Social Signal Interpretation XML Tutorial

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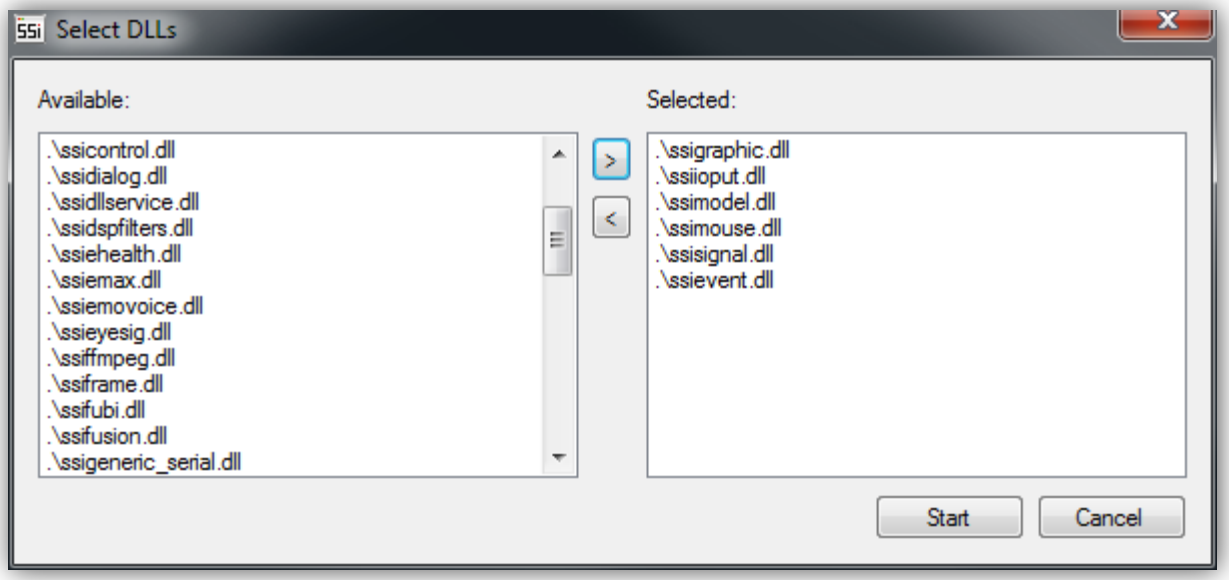
http://openssi.net

XML Editor

1. Start bin/<Win32|x64>/<vc100|vc120>/xmledit.exe
2. Select DLLs you want to use (press ‘strg‘ to select multiple)

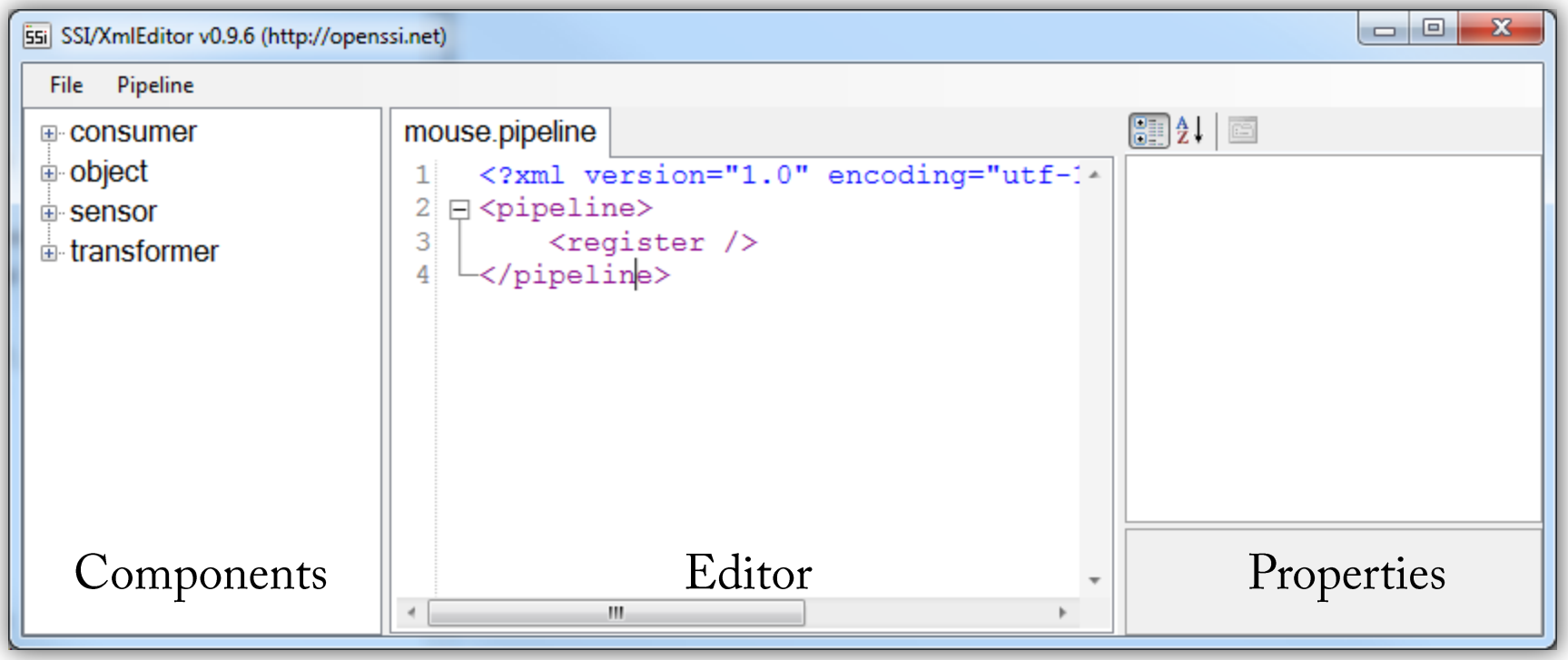
   ssievent.dll, ssigraphic.dll, ssioput.dll,
   ssimodel.dll, ssimouse.dll, ssisignal.dll



