

Manual Test Plan for Class MIDIPlayer

1. Run the following code after importing `java.util.Scanner`:

```
MIDIPlayer player = new MIDIPlayer();
player.open("MidiFiles/alkan_etude.mid");
player.play();
Scanner scanner = new Scanner(System.in);
String command;
while(true) {
    command = scanner.next();
    if(command.equals("pause"))
        player.pause();
    else if(command.equals("resume"))
        player.resume();
    else if(command.equals("stop"));
        player.stop();
    else if(command.equals("start"));
        player.play();
}
```

2. You should be able to type in the following commands and observe the associated results:
 - i. **pause** : Pauses playback
 - ii. **resume** : Resumes playback at the point at which it was paused
 - iii. **stop** : Stops playback
 - iv. **start** : Starts playback from the beginning

Note that the command **start** must be given after **stop**, and before **resume**, or the MIDIPlayer will attempt to start playback on a closed **Sequencer**, which will raise an error.

Manual Test Plan for Class PNGMusic

1. Run the following code:

```
PNGMusic instance = new PNGMusic();
instance.loadImage("Images/amazingart.png");
instance.imageToMidi();
instance.save("MidiFiles/picture.mid");

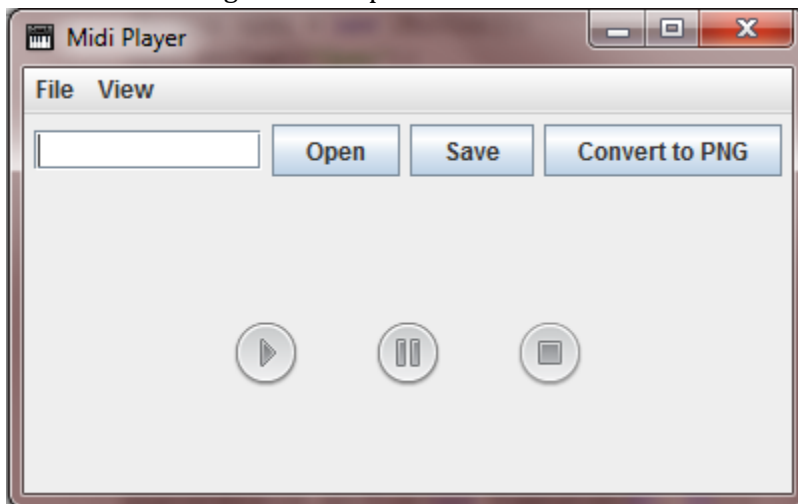
instance.loadImage("Images/justcolors.png");
instance.imageToMidi();
instance.save("MidiFiles/brilliantmusic.mid");
```

2. You should see the MIDI files *picture.mid* and *brilliantmusic.mid* appear in the *MidiFiles* folder. These files can be played back by MIDIPlayer or an external sequencing program.

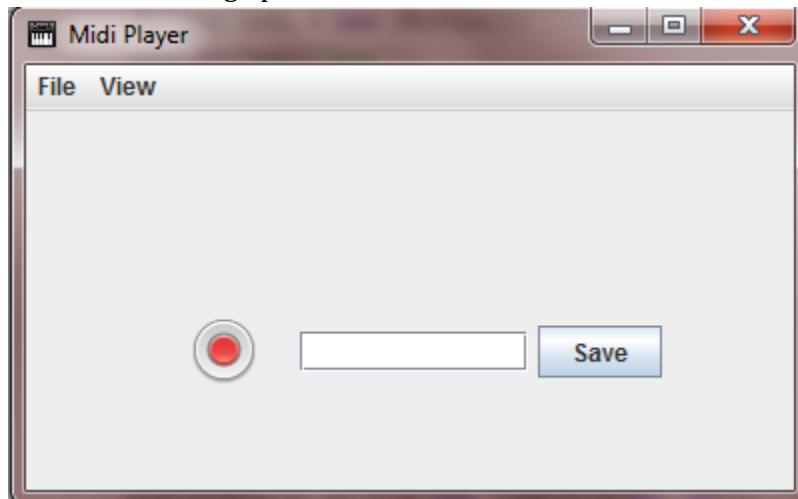
Manual Test Plan for Class MIDIPlayerView

1. Create a new MIDIPlayerView object.

2. You should see the following window open:



3. Click on View > Record Music.
4. You should see the following open in the same window:

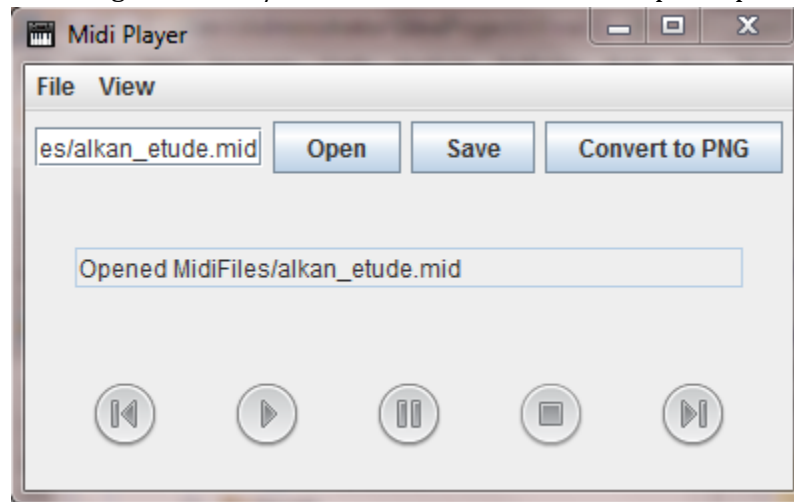


That's right, it's not complete.

