 0, 0, 58)
Line width	1.0
Line style	SOLID
Position and size	
x	-150.0
Width	291.333
y	-30.0
Height	50.0
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false

## Group: group26

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Position and size	
x	-10.0
y	-30.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false

## Time Plot: patientBP1

Name	Value
------	-------

Name	Value
General	
Lock	false
Public	true
Data update	
Analysis auto update	true
ANALYSIS_UPDATE_TIME_PROPERTIES	- Recurring Event Properties
Dataset Samples To Keep	50
Scale	
Time window	50
Time	model time units
Vertical scale	Fixed
Chart Vertical Scale: From	60
Chart Vertical Scale: To	165
Appearance	
Labels horizontal position	NONE
Labels vertical position	DEFAULT
Label format	Model time units
Labels Text Color	darkGray
Chart Area Grid Color	darkGray
Draw line	true
Fill area under line	false
Interpolation	Linear
Position and size	
x	-190.0
Width	373.008
y	-110.0
Height	251.053
Legend	
Show legend	true
Legend size	30.0
Legend text color	black
Chart area	
Chart Area: X Offset	50.0
Chart Area: Width	290.0
Chart Area: Y Offset	31.053
Chart Area: Height	178.947
Chart Area: Background Color	white
Chart area border color	black
Advanced	
Time window moves	Continuously
Show name	false
Logging	true

## Plot Items:

Title	Type	Dataset / Value	Point Style	Color	Line	Width	Interpolation
Systolic	value	patient.bp_systolic	NONE	coral	true	2.0	LINEAR
Diastolic	value	patient.bp_diastolic	NONE	limeGreen	true	2.0	LINEAR

## Text: text97

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	Blood Pressure (mmHg)
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	-140.0
y	-98.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Group: RateSliderGroup

Description: changes the rate of lvef dec

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Position and size	
x	860.0
y	540.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false
Description	
Description	changes the rate of lvef dec

## Text: EFRate

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	

Name	Value
Text	Initial LVEF
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	-120.0
y	-30.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text55

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	min
Dynamic: Text	LVEFSlider.getMin()
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	-130.0
y	10.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text56

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	max
Dynamic: Text	LVEFSlider.getMax()
Appearance	
Color	black
Alignment	RIGHT
Position and size	

Name	Value
x	120.0
y	10.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text77

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	value
Dynamic: Text	LVEFSlider.getValue()
Appearance	
Color	black
Alignment	CENTER
Position and size	
x	-5.0
y	10.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Slider: LVEFSlider

Name	Value
General	
Enabled	true
Default value	68
Step	1
Maximum value	70
Minimum value	20
Link to	false
Orientation	Horizontal
Lock	false
Public	true
Action	
Action	patient.ejectionFraction = value;
Position and size	
x	-130.0
Width	250.0
y	-20.0

Name	Value
Height	30.0
Advanced	
Show name	false

## Group: BPSliderGroup

Description: changes the rate of bp inc

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Position and size	
x	860.0
y	610.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false
Description	
Description	changes the rate of bp inc

## Text: ACRRate

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	Initial Blood Pressure
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	-120.0
y	-30.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text92

Name	Value
------	-------



Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	min
Dynamic: Text	ACRRateSlider.getMin()
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	-130.0
y	10.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text93

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	max
Dynamic: Text	ACRRateSlider.getMax()
Appearance	
Color	black
Alignment	RIGHT
Position and size	
x	120.0
y	10.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text109

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	

Name	Value
Text	value
Dynamic: Text	ACRRateSlider.getValue()
Appearance	
Color	black
Alignment	CENTER
Position and size	
x	-5.0
y	10.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Slider: ACRRateSlider

