

Digitally Distributed Orchestra: DDO

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1 Project Goals

2 Final Design

2.1 Client-Server Relationship

2.1.1 Option 1: Twisted

2.1.2 Option 2: Tornado

2.1.3 Option 3: Erlang

2.1.4 Decision

2.2 Sheet Music Representation

2.2.1 Inspiration from Guitar Tabs

2.2.2 Refinement of Long Note Representation

2.2.3 Handling of Sharps and Flats

2.2.4 Handling of Octaves

2.3 Audio Generation

2.3.1 PyAudio

2.3.2 winsound

2.3.3 Linux System Calls

2.4 Design Diagram

2.5 Reflection

2.5.1 Best Decision

2.5.2 Room for Improvement

3 Analysis of Outcome

4 Abstractions and Language

4.1 Musicians

4.2 Conductors

4.3 Parsed Songs

5 Implementation Strategy

5.1 Timeline

5.2 Reflection on Division of Labor

6 Bug Report

7 Code Overview

8 How To Run