

### 1. Functional Dependencies.

People:

pid -> fname, lname, address, city, state, postalcode, country, phonenumber

Players:

pid -> age

Coaches:

pid -> yearscoached

Teams:

tid -> name

tid -> headcoachfname

tid -> headcoachlname

Playsinteam:

tid -> playerfname

tid -> playerlname

Asstcoaches:

tid -> asstcoachfname

tid -> asstcoachlname

### 2. Diagram on separate sheet.

3.

Normalization:

This database is in first normal form as all data in a cell is atomic. Efforts were made to do this, such as splitting address into address, city, state, postalcode, and country. Each table only consists of related data, which can be found using the primary key.

The database is in second normal form as a table's records only depend on its primary keys. As artificial keys are used, for example in the people table, all of the columns are dependant on the primary key.

The database is in third normal form as all fields depend on their primary key. Every column of a table is related and dependant to that table's primary key.