Name	Value
General	
Enabled	true
Default value	0
Step	1
Maximum value	8
Minimum value	0
Link to	false
Orientation	Horizontal
Lock	false
Public	true
Action	
Action	<pre> patient.setBloodPressure(value);  /** patient.bp_systolic = value;  if (patient.bp_systolic &gt; 100) patient.bp_diastolic = value-50; else patient.bp_diastolic = 70; **/ </pre>
Position and size	
x	-130.0
Width	250.0
y	-20.0
Height	30.0
Advanced	
Show name	false

## Group: PatientProgSliderGroup

Description: changes the rate of progression

Name	Value
General	
Show at runtime	true

Name	Value
Lock	false
Embedded icon	false
Public	true
Position and size	
x	860.0
y	460.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false
Description	
Description	changes the rate of progression

## Text: PatientProg

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	Patient Progression:
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	-120.0
y	-30.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text116

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	min
Dynamic: Text	ACRRateSlider.getMin()
Appearance	
Color	black
Alignment	LEFT

Name	Value
Position and size	
x	-130.0
y	10.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text117

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	max
Dynamic: Text	ACRRateSlider.getMax()
Appearance	
Color	black
Alignment	RIGHT
Position and size	
x	120.0
y	10.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text120

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	value
Dynamic: Text	ACRRateSlider.getValue()
Appearance	
Color	black
Alignment	CENTER
Position and size	
x	-5.0
y	10.0
z	0.0
Rotation	0.0

Name	Value
Advanced	
Show in	2D only
Show name	false

## Slider: PatientProgSlider

Name	Value
General	
Enabled	true
Default value	0
Step	1
Maximum value	4
Minimum value	1
Link to	false
Orientation	Horizontal
Lock	false
Public	true
Action	
Action	efRate = value; bpsRate = value; bpdRate = value;
Position and size	
x	-130.0
Width	250.0
y	-20.0
Height	30.0
Advanced	
Show name	false

## Group: EFGraphGroup

Description: Measures the patients lvef. Colored blocks and range labels are visible depending on the range of the ejection fraction.

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Position and size	
x	670.0
y	200.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false
Description	
Description	Measures the patients lvef. Colored blocks and range labels are visible depending on the range of the ejection fraction.

## Time Plot: plot1

Name	Value
General	
Lock	false
Public	true
Data update	
Analysis auto update	true
ANALYSIS_UPDATE_TIME_PROPERTIES	- Recurring Event Properties
Dataset Samples To Keep	50
Scale	
Time window	50
Time	model time units
Vertical scale	Fixed
Chart Vertical Scale: From	20
Chart Vertical Scale: To	80
Appearance	
Labels horizontal position	NONE
Labels vertical position	DEFAULT
Label format	Model time units
Labels Text Color	darkGray
Chart Area Grid Color	darkGray
Draw line	true
Fill area under line	false
Interpolation	Linear
Position and size	
x	-250.0
Width	350.0
y	-110.0
Height	230.0
Legend	
Show legend	true
Legend size	30.0
Legend text color	black
Chart area	
Chart Area: X Offset	50.0
Chart Area: Width	270.0
Chart Area: Y Offset	10.0
Chart Area: Height	180.0
Chart Area: Background Color	white
Chart area border color	black
Advanced	
Time window moves	Continuously
Show name	false
Logging	true

### Plot Items:

Title	Type	Dataset / Value	Point Style	Color	Line	Width	Interpolation
Ejection Fraction	value	patient.ejectionFraction	NONE	teal	true	2.0	LINEAR

## Text: text76

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	Left Ventricular Ejection Fraction
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	-200.0
y	-120.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text102

Name	Value
General	
Dynamic: Visible	patient.ejectionFraction > 40 && functCap != 0
Show at runtime	true
Lock	false
Public	true
Text	
Text	Heart Failure with Preserved Ejection Fraction
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	80.0
y	-40.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text103

Name	Value
General	
Dynamic: Visible	patient.ejectionFraction < 41 && functCap != 0

Name	Value
Show at runtime	true
Lock	false
Public	true
Text	
Text	Heart Failure with Reduced Ejection Fraction
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	80.0
y	30.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Rectangle: rectangle24

