**Devil Player – Desktop Audio Player Application**

**Role:** Lead Developer  
**Technologies:** C#, .NET Framework, WinForms, NAudio, INI File Management  
**Timeline:** [Optional: Add dates]  
**Project Type:** Desktop Audio Player with Advanced Playlist and Playback Management

**Project Overview**

Devil Player is a full-featured desktop audio player developed using C# and WinForms, designed for **smooth multimedia playback, playlist management, and flexible user experience**. The application supports multiple audio formats and provides advanced features like playback modes, opacity adjustments, and customizable language settings.

**Key Features**

1. **Audio Playback Management**
   * Play, pause, stop, previous, next track functionalities.
   * Playback modes: Shuffle, Repeat, Repeat All, No Repeat.
   * Keyboard shortcuts for quick playback control (Space for Pause/Resume, V for Stop, Z/B for previous/next track).
2. **Playlist Handling**
   * Add single media files or entire directories.
   * Load and save playlists in a custom .DPP format.
   * History management of recently played files.
   * Automatic detection and support for multiple audio formats including MP3, WAV, OGG, WMA, M4A, FLAC, MID.
3. **User Interface & Experience**
   * Fully responsive WinForms UI with menu items dynamically changing based on language settings.
   * Opacity adjustments from 10% to 100% via menu.
   * Top-most and movable window options for better accessibility.
   * Context menus and interactive list box for playlist control.
4. **Internationalization**
   * Full support for **English** and **Persian** languages.
   * Menu items, messages, and status texts dynamically change based on the selected language.
   * Right-to-left (RTL) support for Persian interface.
5. **Settings & Persistence**
   * Settings stored in INI files including window position, language, playback mode, and opacity.
   * Playlist and history saved and loaded automatically between sessions.
   * Clean resource management on exit (audio stop, file closure, playlist save).
6. **File & Folder Management**
   * Open file dialog for adding single audio files.
   * Folder browser integration to add multiple files from directories.
   * File validation to ensure only supported audio types are added.
7. **Enhanced User Interaction**
   * Notify icon support with click behavior to restore the application.
   * Custom handling of Windows messages to control window movement.
   * Interactive dialogs for loading and saving playlists.
   * Status updates in form title and progress bar to indicate current playback state.

**Technical Highlights**

* **WinForms Event Handling:** Leveraged extensive event-driven programming to handle menu actions, keyboard shortcuts, form events, and playback events.
* **NAudio Integration:** For low-level audio playback, pause, resume, and stop operations.
* **INI File Operations:** Implemented a custom INI file helper for reading, writing, and deleting settings and history.
* **Dynamic UI Updates:** Controlled menu item check states, opacity settings, and language text dynamically based on user actions or saved preferences.
* **Error Handling:** Robust try-catch blocks throughout the application to prevent runtime exceptions and maintain user experience stability.

**Skills Demonstrated**

* Desktop application development with C# and WinForms.
* Multimedia processing and audio playback control using NAudio.
* File I/O operations and playlist persistence.
* Internationalization (i18n) and multi-language support.
* Event-driven programming and UI state management.
* Application settings management with INI files.
* User experience enhancements including keyboard shortcuts, opacity control, and interactive menus.

**Achievements**

* Successfully developed a **feature-rich audio player** supporting multiple playback modes and playlists.
* Designed a **flexible UI** with runtime language switching and dynamic opacity settings.
* Implemented **robust file and playlist management**, ensuring user data is preserved between sessions.
* Created an **intuitive keyboard-driven workflow**, improving usability for power users.