Not selected Selected

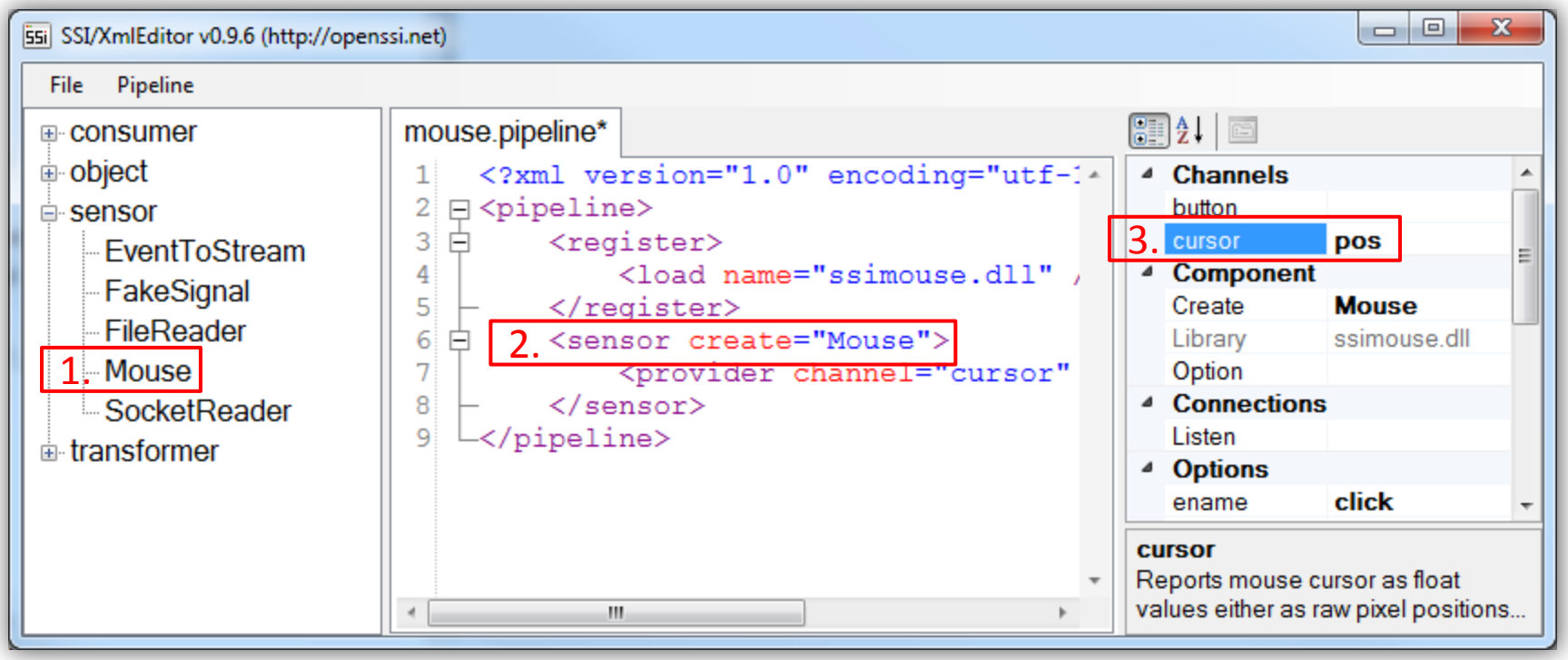
Pipeline

1. Start bin/<Win32|x64>/<vc100|vc120>/xmledit.exe
2. Create a new pipeline (File>New) and save it (File->Save)



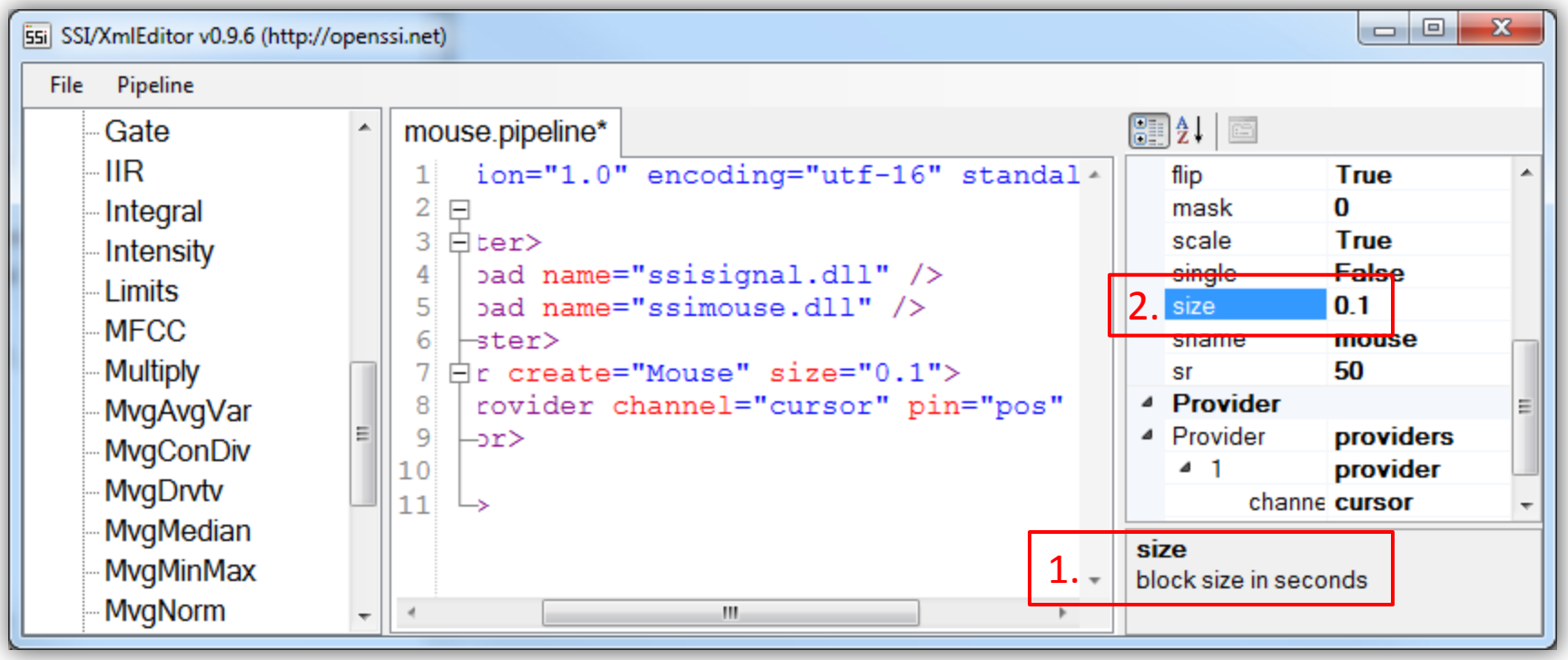
Cursor Provider

1. Expand the sensor-tree and insert a Mouse (double click)
2. Place cursor in line <sensor… to display properties
3. Below Channels assign pin-name to cursor (e.g. pos)



