Lab 07 UML Diagram : Team Mauve (13)

Richard Caraher (rjcarahe@iu.edu) Nolan Cauley (nmcauley@iu.edu) Clare Tidmarsh (cmtidmar@iu.edu)

+on() : void +off(): void +setBPM(Int): void +getBPM(): Int +registerObserver(BeatObserver): void +removeObserver(BeatObserver): void

+registerObserver(BPMObserver): void

+removeObserver(BPMObserver): void

<<interface>>

ControllerInterface

+start(): void

+stop(): void

+increaseBPM(): void

+decreaseBPM(): void

+setBPM(int bpm) : void

<<interface>>

BeatModelInterface

BeatModel +beatObservers : ArrayList<BeatObserver> +bpmObservers : ArrayList<BPMObserver>

+bpm: Int +thread : Thread +clip : Clip

+initialize(): void +on(): void +off(): void +run(): void +setBPM(Int): void +getBPM(): Int

+registerObserver(BeatObserver): void +notifyBeatObservers(): void

+registerObserver(BPMObserver): void

+notifyBPMObservers(): void +removeObserver(BeatObserver): void

+removeObserver(BPMObserver): void +playBeat(): void +stopBeat(): void

BeatController

+ model : BeatModelInterface

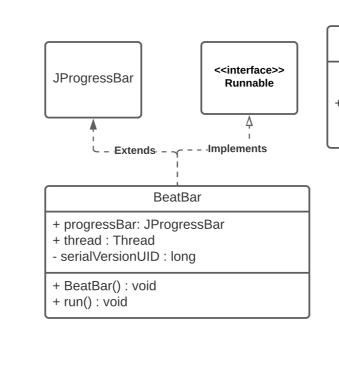
+ view : DJView

|⊲-----

+ BeatController(BeatModelInterface)

+ start() : void + stop(): void

+ increaseBPM(): void + decreaseBPM(): void + setBPM(int) : void



Libraries

java.sound.sampled.AudioSystem

java.sound.sampled.Clip

java.sound.sampled.Line

java.util.*

java.io.*

javax.swing.*

<<interface>> BeatObserver

+updateBeat(): void

+BeatModelInterface model:

+ControllerInterface controller;

+JFrame viewFrame:

+BeatBar beatBar:

+JLabel bpmLabel;

+JButton setBPMButton:

+JButton decreaseBPMButton:

+JMenuBar menuBar;

+JMenu menu;

+updateBeat(): void

+actionPerformed(ActionEvent event): void

+disableStartMenuItem(): void

+disableStopMenuItem(): void

+createControls(): void

<<interface>>

ActionListener

+updateBPM(): void

<<interface>>

BPMObserver

DJView +JPanel viewPanel:

+JLabel bpmOutputLabel; +JFrame controlFrame; +JPanel controlPanel;

+JTextField bpmTextField;

+JButton increaseBPMButton;

+JMenuItem startMenuItem:

+JMenuItem stopMenuItem;

DJView(ControllerInterface controller, BeatModelInterface model)

+updateBPM(): void

+enableStartMenuItem(): void

+enableStopMenuItem(): void

+createView(): void