5. Click on File > Quit to close the program.

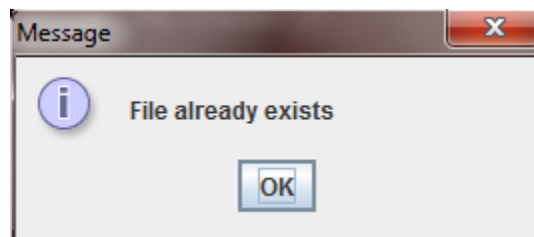
Manual Test Plan for View-Controller

1. Type in a filename – e.g. “MidiFiles/alkan_etude.mid” – and click open “open”.

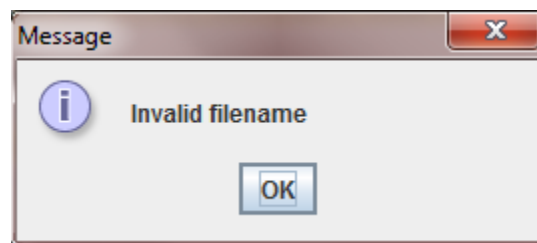


It should say “Opened <filename>” in the uneditable textbox upon successfully opening the file.

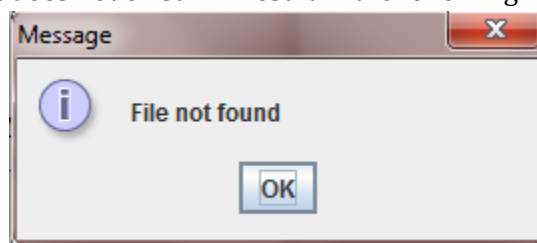
2. Click on the playback buttons to navigate this fine nineteenth-century composition.
3. Typing in a filename in the same text field and clicking on “save” will save the loaded sequence in the file specified. Attempting to overwrite a file will result in the following message being displayed:



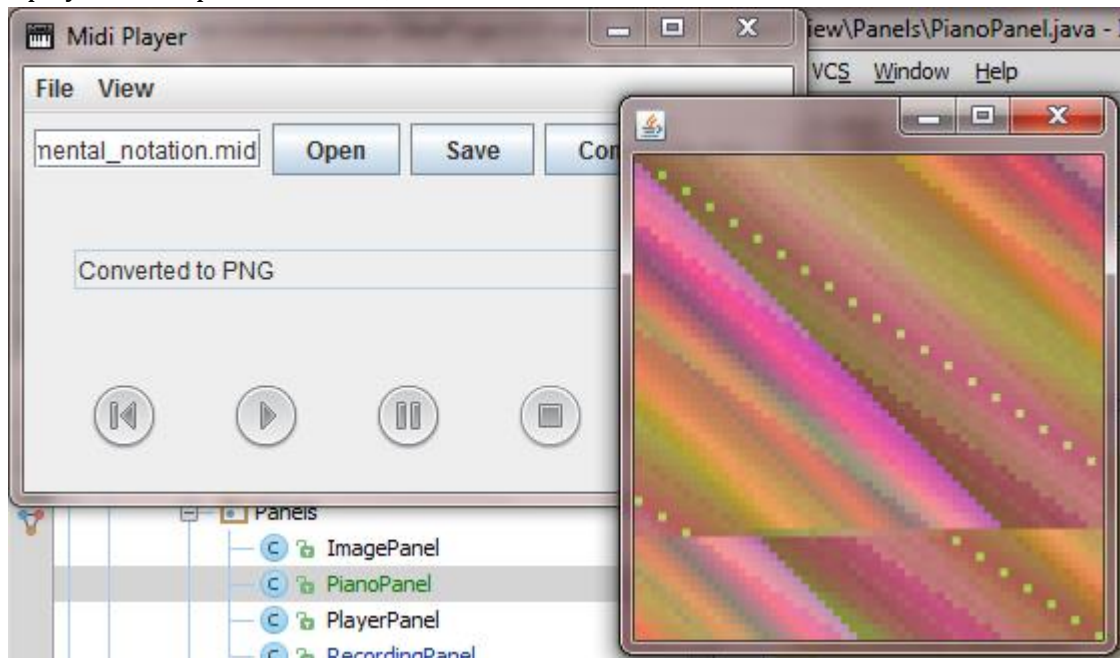
4. Trying to load or save a file of an invalid type (i.e. other than *.mid* or *.png*) will result in the following message:



5. Trying to load a file that does not exist will result in the following message:



6. Opening a PNG file will automatically cause it to be converted into a MIDI sequence. The playback buttons may be used to navigate the resulting primitive composition.
7. Converting a loaded MIDI sequence to a PNG file should result in the PNG file being displayed in a separate window, when it works as intended:



All images are scaled down (or up) to 100 x 100 pixels upon loading, and all images are scaled to 250 x 250 when displaying, so pixilation may (will) result.