Name	Value
General	
Dynamic: Visible	( patient.ejectionFraction < 70 && patient.ejectionFraction > 55 )
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	new Color(154, 205, 50, 100)
Line width	1.0
Line style	SOLID
Position and size	
x	-200.0
Width	270.0
y	-70.0
Height	44.0
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false

## Rectangle: rectangle25

Name	Value
General	
Dynamic: Visible	( patient.ejectionFraction < 55 && patient.ejectionFraction > 40 )
Show at runtime	true



Name	Value
Lock	false
Public	true
Appearance	
Fill color	new Color(255, 255, 0, 64)
Line width	1.0
Line style	SOLID
Position and size	
x	-200.0
Width	270.0
y	-26.0
Height	45.0
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false

## Rectangle: rectangle28

Name	Value
General	
Dynamic: Visible	( patient.ejectionFraction < 40 && patient.ejectionFraction > 35 )
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	new Color(255, 165, 0, 123)
Line width	1.0
Line style	SOLID
Position and size	
x	-200.0
Width	270.0
y	20.0
Height	15.0
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false

## Rectangle: rectangle40

Name	Value
General	
Dynamic: Visible	( patient.ejectionFraction < 35 && patient.ejectionFraction > 20 )
Show at runtime	true

Name	Value
Lock	false
Public	true
Appearance	
Fill color	new Color(255, 0, 0, 58)
Line width	1.0
Line style	SOLID
Position and size	
x	-200.0
Width	270.0
y	35.0
Height	45.0
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false

## Rectangle: rectangle41

Name	Value
General	
Dynamic: Visible	patient.ejectionFraction > 70
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	new Color(255, 255, 0, 66)
Line width	1.0
Line style	SOLID
Position and size	
x	-200.0
Width	270.0
y	-100.0
Height	29.0
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false

## Group: FCGraphGroup

Description: All three variables change based off of stage. The various messages change based off of the current CHF stage

Name	Value
General	
Show at runtime	true
Lock	false

Name	Value
Embedded icon	false
Public	true
Position and size	
x	270.0
y	420.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D and 3D
Show name	false
Description	
Description	All three variables change based off of stage. The various messages change based off of the current CHF stage

## Time Color Chart: chart4

Name	Value
General	
Time	model time units
Time window	100
Lock	false
Public	true
Data update	
Analysis auto update	true
ANALYSIS_UPDATE_TIME_PROPERTIES	- Recurring Event Properties
Dataset Samples To Keep	100
Appearance	
Bars relative width	0.8
Labels horizontal position	DEFAULT
Label format	Model time units
Labels Text Color	darkGray
Chart Area Grid Color	darkGray
Position and size	
x	-230.0
Width	360.0
y	-120.0
Height	240.0
Legend	
Show legend	true
Legend size	60.0
Legend text color	black
Chart area	
Chart Area: X Offset	30.0
Chart Area: Width	300.0
Chart Area: Y Offset	30.0
Chart Area: Height	120.0
Chart Area: Background Color	white
Chart area border color	black

Name	Value
Advanced	
Time window moves	Continuously
Show name	false
Logging	true

## Color Mappings:

Color	Expression
new Color(173, 213, 86)	1
new Color(213, 242, 57)	2
new Color(249, 241, 118)	3
gold	4
new Color(255, 179, 52)	5
new Color(255, 141, 52)	6
new Color(247, 96, 96)	7
new Color(251, 48, 48)	8

## Plot Items:

Title	Type	Dataset / Value
Physical Activity Limitation	value	functCap
Comfort at Rest	value	functCap
Symptoms with Ordinary Activity	value	functCap

## Text: text70

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	comfort at rest
Dynamic: Text	setComfMess(functCap)
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	110.0
y	-30.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text73