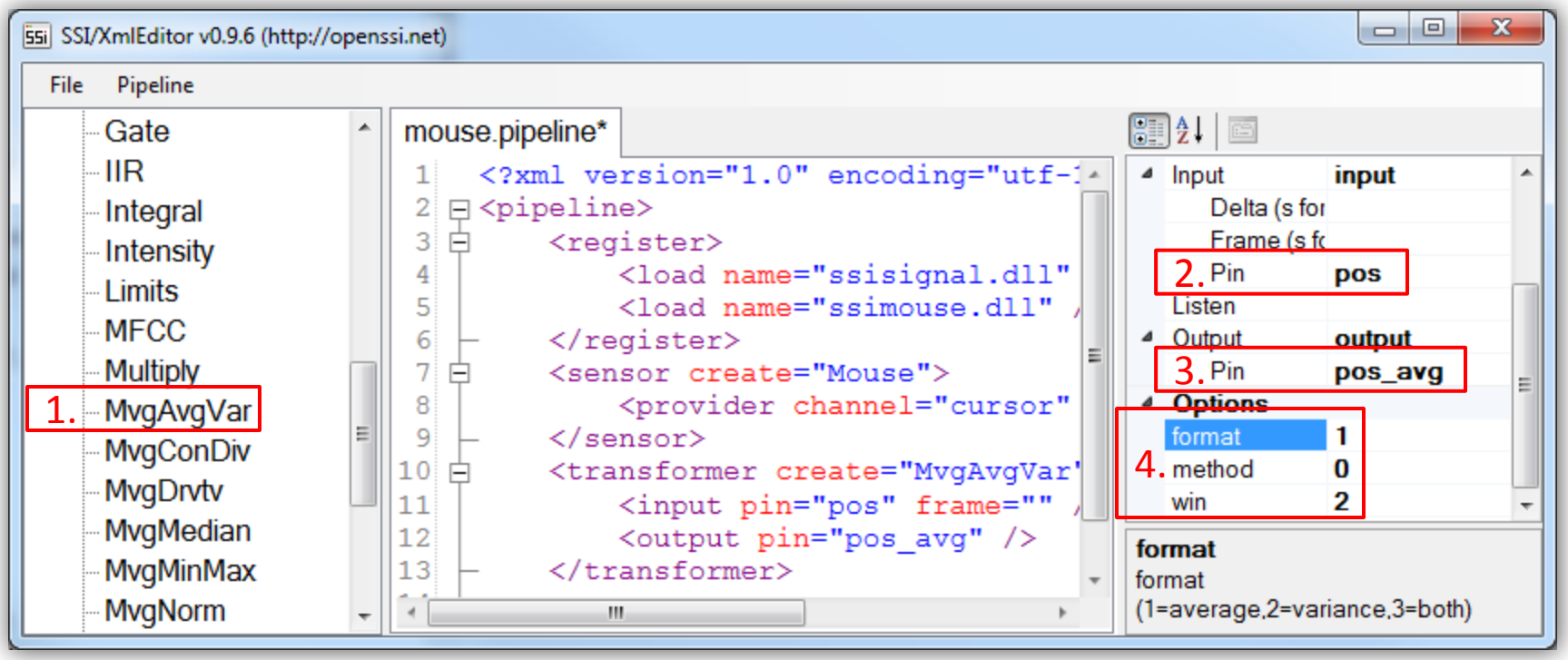
Change Options

1. When you click on an option in the property panel you'll find additional information at the bottom of the panel
2. Set option size to 0.1



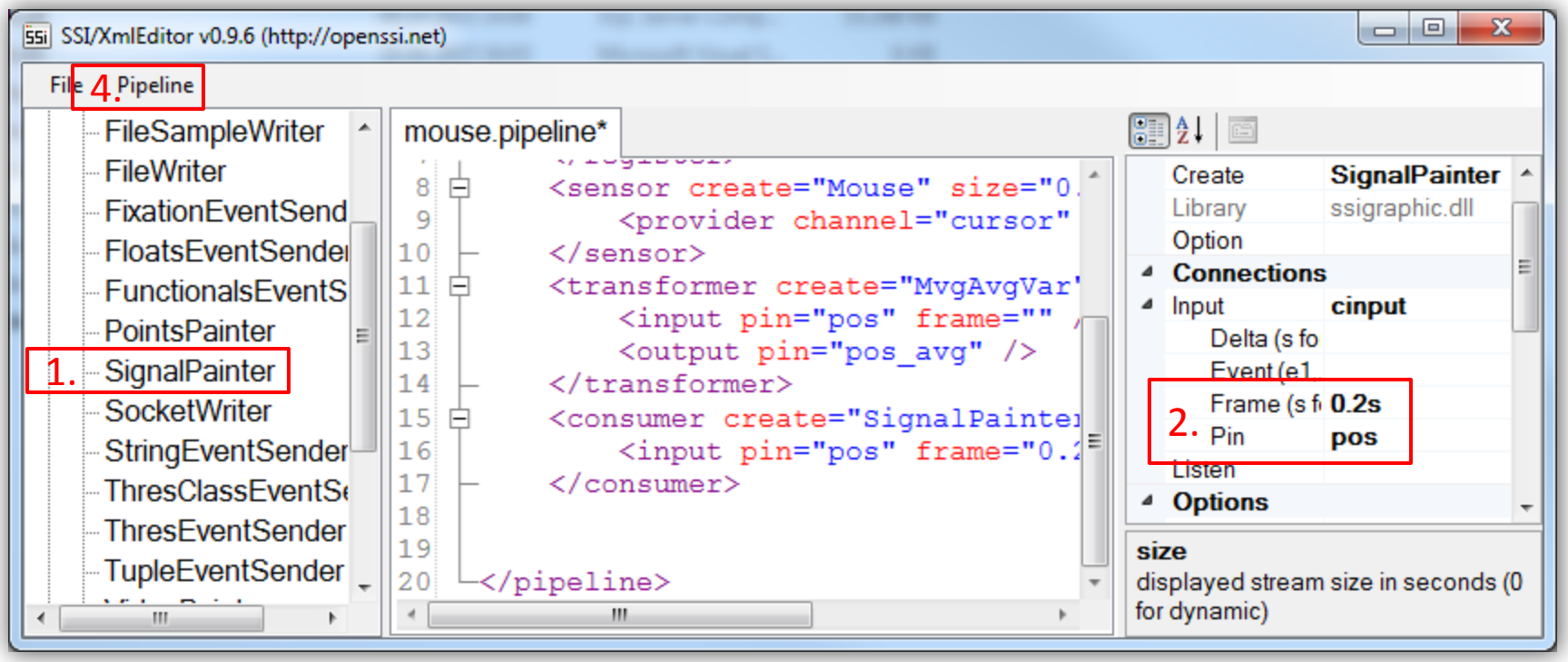
Smoothing Transformer

1. Place cursor in a new line below </sensor> and insert a MvgAvgVar (expand transformer-tree)
2. Set input pin to (pos) and assign an output pin (pos_avg)
3. Set frame size as samples per second (e.g. "10") or as seconds (e.g. "0.2s")
4. Set option format to 1 and option win to 2



