SoccEval Annotation Guideline

I. Introduction

The underlying goal for our project is to evaluate the ability and performance of a soccer player from both objective and subjective descriptions of them and their actions. More specifically, we hope to be able to use these evaluations to summarize the salient attributes of a player, to distinguish between good, mediocre, and poor players, and to use these judgments to compare the media's portrayal of a player to that player's objective statistics.

II. A Brief Summary of the Annotations

The annotation is to find phrases describing the performance of individual players in a soccer team. You will be given either match reports or season reviews, and you will try to identify phrases that describe either factual events or opinions linked to a specific player and their performance. From there you will assign time, description and sentiment values to those phrases. You will also link the target player with the performance description. The task has been designed so that it does not require an intimate knowledge of soccer; a basic familiarity should be sufficient.

The tool for this annotation task is MAE (Multi-document Annotation Environment). It is an open source, lightweight annotation tool that allows users to define their own annotation tasks, markup arbitrary text spans, use non-consuming tags, easily create links between annotations, and output annotations in stand-off XML. For detailed information about MAE, see https://keighrim.github.io/mae-annotation/.

III. Structure of the Scheme

Our scheme has five tags -- four substantive tags (Player, Coref, Fact and Opinion), and one link tag (TargetLink).

1. Player: first mention of a unique player

span: the text span that mentions a player by name

playerID: a unique ID needs to be assigned to each unique player; this is distinct from

the ID used to refer to the tag itself.

name: optional tag

2. Coref: secondary mentions of a previously mentioned player

span: the text span that refers to the player. This can include pronouns and other noun or noun phrases.

playerID: needs to be the same as the player being referred to.

3. Fact

span: the text span that describes an event

type: goal, assist, pass, shot, movement, position on field, substitute out, substitute in,

injury, tackle, save, other

time: distant past, last season, current season, last match, present, future

factID: a unique ID needs to be assigned to each different event

4. Opinion

span: the text span that expresses an opinion with attitude

type: soccer skill, general attribute, impact on team, growth/decline, accomplishment,

other opinion

polarity: positive, negative

time: distant past, last season, current season, last match, present, future

hypothetical: counter-factive, prediction

reported: false, true

TargetLink

fact/opinion: tag ID (generated by MAE) of a Fact or Opinion **target**: tag ID (generated by MAE) of the relevant Player or Coref

IV. Pre-processing

What you will get is a pre-processed XML file with Player and Coref being annotated automatically. However, these tags are not 100% accurate. So you will still need to make additions, deletions or changes if necessary.

V. Explanation of Tags

1. Player:

For players, you just need to assign an ID for each unique player. Our task does not include annotation on coaches, sponsors or anyone who is currently not a player. If you are not sure if a name belongs to a player or not, confirm it by searching on google or wikipedia. Include only those people who are players at the time that is being discussed in the article (so do not include former players who are now managers, commentators, etc) as it may be potentially tagged in preprocessing.

We recommend that the *playerID* number start from 1. Assign a new ID whenever you notice a new player name.

There is also an optional attribute, which is *name*. The purpose of this attribute is primarily to help you, the annotator, keep track of which player is which. This might be useful in cases where the document mentions a large number of players and the document does not always use a player's full name.

2. Coref:

Any time a player is referred to by something other than his name, it should be tagged as *Coref*. Each *Coref* tag has a *playerID* attribute that should be given the same value as the one given to the player it refers to. Pronoun anaphors have been automatically tagged and must either be given the correct *playerID* or deleted if they refer to an entity other than a player. Like player tag, do not tag coref for non-players.

While there are many types of non-pronoun anaphors, the most common are those that refer to a player's position (such as the "forward or the goalkeeper") and those that refer to a player's nationality (such as "the Spaniard").

3. Fact:

The *Fact* tag is specifically for phrases describing the the actions of a player or events involving the players. These phrases describe objective facts and do not carry a sentiment with them.