Name	Value
General	

Name	Value
Show at runtime	true
Lock	false
Public	true
Text	
Text	physical activity message
Dynamic: Text	setPAMess(funcCap)
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	110.0
y	-70.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text78

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	symptoms with activity
Dynamic: Text	setActMess(funcCap)
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	110.0
y	10.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text98

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	NYHA Classification

Name	Value
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	-200.0
y	-110.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text99

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	patient function capacity
Dynamic: Text	setPatFunctCap(functCap)
Appearance	
Color	black
Alignment	RIGHT
Position and size	
x	90.0
y	-110.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## View Area: viewHome

Name	Value
General	
Show name	false
Position and size	
x	0.0
Width	1070.0
y	0.0
Height	780.0

## View Area: viewLogic

Name	Value
General	

Name	Value
Show name	false
Position and size	
x	0.0
Width	1070.0
y	840.0
Height	770.0

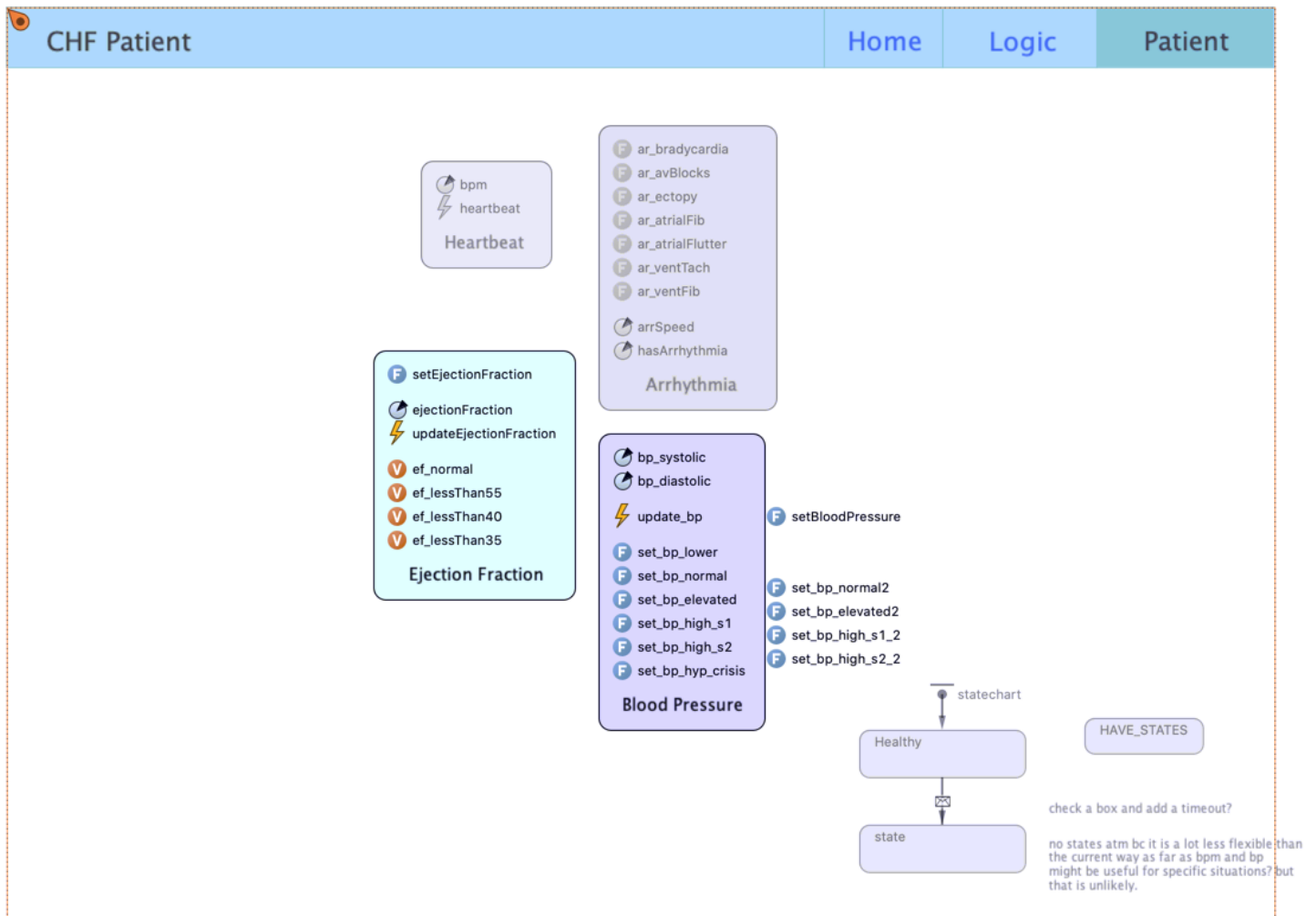
## Link to agents: connections

Name	Value
General	
Show at runtime	true
Show name	true
Communication	
Message type	Object
Animation	
Draw line	false

## Agent Type: Patient

Name	Value
Agent in flowcharts	
Use in flowcharts as	Agent
Dimensions and movement	
Speed	(10 : MPS)
Rotate animation towards movement	true
Rotate vertically as well (along Z-axis)	false
Space and network	
Space Type	Continuous
Advanced Java	
Generic	false
Advanced	
Logging	true
Auto-create datasets	true
AOC_DATASETS_UPDATE_TIME_PROPERTIES	- Recurring Event Properties
Limit the number of data samples	false

 main

 connections


## Scale: scale

Name	Value
General	
Unit	meters
Scale	10.0
Type	Defined graphically
Length, pixels	100.0
Show at runtime	false
Lock	false
Public	false