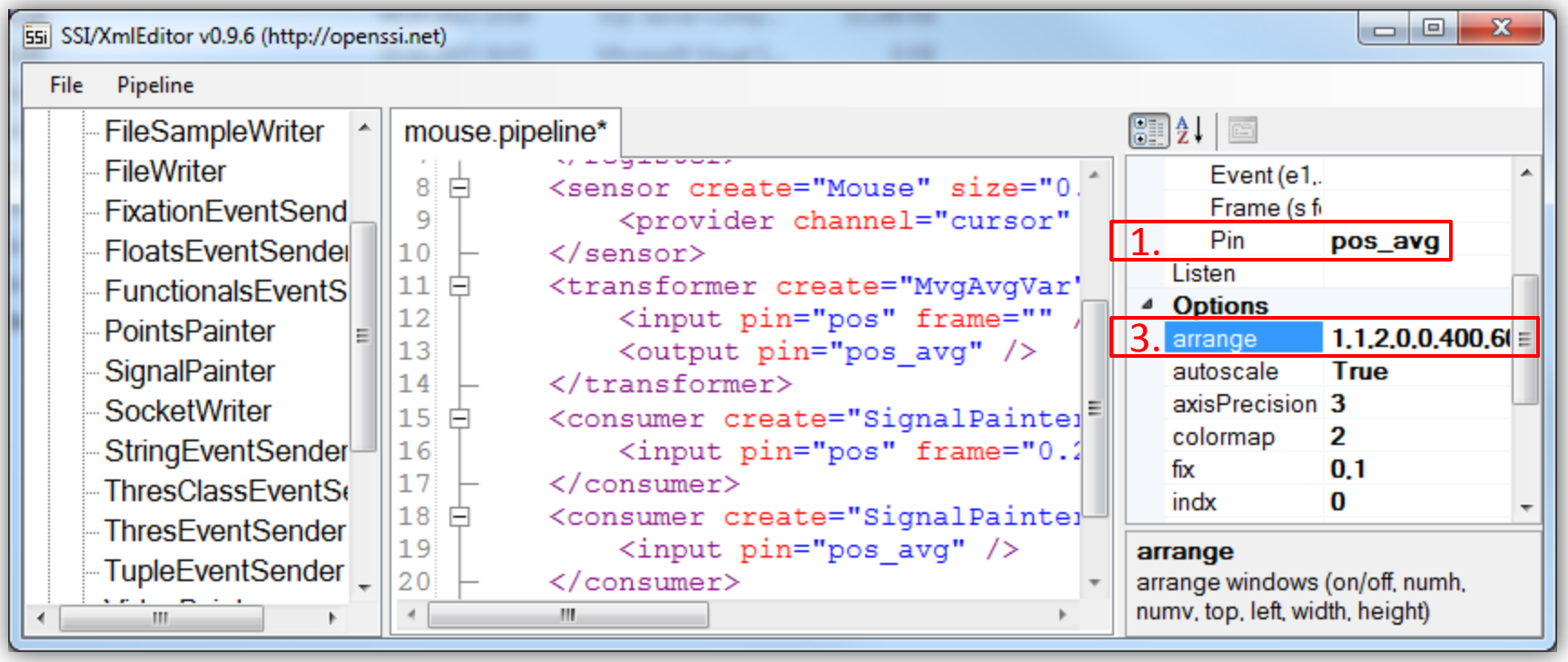
Plot Consumer

1. Place cursor in a new line below </transformer> and add a SignalPainter (expand consumer-tree)
2. Set input pin to pos and choose frame size (e.g. 0.2s)
3. Set option size to 10.0
4. Press F5 to run pipeline



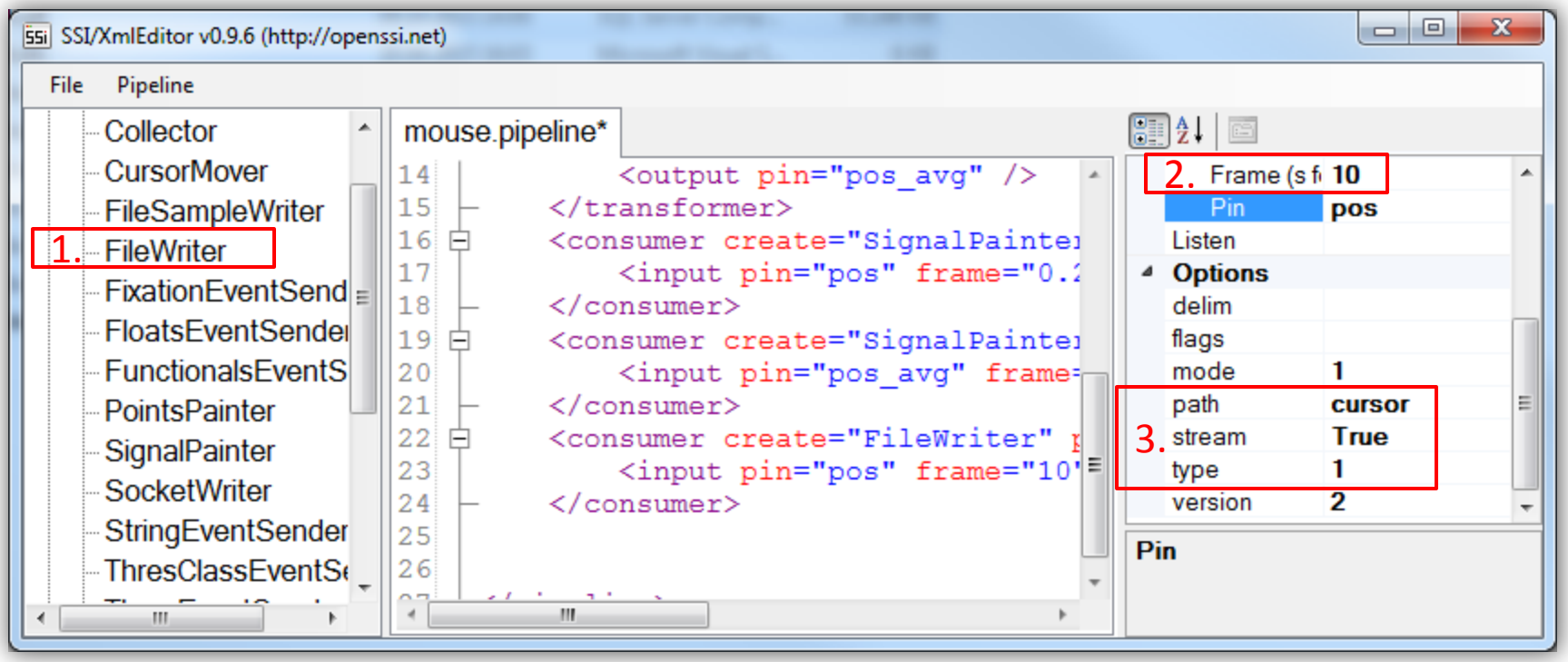
Another Plot Consumer

1. To compare the raw cursor signal with the filtered version insert another SignalPainter consumer and connect it with input pin cursor_avg (and same frame size as before)
2. Set option size to 10.0
3. Set option arrange to 1,1,2,0,0,400,600



