Simon RFS

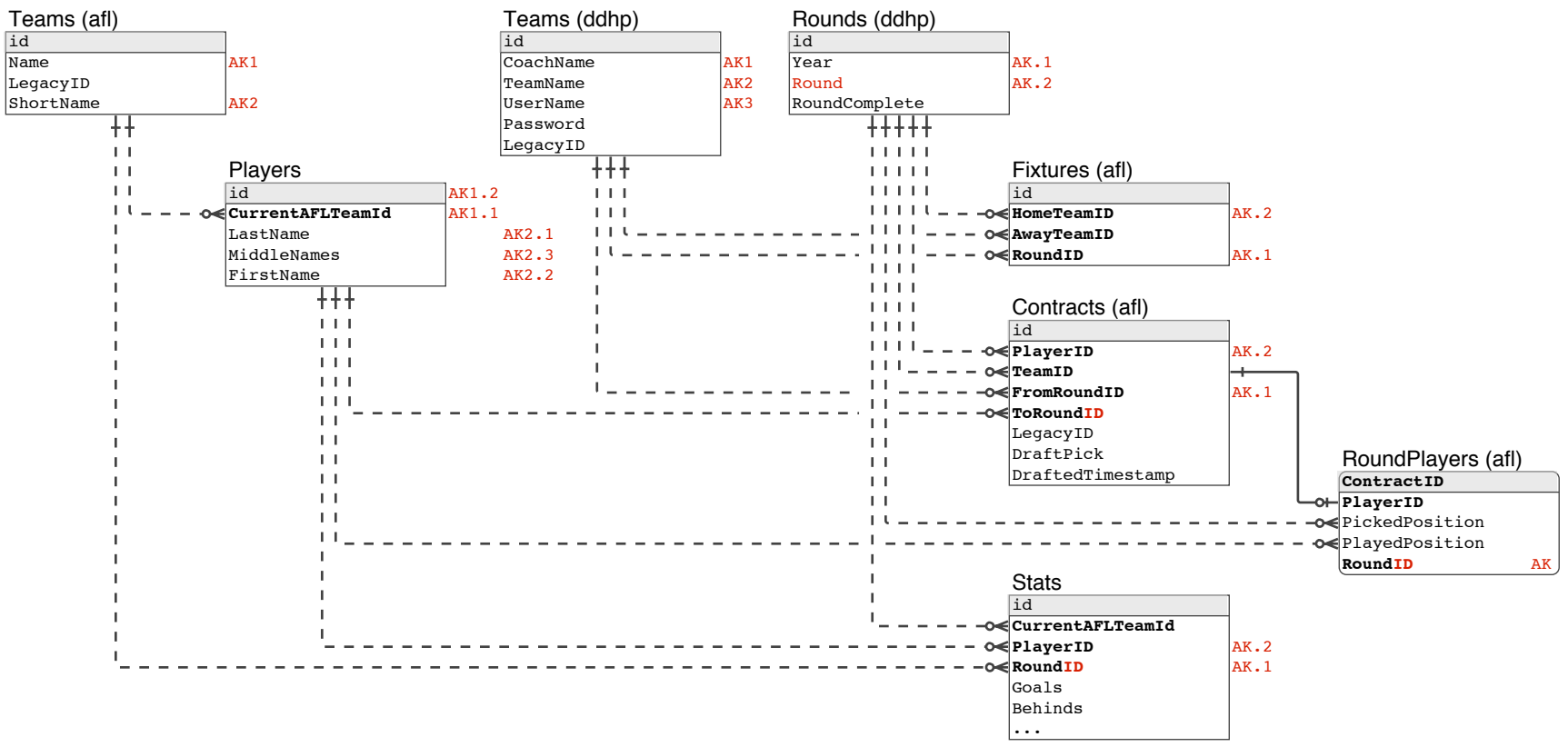
Record Filing System

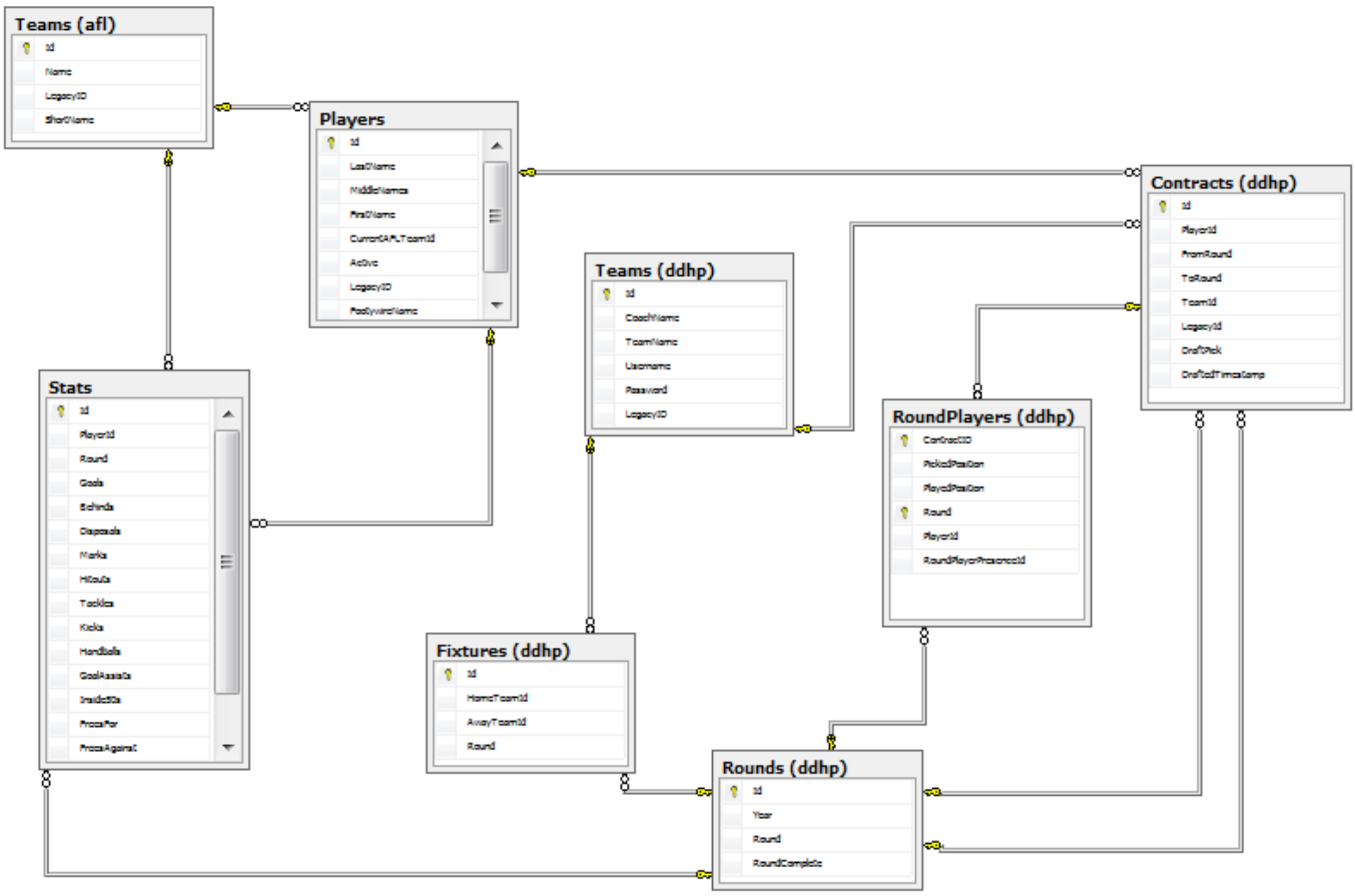
Your RFS (unconsciously anti-Relational, due to the heavy promotion and marketing by C J Date; Hugh Daren; Ronald Fagin; et al), rendered in IDEF1X, for the purpose of providing a ready comparison with the proposed Relational data model. Your approach and history is likely as follows, again due to following the heathens:

- your perspective and approach to the data was based on what you wanted to see in the GUI windows: data modelling, which requires perception & study of the data independent of all requirements, is prevented
- you were lead to believe that the lens & frame through which you view the data should be the [in]famous "one rule of the relational model": *view all data as tables made up of rows and columns*.
- which meant, replicate the GUI window with a record ID in front, just like a spreadsheet: data modelling is prevented
- and make the Record ID the "primary key": genuine Keys are neither determined, nor implemented
- after implementation, you found the navigation to be horrendous, so you ended up moving carefully chosen data fields (Record IDs) from certain parent files in their child files, just to ease the *extent* of horror in the SQL code. If Round is not an ID (as I have assumed), in one instance you moved a data field
  - which means a duplicated field, Normalisation has been breached, an UpdateAnomaly has been created
  - sometimes you moved a field and *linked* it to the parent via a Foreign Key declaration, even if the relationship being declared was false, and other times not
  - yet there remain horrors, and a nagging intuitio. Intuition is a *good thing*, because if some thing does not make sense, it does not make sense, even if highly published and slavishly admired softist say it is
- which predicated your question on StackOverflow.