Position and size	
x	0.0
y	-150.0
Rotation	0.0

## Parameter: bp\_systolic



Name	Value
General	
Array	false
Default value	110
Type	double
Show at runtime	true
Show name	true
Value editor	
Editor control	Text
Advanced	
System dynamics units	false
Save in snapshot	true

## Parameter: bp\_diastolic

Name	Value
General	
Array	false
Default value	70
Type	double
Show at runtime	true
Show name	true
Value editor	
Editor control	Text
Advanced	
System dynamics units	false
Save in snapshot	true

## Parameter: ejectionFraction

Description: descriptions for ef variables from  
<https://my.clevelandclinic.org/health/articles/16950-ejection-fraction>

Name	Value
General	
Array	false
Default value	67
Type	double
Show at runtime	true
Show name	true
Value editor	
Editor control	Text
Advanced	
System dynamics units	false
Save in snapshot	true
Description	
Description	descriptions for ef variables from <a href="https://my.clevelandclinic.org/health/articles/16950-ejection-fraction">https://my.clevelandclinic.org/health/articles/16950-ejection-fraction</a>

## Function: set\_bp\_normal

Name	Value
General	
Return type:	Just action (returns nothing)
Show at runtime	true
Show name	true
Function body	
Body	bp_systolic = 110; bp_diastolic = 70;
Advanced	
Access type	default
System dynamics units	false

## Function: set\_bp\_elevated

Name	Value
General	
Return type:	Just action (returns nothing)
Show at runtime	true
Show name	true
Function body	
Body	bp_systolic = 124; bp_diastolic = 76;
Advanced	
Access type	default
System dynamics units	false

## Function: set\_bp\_high\_s1

Name	Value
General	
Return type:	Just action (returns nothing)
Show at runtime	true
Show name	true
Function body	
Body	bp_systolic = 134; bp_diastolic = 84;
Advanced	
Access type	default
System dynamics units	false

## Function: set\_bp\_high\_s2

Name	Value
General	
Return type:	Just action (returns nothing)
Show at runtime	true
Show name	true
Function body	
Body	bp_systolic = 150; bp_diastolic = 95;
Advanced	
Access type	default