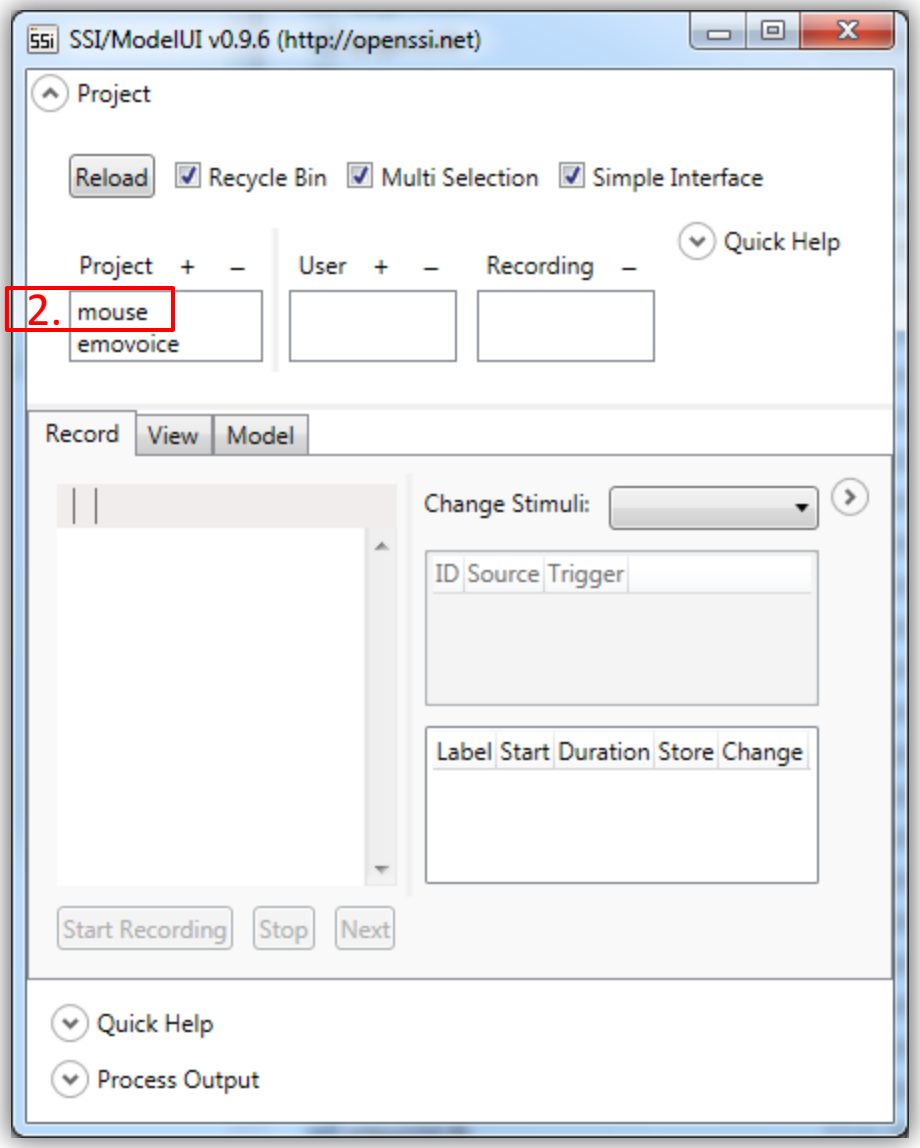
File Consumer

1. Add a FileWriter (consumer) and connect it to pos
2. Set frame size (e.g. 10)
3. Set a path and change file mode to 1 (=ASCII)
4. When you run the pipeline cursor position will be stored to disk (two files cursor.stream and cursor.stream~ will be created)



