```
require 'java'
java_import 'javax.swing.JFrame'
java import 'javax.swing.JMenu'
java_import 'javax.swing.JMenuBar'
java import 'javax.swing.JMenuItem'
java_import 'javax.swing.JOptionPane'
java import 'javax.swing.JFileChooser'
java_import 'javax.swing.JButton'
java import 'javax.swing.JCheckBox'
java_import 'javax.swing.JLabel'
java import 'javax.swing.SwingConstants'
java_import 'javax.sound.midi.MidiSystem'
java import 'javax.sound.midi.Sequencer'
java_import 'java.awt.event.ActionListener'
java_import 'java.awt.BorderLayout'
java_import 'java.awt.Font'
java_import 'java.awt.Rectangle'
java_import 'java.awt.Toolkit'
java_import 'java.net.URL'
class JMidiPlayer
  def initialize
   init
  end
  private
  def init
    midiframe = JFrame.new 'JRuby MIDI Player'
    mb = JMenuBar.new
   midiframe.set jmenu bar(mb)
   file = JMenu.new 'File'
    open = JMenuItem.new 'Open'
    exit = JMenuItem.new 'Exit'
   file.add(open)
   file.add(exit)
   mb.add(file)
   help = JMenu.new 'Help'
    about = JMenuItem.new 'About'
    help.add(about)
    mb.add(help)
    play = JButton.new
```

```
status = JLabel.new
    stop = JButton.new
    loop = JCheckBox.new
    loop.setEnabled(false)
    open.add_action_listener do |e|
      @midi file = get file
      @midi = MidiSystem.getSequence(@midi_file)
      file name = @midi file.to s.split('/')
#
      puts file_name
      name = file name[file name.length - 1]
      puts name
#
      status.setText("Status: " + name + " Loaded")
      play.setEnabled(true)
      loop.setEnabled(true)
      @sequencer = MidiSystem.getSequencer
      @sequencer.open
      @sequencer.setSequence(@midi)
    end
    def get_file
     chooser = JFileChooser.new
      @file = URL.new("file", "",
        chooser.selectedFile.getAbsolutePath)\
        if (chooser.showOpenDialog(nil)\
          == JFileChooser::APPROVE OPTION)
    end
    exit.add_action_listener do |e|
      @sequencer.stop
      @sequencer.close
      midiframe.set_default_close_operation JFrame::DISPOSE_ON_CLOSE
      midiframe.dispose
    end
    about.add action listener do |e|
      JOptionPane.showMessageDialog(nil,
        "This was inspired by Rich Perilli and his JAVA MIDI player v1.0",
        "JRuby Java Swing JFrame Application.",
        JOptionPane::INFORMATION MESSAGE)
    end
    stop.setBounds(Rectangle.new(44, 85, 75, 29))
    stop.setEnabled(false)
```

```
stop.setFont(Font.new("Dialog", Font::BOLD, 11))
stop.setText("Stop");
stop.addActionListener do |e|
  status.setText("Status: Stopped")
  @sequencer.stop
  @sequencer.close
  stop.setEnabled(false)
  loop.setEnabled(true)
  play.setEnabled(true)
  open.setEnabled(true)
  about.setEnabled(true)
end
play.setBounds(Rectangle.new(133, 85, 75, 29))
play.setEnabled(false)
play.setFont(Font.new("Dialog", Font::BOLD, 11))
play.setText("Play")
play.addActionListener do |e|
  stop.setEnabled(true)
  play.setEnabled(false)
  loop.setEnabled(false)
  open.setEnabled(false)
  about.setEnabled(false)
  if loop.isSelected == false
    status.setText("Status: Playing (Repeat Off)")
   @sequencer.open
    @sequencer.setSequence(@midi)
  end
  if loop.isSelected == true
    @sequencer.open
    @sequencer.setSequence(@midi)
    @sequencer.setLoopCount(Sequencer::LOOP CONTINUOUSLY)
    status.setText("Status: Playing (Repeat On)")
  end
   status.setText("Status: Playing")
  @sequencer.start
end
loop.setFont(Font.new("Dialog", Font::BOLD, 11))
loop.setText("Repeat")
loop.setBounds(Rectangle.new(213, 90, 109, 20))
```

```
status.setFont(Font.new("Dialog", Font::BOLD, 15))
    status.setHorizontalAlignment(SwingConstants::TRAILING)
    status.setText("Status: File Is Not Loaded Yet")
    status.setBounds(Rectangle.new(96, 41, 244, 35));
   midiframe.getContentPane.add(stop)
   midiframe.getContentPane.add(play)
   midiframe.getContentPane.add(loop)
    midiframe.getContentPane.add(status)
    # image files
         image1 =
Toolkit.getDefaultToolkit.getImage(URLClassLoader.getSystemResource(\
             "images/x.jpg")) #This will load the image file
    #
        midiframe.setIconImage(image1) #this sets the icon
   midiframe.set size(400, 200)
    midiframe.set resizable false
    midiframe.set default close operation JFrame::EXIT ON CLOSE
    midiframe.setVisible true
  end
end
run = JMidiPlayer.new
class AboutAction
  # Implementing a Java interface
 include ActionListener
  def action performed(e)
    JOptionPane.showMessageDialog(nil,
      "This was inspired by Rich Perilli and his JAVA MIDI player v1.0 on Plane
Source Code",
      "JRuby Java Swing JFrame Application.",
      JOptionPane::INFORMATION_MESSAGE)
  end
end
```