Name	Value
System dynamics units	false

## Function: set\_bp\_hyp\_crisis

Name	Value
General	
Return type:	Just action (returns nothing)
Show at runtime	true
Show name	true
Function body	
Body	bp_systolic = 185; bp_diastolic = 105;
Advanced	
Access type	default
System dynamics units	false

## Function: set\_bp\_lower

Name	Value
General	
Return type:	Just action (returns nothing)
Show at runtime	true
Show name	true
Function body	
Body	bp_systolic = 90; bp_diastolic = 60;
Advanced	
Access type	default
System dynamics units	false

## Function: set\_bp\_normal2

Name	Value
General	
Return type:	Just action (returns nothing)
Show at runtime	true
Show name	true
Function body	
Body	bp_systolic = 115; bp_diastolic = 75;
Advanced	
Access type	default
System dynamics units	false

## Function: set\_bp\_elevated2

Name	Value
General	
Return type:	Just action (returns nothing)
Show at runtime	true
Show name	true

Name	Value
Function body	
Body	<pre>bp_systolic = 126; bp_diastolic = 77;  //if (main.HyptSlider.value == 0) //main.HyptSlider.setValue(2.0);</pre>
Advanced	
Access type	default
System dynamics units	false

## Function: set\_bp\_high\_s1\_2

Name	Value
General	
Return type:	Just action (returns nothing)
Show at runtime	true
Show name	true
Function body	
Body	<pre>bp_systolic = 136; bp_diastolic = 86;</pre>
Advanced	
Access type	default
System dynamics units	false

## Function: set\_bp\_high\_s2\_2

Name	Value
General	
Return type:	Just action (returns nothing)
Show at runtime	true
Show name	true
Function body	
Body	<pre>bp_systolic = 160; bp_diastolic = 100;  //if (main.HyptSlider.value == 0) //main.HyptSlider.setValue(6.0);</pre>
Advanced	
Access type	default
System dynamics units	false

## Function: setEjectionFraction

Name	Value
General	
Return type:	Just action (returns nothing)
Show at runtime	true
Show name	true
Function body	
Body	<pre>if (main.functCap &lt; 2) ejectionFraction = ef_normal;</pre>

Name	Value
	<pre> else if (main.functCap &lt; 3) ejectionFraction = ef_normal - 8;  else if (main.functCap &lt; 4) ejectionFraction = ef_lessThan55;  else if (main.functCap &lt; 5) ejectionFraction = ef_lessThan55 - 7;  else if (main.functCap &lt; 6) ejectionFraction = ef_lessThan40;  else if (main.functCap &lt; 7) ejectionFraction = ef_lessThan40 - 1;  else if (main.functCap &lt; 8) ejectionFraction = ef_lessThan35;  else ejectionFraction = ef_lessThan35 - 3; </pre>
Advanced	
Access type	default
System dynamics units	false

## Function: setBloodPressure

Name	Value
General	
Return type:	Just action (returns nothing)
Show at runtime	true
Show name	true
Function body	
Body	<pre> if (value &lt; 2) set_bp_normal();  else if (value &lt; 3) set_bp_normal2();  else if (value &lt; 4) set_bp_elevated();  else if (value &lt; 5) set_bp_elevated2();  else if (value &lt; 6) set_bp_high_s1();  else if (value &lt; 7) set_bp_high_s1_2();  else if (value &lt; 8) set_bp_high_s2();  else set_bp_high_s2_2(); </pre>
Advanced	
Access type	default
System dynamics units	false

## Arguments:

Name	Type
value	double

## Event: update\_bp

Name	Value
General	
Logging	true
EVENT_TIMEOUT_PROPERTIES	- Recurring Event Properties
Mode	Cyclic
Trigger type	Timeout
Show at runtime	true
Show name	true
Action	
Action	bp_systolic -= main.bpsRate; bp_diastolic -= main.bpdRate;

## Event: updateEjectionFraction

Name	Value
General	
Logging	true
EVENT_TIMEOUT_PROPERTIES	- Recurring Event Properties
Mode	Cyclic
Trigger type	Timeout
Show at runtime	true
Show name	true
Action	
Action	ejectionFraction -= main.efRate;

## Variable: ef\_normal

Description: Pumping Ability of the Heart: Normal

Level of Heart Failure/Effect on Pumping: Heart function may be normal or you may have heart failure with preserved EF (HF-pEF).