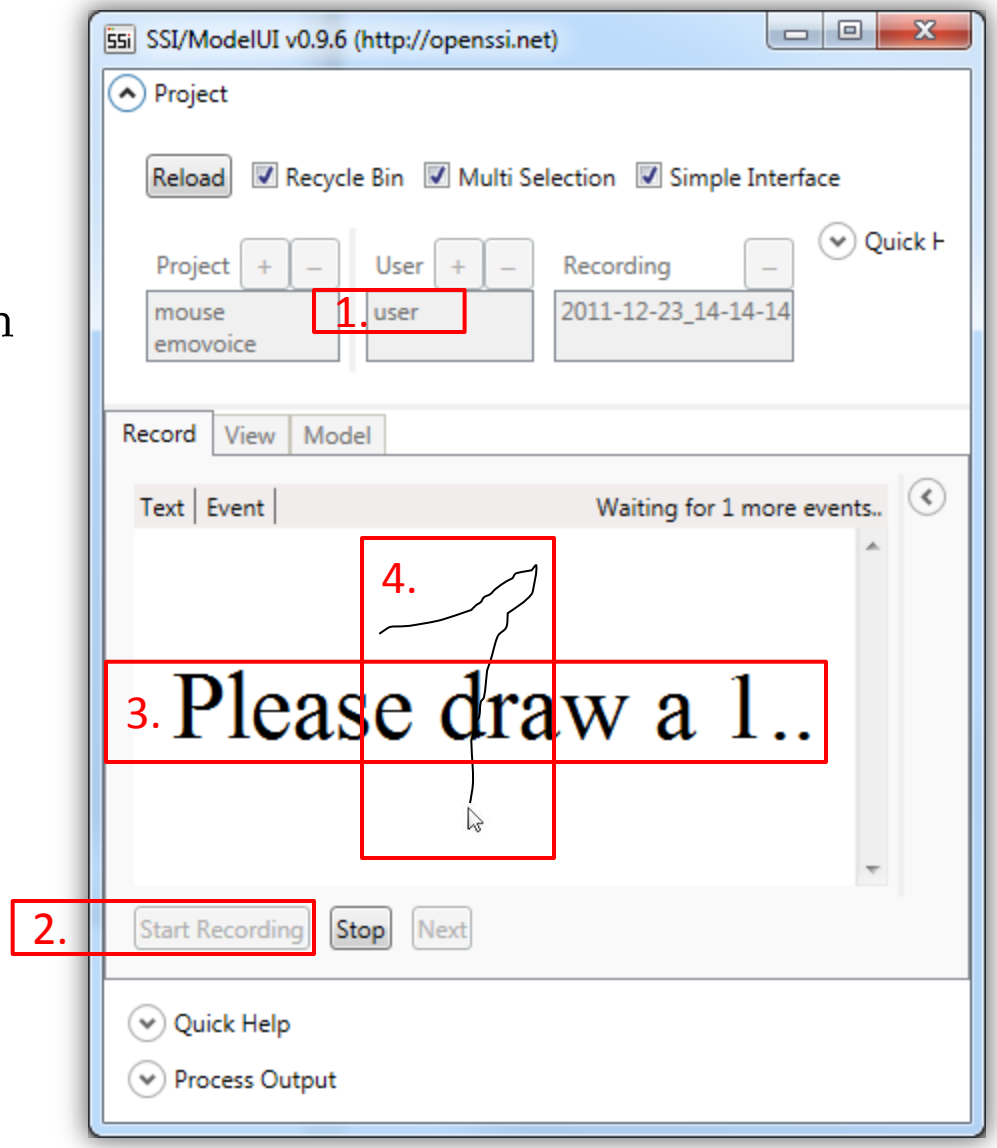
ModelUI

1. Start modelui.exe
2. select project mouse



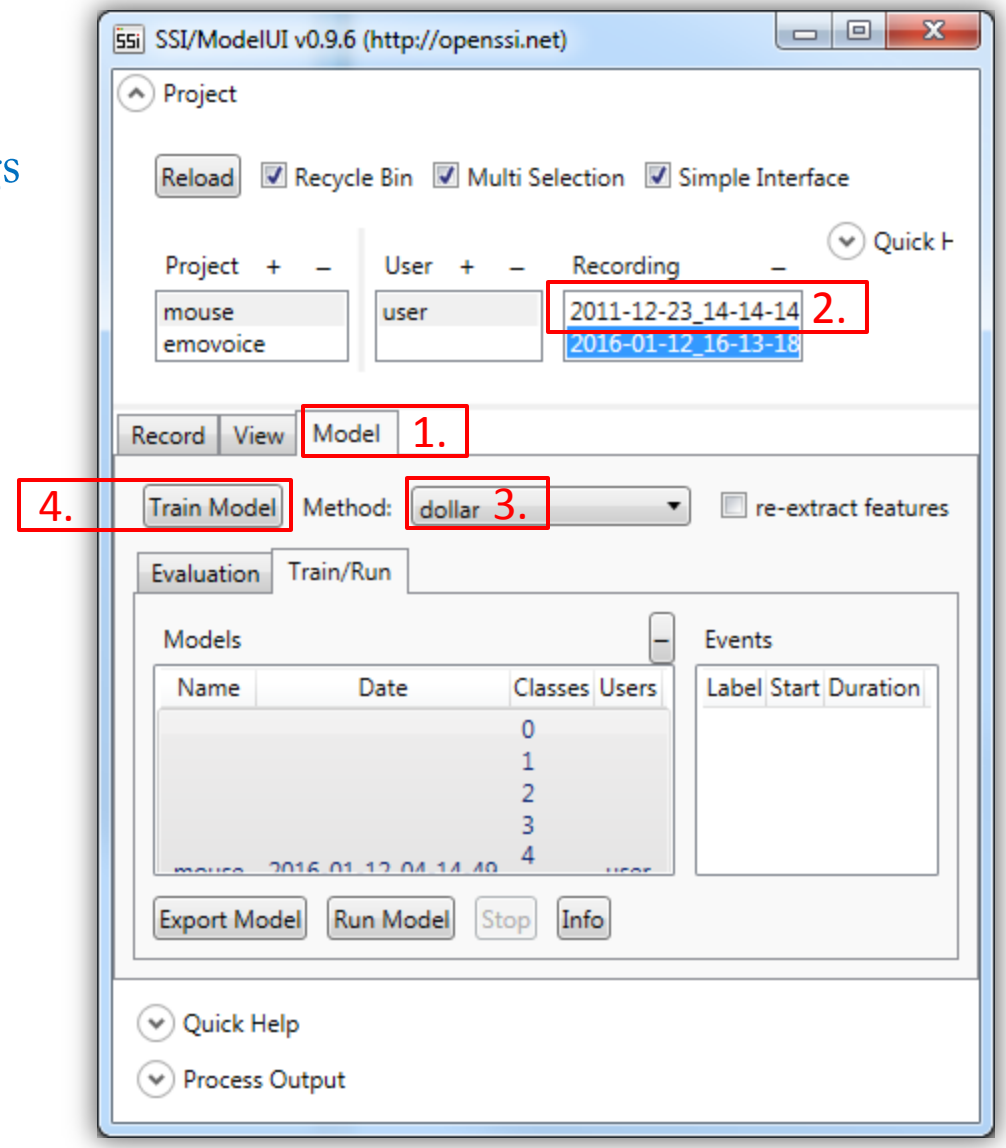
Record

1. Select user
2. Click Start Recording
3. Follow instructions on screen
4. Draw inside the GUI while holding the left mouse button pressed