For the *type* attribute, we have created categories for the following events:

- goal: phrase describes a player scoring a goal
- assist: phrase describes events when a player helps another player score a goal
- pass: phrase describes players pass the ball
- shot: phrase describes an attempt to score a goal (that do not result in a goal), including headers, penalty kicks, etc.
- *movement*: phrase describes players moving from one place to another on the field
- positioning: phrase describes a player's position on the field
- *substitute out*: phrase describes the team making a substitution; this tag is for the outgoing player
- *substitute in*: phrase describes the team making a substitution; this tag is for the the incoming player
- *injury*: phrase describes an injury event
- tackle/block/defend: phrase describes a defensive action
- save: phrase describes a goalkeeper preventing a goal from being scored
- foul: phrase describes a player committing a foul

Beside from figuring out the type of the event, you will also need to identify the *time* the event actually happened. It can be: *last match*, *current season* (previous matches during the current season), *last season*, *distant past* (before the previous season), or less likely, *present* or *future*.

In addition, you also need to assign a *factID* for each phrase. Phrases that describe the same event will get the same ID. The conventions for this are the same as for the *playerID*.

If a *Fact* is described with some opinion (i.e. 'an unbelievable goal'), it should only be annotated as a *Fact*. Opinions describing facts and events tagged as *Fact* should not be annotated.

4. Opinion:

The *Opinion* tag is specifically for sentences where an attitude is expressed about the performance of a player.

For the *type* attribute, so far we have categorized them into the following groups:

- Soccer skill: phrase expresses an evaluation or sentiment about a specific soccer-related skill. These will most often be noun phrases.
 - "snazzy dribbles"
 - o "ingenious passes"
 - o "decisive finishes"
- Accomplishment: phrase makes note of some kind of accomplishment. These will
 usually be full phrases
 - Can be either a concrete statistic ("scored most goals in the Premier League this season")
 - o or more vague evaluations ("this is his best season yet")
- *General attribute*: phrase expresses a more general evaluation of a player than "soccer skill". These will most often be adjectives, nouns, or noun phrases
 - "trickery"
 - "dynamism and deadliness"
 - o "agility"
- *Impact on team*: phrase expresses a sentiment about how a player either helped or hindered the team. These will often be full phrases.
 - "led, masterfully, the title-winning defence for every minute of every match"
 - "tidying up messes by the goofs around him"
 - o "added to Van Gaal's [the coach] problems"
 - "Tottenham fans were almost able to forget about [the player]"
- Growth/decline: phrase expresses an opinion about a player's improvement or decline in performance over a period of time. Usually a full phrase.
 - "endured an iffy spell"
 - o "in top form"
- Other Opinion: phrase represents an opinion about the player, without describing any of the above categories. Many phrases in this category use flowery or metaphorical language. Can be noun phrases or longer phrases.
 - "always a joy to watch"
 - o "a Winston Wolfe figure at Manchester United"
 - "delivered performances that ridiculed the suggestion he was past it"
 - o "this nifty mischief-maker"

In some cases where a phrase can be tagged with multiple tags, follow the following priority: soccer skill, accomplishment > general attribute > impact on team > growth/decline > other opinion

Sentiment polarity needs to be assigned based on the positive or negative attitude toward the player.

The *time* attribute is the same as that in *Fact*; you need to identify if it belongs to the performance of *last match*, *current season* (previous matches in current season), *last season*, or more *distant past*, or less likely, *present* or *future*.

For the *hypothetical* attribute, there are two cases where it should be used. One is for cases when the phrase makes a prediction about something related to the player. In such cases, tag it as a *prediction*. The other is for phrases speculating on what might have happened had something occurred differently. In such cases, tag them as *counterfactive*. E.g.,

prediction: "Keep Kompany fit until the end of the season and more likely than not they will be lifting the Premier League trophy aloft come May"

counterfactive: "United would certainly not be in the Champions League without him"

The *reported* attribute is tagged as *false* by default. But if the phrase in the span is reported by someone within the story (ie. a secondary source that isn't the writer of the article), make it *true*.

5. Other issues regarding Fact and Opinion tags

How much text to tag

- Tag as much text as is connected to a specific event, excluding any auxiliary parts.
 - If the Fact/Opinion refers to multiple instances of an event (such as "two goals"), be sure to tag the number as well.
- However, if within a phrase, the phrase describes two separate but related events/opinions, split the phrase into the two sections.
- For *general attributes* and *soccer skills*, it is often enough to just tag the noun phrase:
 - i.e. "the [agility]_{OPINION: GENERAL ATTRIBUTE} of their goalkeeper."