Name	Value
General	
Initial value	67
Type	double
Show at runtime	true
Show name	true
Advanced	
Access type	public
Constant	false
Save in snapshot	true
System dynamics units	false
Description	
Description	Pumping Ability of the Heart: Normal Level of Heart Failure/Effect on Pumping: Heart function may be normal or you may have heart failure with preserved EF (HF-pEF).

## Variable: ef\_lessThan55

Description: Pumping Ability of the Heart: Slightly below normal

Level of Heart Failure/Effect on Pumping: Less blood is available so less blood is ejected from the ventricles. There is a lower-than-normal amount of oxygen-rich blood available to the rest of the body. You may not have symptoms.

Name	Value
General	
Initial value	50
Type	double
Show at runtime	true
Show name	true
Advanced	
Access type	public
Constant	false
Save in snapshot	true
System dynamics units	false
Description	
Description	Pumping Ability of the Heart: Slightly below normal Level of Heart Failure/Effect on Pumping: Less blood is available so less blood is ejected from the ventricles. There is a lower-than-normal amount of oxygen-rich blood available to the rest of the body. You may not have symptoms.

## Variable: ef\_lessThan40

Description: Pumping Ability of the Heart: Moderately below normal  
Level of Heart Failure/Effect on Pumping: Mild heart failure with reduced EF (HF-rEF).

Name	Value
General	
Initial value	38
Type	double
Show at runtime	true
Show name	true
Advanced	
Access type	public
Constant	false
Save in snapshot	true
System dynamics units	false
Description	
Description	Pumping Ability of the Heart: Moderately below normal Level of Heart Failure/Effect on Pumping: Mild heart failure with reduced EF (HF-rEF).

## Variable: ef\_lessThan35

Description: Pumping Ability of the Heart: Severely below normal  
Level of Heart Failure/Effect on Pumping: Moderate-to-severe HF-rEF. Severe HF-rEF increases the risk of life-threatening heartbeats and cardiac dyssynchrony/desynchronization (right and left ventricles do not pump in unison).

Name	Value
General	
Initial value	30
Type	double
Show at runtime	true
Show name	true
Advanced	
Access type	public
Constant	false
Save in snapshot	true

Name	Value
System dynamics units	false
Description	
Description	Pumping Ability of the Heart: Severely below normal Level of Heart Failure/Effect on Pumping: Moderate-to-severe HF-rEF. Severe HF-rEF increases the risk of life-threatening heartbeats and cardiac dyssynchrony/desynchronization (right and left ventricles do not pump in unison).

## Rounded Rectangle: roundRectangle1

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Appearance	
Fill color	lightCyan
Line color	black
Line width	1.0
Line style	SOLID
Position and size	
x	310.0
Width	170.0
y	290.0
Height	210.0
Rotation	0.0
Radius	10.0
Advanced	
Show name	false

## Rounded Rectangle: roundRectangle3

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Appearance	
Fill color	new Color(219, 215, 254)
Line color	black
Line width	1.0
Line style	SOLID
Position and size	
x	500.0
Width	140.0
y	360.0
Height	250.0



Name	Value
Rotation	0.0
Radius	10.0
Advanced	
Show name	false

## Text: text37

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Text	
Text	Ejection Fraction
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	340.0
y	470.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Text: text38

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Text	
Text	Blood Pressure
Appearance	
Color	black
Alignment	LEFT
Position and size	
x	520.0
y	580.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false