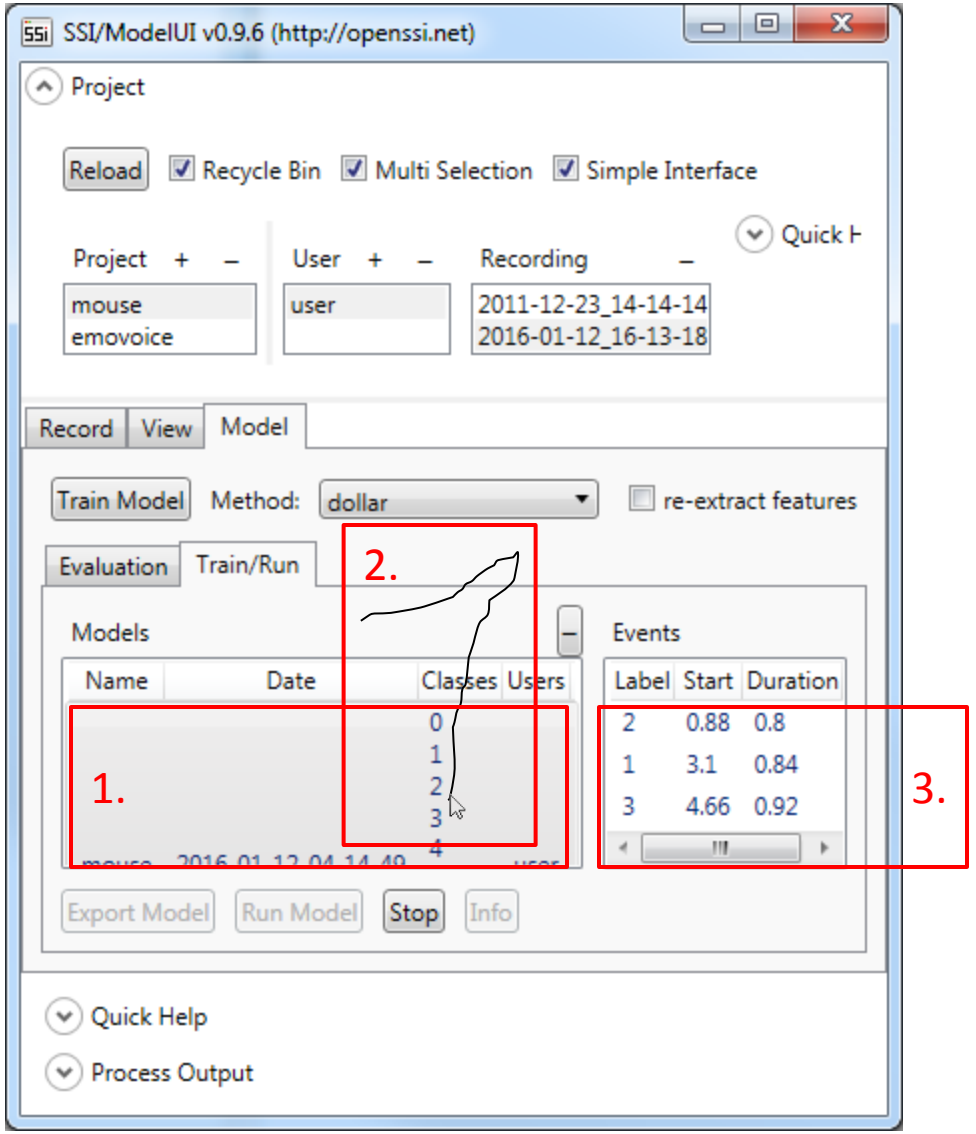
Train

1. Switch to Model panel and select Train/Run
2. Select one or more recordings (by holding the ctrl key)
3. Select dollar as training method
4. Press Train Model to train model



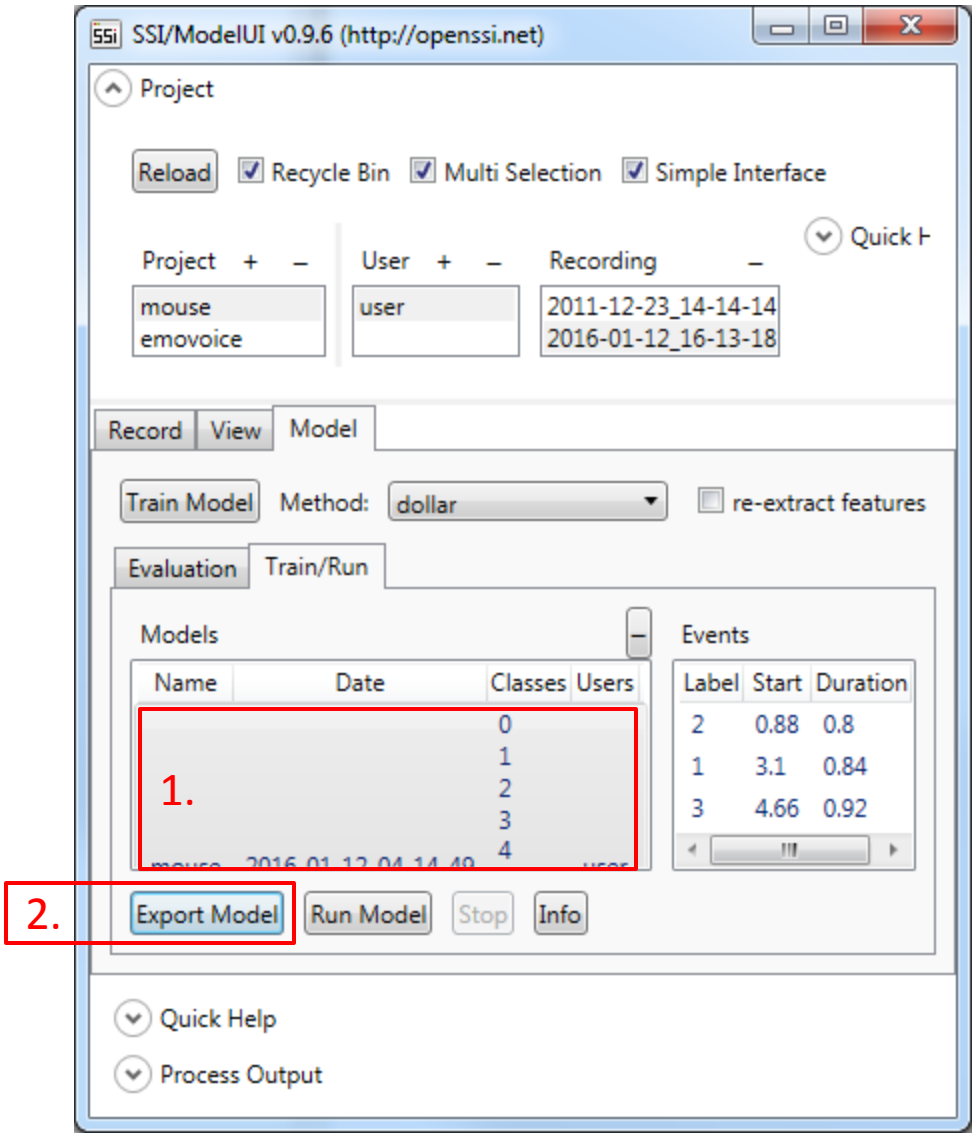
Run

1. Select the trained model and click Run Selected Model
2. Draw inside the GUI by holding the left mouse button pressed
3. Classification results are displayed when you release the mouse button



