Lab2 - BellChoir - UML Diagrams

Conductor

af: AudioFormat

notePlayer: Map<Note, Player>

- Lock: Object

+ Conductor(af: AudioFormat)

+ main(arge: String[]): void

+ playSong(song: List<BellNote>): void

- getOrCreatePlayer(note: Note): Player

- LoadNotes(filename: Str): song

validateNote(noteStr: Str): Note

validateNoteLength(lengthStr: Str):
 NoteLength

Player

Note: Note

- Running: boolean

hasNoteToPlay: boolean
 currentNote: BellNote
 line: SourceDataLine

Lock: Object

+ Player(note: Note)

+ run(): void

 playNote(line: SourceDataLine, bn: BellNote, lock: Object): void

+ + stop(): void

playTone(line: SourceDataLine,

currentNote: BellNote)

BellNote

+ Note: Note

+ Length: NoteLength

 BellNote(note: Note, Length: NoteLength)

Note

<<enum>>
All notes "REST,G4, C3, etc..."

- + SAMPLE RATE: int
- + MEASURE_LENGTH_SEC: int
- FREQUENCY_A4_HZ: double
- step_alpha: double
- MAX_VOLUME: double
- singSample: byte[]
- + sample(): byte[]

NoteLength

<enum>> WHOLE,HALF, QUARTER, EIGHTH

+ timeMs(): int