The provided code outlines a basic virtual piano application developed in Java, utilizing JavaFX for the graphical interface and the Java Sound API for audio output. The application consists of two primary classes: `PianoController` and `PianoScreen`.

`PianoController` Class

- Purpose: Manages the piano's functionality, including key presses and sound generation.
- Key Features:
    - MIDI synthesizer initialization for sound playback.
    - Methods to handle piano key press and release events.
    - Volume and octave adjustment capabilities.

`PianoScreen` Class

- Purpose: Sets up the JavaFX panel and handles the application window.
- Key Features:
    - Creation of the main application window.
    - Window event handling, including exit confirmation.
    - Integration with `PianoController` for functionality.

Relevant Documentation Links

- JavaFX: A platform for creating and deploying desktop applications.https://openjfx.io/openjfx-docs/
- Java Sound API: Provides interfaces and classes for capture, processing, and playback of audio data. https://docs.oracle.com/javase/7/docs/technotes/guides/sound/programmer_guide/contents.html
- MIDI System: Part of the Java Sound API, used for synthesizing audio for musical instruments. https://docs.oracle.com/javase/8/docs/api/javax/sound/midi/package-summary.html