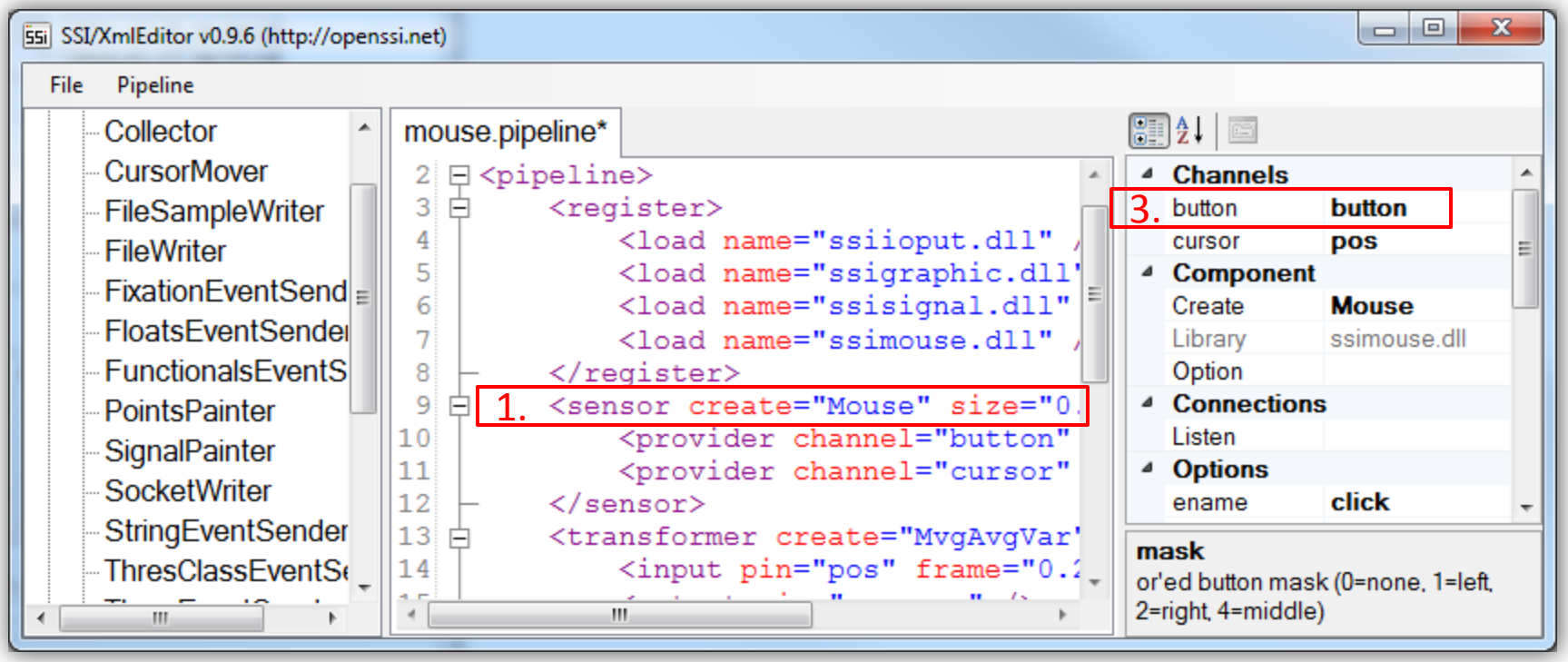
Export

1. Select the trained model
2. Click Export Model
3. Save model in the same folder as the pipeline you have created earlier



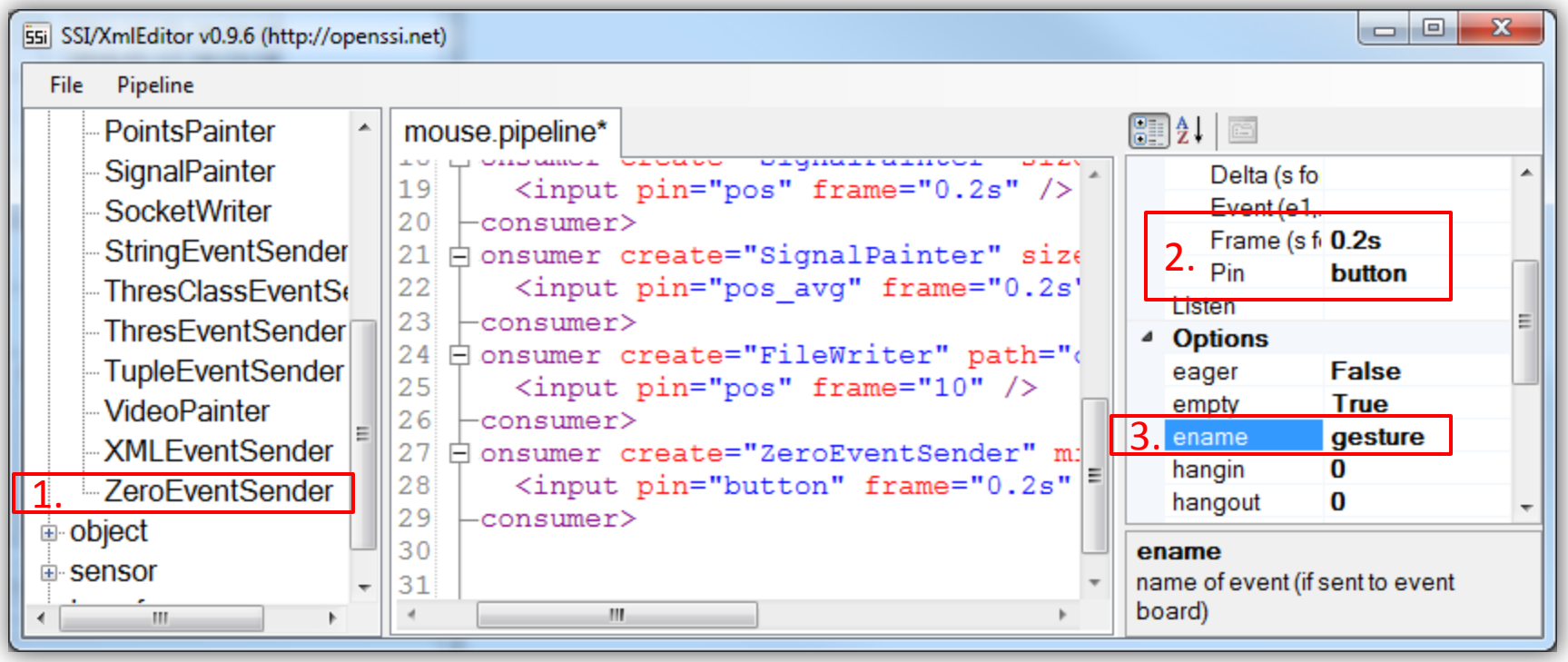
Button Provider

1. Switch back to the editor and place cursor again in the <sensor… line
2. Set mask of mouse sensor to 1
3. Assign a name to the button channel name (e.g. button)



Button Trigger

1. Add a ZeroEventSender (consumer) with input pin button and
2. Set frame size to 0.2s
3. Input an event name by setting option ename (e.g. gesture) and set option mindur to 0.3



Classifier

1. Insert a consumer of type Classifier and set input to pos
2. Instead of a frame size set gesture@ as Event name
3. Set trainer to the previously trained model (mouse) and console to True
4. Detected gestures will now be displayed on the console when you run the pipeline