Ondes Synth – Object Diagram

*The WiredIntSuppliers track a "visited" flag so that the graph can contain loops. (e.g. a WaveGen can feed back on itself for FM)

The flag must be reset for each sample.

App

Parses command line args
Acquires
- MIDI In
- Audio Out

Starts up OndesSynth

VoiceMaker

Loads programs from YAML. Each is a Map with a "name" key

Voice

(sample voice)   + Other components

WaveGen

WiredIntSupplier

EnvGen

WiredIntSupplier

PhaseClocks

ElapsedTime

Instant

MainMix triggers the line update for all the components by requesting the next value, initiating a DFS*

OndesSynth

Keyboard

MIDI Messages

```
listen();
```

Sets callback for MIDI messages to routeMidiMessage()

Maps from MIDI channel to Program

Tight timing loop

```
void next() {
    instant.next();
    mainMix.update();
}
```

srcLine.write(lineBuffer, 0, lineBuffer.length);

MainMix

Sends signal to JavaSound audio system

List<WiredIntSupplier>