Believe me, it is not your fault, the freaks have a lot to answer for. This is one of the largest scientific frauds ever comitted.

Although not intended as a critique of the RFS as is (ie. with no intention of converting it to Relational), there may be some value in perceiving it as such: as long as it is understood that it is not a complete or formal critique. My intention was to understand your RFS clearly in order to produce the Relational data model, after which I realised it may be of value to you. Documentary, if nothing else.





Ambiguity

- Round (not RoundID) is migrated to child files in 5 instances. On the face of it, by virtue of the field name, Round is a data value (attribute), not the usual Record ID ("primary key") of the Round file. If that is true, the 5 occurrences of Round would not be Foreign Keys. They would be simple duplicated data fields.
- But that does not jive with the relationship lines you have drawn, which imply that the 5 occurrences of Round are Foreign Keys, and the field name should be RoundID.
- On the basis that the relationships are relevant (you would not have drawn them if they were not), I have taken it that they are correct, and therefore the 5 occurrences of Round should be RoundID.

Duplicate Rows

- Setting the Record ID to "primary key" ensures that record, not logical rows, are unique. That allows rows to be non-unique, the consequences of which are terrible.
- Uniqueness must be set for the rows. These are indcated as Alternate Keys.
- Note that all proper (logical) Keys cannot be declared in this RFS, due to the rows not being logical or complete
  - Only the Keys that are possible have been defined
  - Only those almost-rows have been made unique.

Round

- I do not understand how Rounds.Round could be a Key. The logical Key I have concluded is (Year, Round).
- I do not understand how RoundPlayers.Round Coul be unique. That would mean that RoundPlayers is truncated every year, which is unlikely (you would lose the Fact of RoundPlayers from prior years).