“CDDB, short for Compact Disc Database, is a database for software applications to look up audio CD information over the Internet. This is performed by a client which calculates a unique disc ID and then queries the database. As a result, the client is able to display the artist name, CD title, track list and some additional information. CDDB is a licensed trademark of Gracenote, Inc.” from [en.wikipedia.org](http://en.wikipedia.org/wiki/CDDB)[Text under CC-BY-SA license](http://creativecommons.org/licenses/by-sa/3.0/) accessed 13 Sept 2020.

From Compsmag review at <https://www.compsmag.com/alternative/software/freedb/#freedb-review-and-short-description> accessed 13 Sept 2020, Freedb allows digital music stored on a compact disk or CD, otherwise unlabeled to be married with an artist, a title, and also provide track listing.

From 27 April 2020 updated Livewire article, **CDDB: A Smart Way of Tagging Your Music Library:** Using an online CDDB is a great time-saving way of tagging your songs by Mark Harris accessed from <https://www.lifewire.com/what-is-cddb-2438540#:~:text=Software%20Media%20Players%3A%20Popular%20programs%20such%20as%20iTunes%2C,CD%20and%20fill%20in%20inf”ormation%20about%20its%20contents.> on 13 Sept 2020, applications that have been built on the CDDB formats are: iTunes, Windows Media Player, and VLC Media Player. The Apple support website, <https://support.apple.com/>, accessed 13 Sept 2020 indicates that iTunes uses Gracenote to provide metadata for its digital music. This reference makes it clear that the CDDB and Gracenote are related. Further reference CDDB Wikipedia, indicates: “In 2000, **CDDB** Inc. was renamed **Gracenote**.” SaaSHub, accessed 13 Sept 2020, <https://www.saashub.com/compare-freedb-vs-gracenote>, relates that Freedb is textual metadata and Gracenote is entertainment metadata across multiple media. From Gracenote, Inc website, <https://www.gracenote.com/music/global-music-data/>, accessed 13 Sept 2020, Gracenote provides a normalized artists and works data base and allows cross media relationships.

Per the Livewire article, the metadata retrieved to label the music tracks was based on an algorithm using track length and order played on the CD.

The affordances of building iTunes, Windows Media Player, and VLC Media Player with CDDB-Gracenote-Freedb formatting allowed for standardization of metadata retrieval and reduced the need for redundant databases when CDs were prominent as well as technologies that mimicked CDs. However, the advent of multiple digital media markets and their inevitable mingling has led to Gracenote expanding its offerings and Freedb to shuttering its website, <https://forums.stevehoffman.tv/threads/freedb-org-is-shutting-down.936700/> Appears Freedb was to shut down on 31 March 2020 and has been replaced with MAGIX.

The focus of the underlying CDDB format on an algorithm derived from physical features of a physical object, i.e. a CD, is a big limitation. While the physical features appeared to have been duplicated in some virtual digital entity, the three applications that are related as using CDDB do not at this time rely entirely on a physical CD to retrieve music, in fact the physical CDs are becoming nonexistent with the advent of newer computers that do not host CD readers. It is obvious from the Gracenote focus on “Cross Media” reach that the algorithm that drove the CDDB originally has had to be adapted to continue to be useful and at some point will not be mutable enough to continue as a means of connecting metadata to the digital entity it represents. As an individual who first listened to music on vinyl records and punched paper cards to support his graduate professor’s computer input work, I can attest that formats that existed and provided utility in the past with the advent of new technologies are seldom viable.