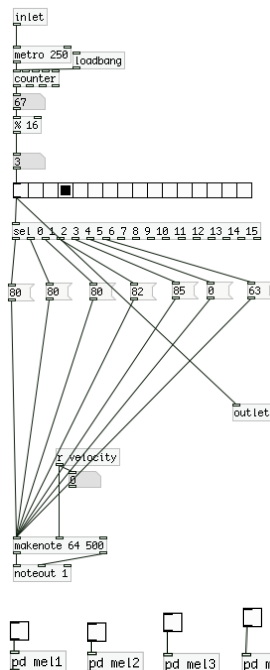


Creative Music Technologies

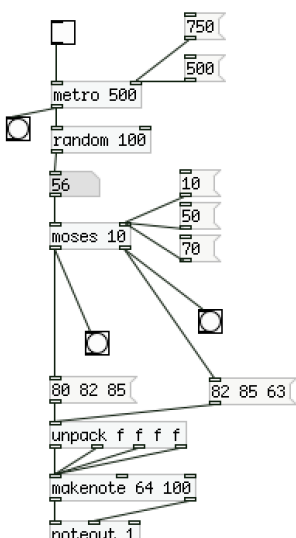
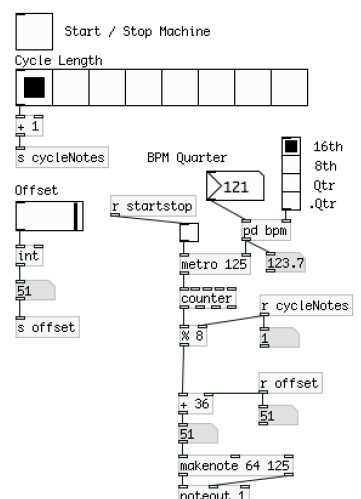
1000 Word Write Up for Creative Project



I recently had been listening to 'Cut 4 Me' which is a song by the artist Kelela. I wanted to create something using Pure Data that would explore melodies using MIDI, so I used this as inspiration to start my piece. The melody is short varies slightly each time, and this sparked my idea to create various small sub patches with toggles that I could later record into Logic individually. To do this I connected Pure Data to Logic so that the MIDI was received and I could use the sounds within its library. This would also allow me to record the MIDI from Pure Data, enabling me to make a track within Logic from my patches.

I only needed an 8 step sequencer for my melody, but I made it 16 in order to make it have the equivalent time after it sounded as a rest. This was because it would make it easier to record as I didn't want it to loop straight round. I used message boxes instead of number boxes to input the midi note values so that the value stayed the same when you closed and opened the patch. This is where I entered the first melody. I then put this sequencer into a sub patch, duplicated it and then worked out the 3 variations of the melody and edited the midi note values in each of my sub patches so that each one played a variation. This way I had a choice of 4 melody variations and could record them into Logic, then decide which ones I wanted to use.

I then created a beat machine which allowed me to record drums into Logic. I was able select how many sounds from ultra beat were played in each cycle and also in control of the range of sounds that played through ultrabeat. I made the initial drum beats by choosing a cycle length of 1 which meant that only one note from ultrabeat sounded. I was then able to change the BPM and the note value so that I could create different rhythms live. However, once recorded into Logic these rhythms did not sync with the melody so I used an offset of one and recorded in the kick and the clap separately which I still adjusted slightly when in Logic.



Once I had arranged a melody with the kick drum and the clap in Logic, I then wanted to generate some chords to add more depth to the melody. I built a patch that uses a random of 100 and connected it to a moses object which uses probability to randomly select from the two chords I entered. I created 3 message boxes containing different numbers to change the probability of what the chord outcome was. I created this patch using moses because I feel that it generates patterns that you wouldn't necessarily think of yourself. When recording this into logic, I decided fire 70 into the moses object and then mess around with the tempo to create a rhythm that I liked. This wasn't altered at all once recorded into Logic as I was really happy with the results and it fitted in well with my track so far. To accompany these chords I used the shaker sound in the beat machine. Again, I used a cycle length of 1 so only the shaker sounded and used the offset slider to select the shaker midi value.

After generating the chords, I wanted to try and make more use of my drum machine. I found the sounds that I wanted, so set the range and the offset and accordingly. These sounds were the shaker, kick, and 'glitch'. I used the 16th note value, a BPM of 120 and flicked between a cycle length of two and three until I ended up with a pattern I was happy with. I then recorded this into Logic. I adjusted the note lengths of this, and the slight timing of the shaker as it was a bit out of sync with the rest of my track. I then took 3 notes used in the melody, sustained them and put it into a new track the 'Sine Bass' preset in the ES2. I dropped these down to lower octaves and doubled up the track to give two low bass sounds which added depth to the piece and gave it a feel of progression combined with the drum pattern.

Overall I was pleased with the outcome of my project. I managed to produce a melodic track that combines my 3 Pure Data patches, one containing sub patches, together to create a song. If I were to make improvements on this project, I would look at making more patches using moses to create more complex chord patterns and also try this with a selected range to create melodies. I faced issues with the timing that the beat machine produced. I would have liked to of used the drum machine to its full capabilities as I mainly used it to generate single notes at a time with the odd exception. If I was to re-make this patch, would see if there was a way to create more syncopated drum rhythms, as I felt that using long cycles on the beat machine I created always made it almost impossible to create a beat that would match with the type of melody I wanted and had already created as the foundation for my piece. Being trained in classical music has given me a strong interest melodies, ornamentation and performance directions, and this is what lead me to creating a melodic based patch. Therefore, I would also read more into to 'Loadbang' by Johannes Kreidler which would give me a greater understanding of Pure Data enabling me to experiment with some patches I came across when reading his book such as patches that generate glissandos, crescendos, diminuendos and rests.

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