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Assignment#15 Music DB Use Case

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**Music Database Use Case**

The premise of this database is to allow the user to perform a number of queries in relation to the music industry. Hypothetically this database would be used within the music industry itself, and not necessarily by the consumer market. Those within a production company would be able to easily view who works in the company, what contracts are held with music groups, and what music artist are involved in said group. Additionally, companies would have the ability to view basic details about the vendors selling their product.

**Requirements**

* Production company
  + Has an ID.
  + Has a name.
  + Contracts music groups(1:M).
  + Has employees(1:M).
  + Produces albums (1:M).
* Employee
  + Has an ID.
  + Works for a department.
  + Has a name.
  + Works for production company(M:1).
  + There are two disjoint subclasses which must be a member of employee. Manager and non-management. Manger has a salary, whereas non-management has an hourly rate.
* Music group
  + Has an ID.
  + Has a group name.
  + Records albums (M:N).
  + Has members (M:N).
* Member
  + Has an ID.
  + Has name.
  + Has a date of birth.
  + Has age, which is derived from birthdate.
  + Has subclasses of manager, guitarist, vocals, and drums, which can overlap and does not represent all of the possibilities of a member of a band, just the most common. Manager has a salary, guitarist has a preferred guitar, vocals has an octave range, and drummers have a preferred drum.
* Album (weak entity due an album depending on a group to record it)
  + Album has a release date.
  + Has an ID.
  + Has a name.
  + Has a genre.
  + Albums are recorded by a group (M:N).
  + Albums are sold by vendors (M:N).
  + Albums are produced by production companies (1:M).
* Vendor
  + Has an ID.
  + Has a name.
  + Sells albums (M:N).