## Group: groupMainMenu1

Description: allows user to change view in simulation. buttons are coded on click

Name	Value
General	
Show at runtime	true
Lock	false
Embedded icon	false
Public	true
Position and size	
x	0.0
y	0.0
z	0.0
Rotation	0.0
Advanced	
Show in	2D only
Show name	false
Description	
Description	allows user to change view in simulation. buttons are coded on click

## Rectangle: rectangle13

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	lightBlue
Line color	new Color(136, 199, 217)
Line width	1.0
Line style	SOLID
Position and size	
x	690.0
Width	100.0
y	0.0
Height	50.899
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
On click	main.navigate( main.viewHome );
Show name	false

## Rectangle: rectangle14

Name	Value
General	
Show at runtime	true

Name	Value
Lock	false
Public	true
Appearance	
Fill color	lightBlue
Line color	new Color(136, 199, 217)
Line width	1.0
Line style	SOLID
Position and size	
x	790.0
Width	129.774
y	0.0
Height	50.899
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
On click	main.navigate( main.viewLogic );
Show name	false

## Rectangle: rectangle15

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	lightBlue
Line color	new Color(136, 199, 217)
Line width	1.0
Line style	SOLID
Position and size	
x	0.0
Width	690.0
y	0.0
Height	50.899
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
Show name	false

## Text: text27

Name	Value
General	
Show at runtime	true
Lock	false
Public	true

Name	Value
Text	
Text	Home
Appearance	
Color	royalBlue
Alignment	LEFT
Position and size	
x	710.0
y	16.0
z	0.0
Rotation	0.0
Advanced	
Show name	false

## Text: text28

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	CHF Patient
Appearance	
Color	darkGray
Alignment	LEFT
Position and size	
x	34.114
y	16.224
z	0.0
Rotation	0.0
Advanced	
Show name	false

## Text: text65

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	Logic
Appearance	
Color	royalBlue
Alignment	LEFT
Position and size	
x	829.333
y	16.334
z	0.0

Name	Value
Rotation	0.0
Advanced	
Show name	false

## Rectangle: rectangle16

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Appearance	
Fill color	new Color(136, 199, 217)
Line color	new Color(136, 199, 217)
Line width	1.0
Line style	SOLID
Position and size	
x	920.0
Width	149.774
y	0.0
Height	50.899
z	0.0
Z-Height	10.0
Rotation	0.0
Advanced	
On click	main.navigate( viewPatient );
Show name	false

## Text: text66

Name	Value
General	
Show at runtime	true
Lock	false
Public	true
Text	
Text	Patient
Appearance	
Color	darkGray
Alignment	LEFT
Position and size	
x	960.0
y	16.0
z	0.0
Rotation	0.0
Advanced	
Show name	false

## View Area: viewPatient

Name	Value
General	
Show name	false
Position and size	
x	0.0
Width	1070.0
y	0.0
Height	770.0

## Link to agents: connections

Name	Value
General	
Show at runtime	true
Show name	true
Communication	
Message type	Object
Animation	
Draw line	false

## Simulation Experiment: Simulation

Name	Value
General	
Bypass Initial Simulation Screen	true
Maximum available memory	512
Agent type	Main
Model time	
Execution mode	Real time with scale
Real time scale	1.0
Stop option	Never
Initial time	0.0
Initial date	Mon Jun 21 00:00:00 GMT 2021
Randomness	
Random Number Generation Type	Fixed seed (reproducible simulation runs)
Seed value	1
Window	
Title	Blank User : Simulation
Enable zoom and panning	false
Enable developer panel	true
Show developer panel on start	false
Advanced	
Load root from snapshot	false

## Blank User

Text: text

Name	Value
General	
Show at runtime	true
Lock	false
Text	
Text	Blank User
Appearance	
Color	royalBlue
Alignment	LEFT
Position and size	
x	50.0
y	30.0
z	0.0
Rotation	0.0
Advanced	
Show name	false