

# [Free media player scheduler report sample](https://assignbuster.com/free-media-player-scheduler-report-sample/)

[Media](https://assignbuster.com/essay-subjects/media/)

So far, we have written a program that simulates a media player on FPGA board and plays an audio file. However, in the real world, we require applications that can play a series of songs for a specified period of time. The user need not be bothered about changing or selecting a song for each time he/she wants a new one. For this, we make use of a song scheduling technique which schedules songs as per requirement of the user automatically for a period of time. A scenario can be taken such as that of Radio station where songs have to be played continuously, and there should not be any need for the person who selects the song to be played to waste any of his/her time in deciding what songs to play. We can thus develop a Song Scheduling algorithm which enables the Radio station to play a variety of songs. The main goal here is to avoid repetition of songs as much as possible, play popular songs frequently and less popular ones not so frequently. The following requirements need to be fulfilled for such a system:
- Library File: A library file must exist which consists of the list of songs that is to be scheduled and played on the system. New sings may be added to this. The system must read this file every week or two weeks to update its own list of songs to be played. Each entry in the file must consist of the following fields: Song Title, Singer, and Record Access Number.
- Song frequency: The system must record the data about frequency for each song. This is based on the number of plays per week, and the date the song was last played. Popularity is also an important factor and the system will record the popularity song on a scale of 100 which is set by the station personnel. Based on this combination of frequency and popularity, the system will prioritize all the songs in its database.
- Schedules: A schedule consists of a list of songs to be played, which can be altered or generated by the station personnel using the Song Scheduling system. Schedules are made by selecting songs at random from the highest priority songs, with no repetitions on any day. A schedule can be day-long or hour-long. An hour-long schedule will program songs for around 45 minutes, leaving room for commercials.
Finally the station personnel, who are the users, may print the finalized song schedule and query the system for data about any song.