What counts as a distinct Fact:

- Phrases that contain one event should be annotated with one Fact ID
 - If a fact involves more than one player, the fact should still be annotated just once
 - Exceptions:

- If the same event involves two players, resulting in a different type of fact for each player, create two Facts, with different IDs.
 - Example: "Andre Schurrle, was substituted by Willian" -- in this type of case, create one Substitute Out Fact tag linked to Andre Schurrle, and one Substitute In Fact tag linked to Willian
- For phrases that mention multiple instances of one Fact type, usually in the form of a number (ie. "Costa scored two goals"), you only need to create one Fact tag for this event.
 - However, if each of these two goals is then mentioned separately later in the text (ie. "Costa scored two goals. ... Costa opened the score at the 22nd minute with a well-placed header. ... Costa scored a second goal before the end of the first half".) create two Fact tags with distinct IDs.

Possible forms a Fact or Opinion might take:

- Verb phrase
- Noun phrase (i.e. "penalty", "dynamism and deadliness")
- Adjective (i.e. "absent")
- Possessive (i.e. "His unbelievable passes")

Unknown terms:

Sometimes esoteric vocabulary is used to describe events or players. If you cannot determine the meaning of the term from a Google or Wikipedia search and the term appears to occur infrequently, it is safe to ignore it and continue annotating.

6. TargetLink

TargetLink links a fact or opinion to a player or coref. Therefore it takes two arguments, one for fact ID or opinion ID generated by MAE, the other for player ID or coref ID generated by MAE. In general, Fact/Opinion tags will be linked to Player/Coref tags within the same sentence; in most cases the Player/Coref is subject of the sentence.

VI. Recommended annotation strategy:

First tag all of the *Player*, *Coreference*, *Fact*, and *Opinion* tags as you read through the document, creating the *TargetLink* tags between them as you go. Assign the *playerIDs* to the *Player* and *Coreference* tags at the end, after creating all of the tags by sorting them alphabetically.

VII. Examples

- Fact:
- 1. White Hart Lane was in ecstasy when [Kane] player [scored] fact:goal again in the 52nd minute.

- 2. Sam Allardyce pointed to the [penalty] *fact:shot* that [Mark Noble] *player* missed in the first half.
- 3. [Nemanja Matic]*player* [made it 4-2]*fact1:goal* in the 74th minute, [pinging a shot]*fact1:goal* past [Tim Howard]*player* from 20 yards, before [Samuel Eto'o's]*player* [header]*fact:shot* against [his]*coref* old side [made it 4-3]*fact:goal* in the 76th.
- 4. Twelve months ago Liverpool laboured to three points against a team under new management courtesy of a [Daniel Sturridge]*player* [goal]*fact:goal* and an 89th-minute [penalty save]*fact:save* from [Simon Mignolet]*player*.
- 5. [Sterling]*player*, [Sturridge]*player* and [Philippe Coutinho]*player* began to [move with greater menace]*fact:movement* but Southampton's shape and composure held firm.
- 6. [Ward-Prowse] *player* almost levelled with a dangerous [free-kick] *fact:shot* to the far corner that drew a fine [save] *fact:save* from [Mignolet] *player*.
- 7. Burnley's ordeal might have been worse but for the referee, Michael Oliver, deciding [Costa]*player* had [dived]*fact:foul* when he [intercepted]*fact:tackle* [Ben Mee's]*player* [back-pass]*fact:pass* in front of [Burnley's goalkeeper]*coref*.
- Opinion:
- [He]coref [should have scored more goals]opinion:accomplishment(counterfactive) negative.
- 2. [The youngster] coref dazzled with his [dynamism] opinion: general_attribute positive and [deadliness] opinion: general_attribute positive, regularly [discombobulating seasoned top-flight defenders] opinion: particular_skill positive.
- 3. Blessed with [formidable speed]opinion:particular_skill positive and [strength]opiniongeneral_attribute positive to go with [his]coref [rare skill]opinion:particular_skill positive, [the 25-year-old]coref was always [worth watching]opinion: other opinion positive.
- Fact and Opinion
- 1. [Terry]*player* also [chipped in with enough goals] *fact:goal* to make [him]*coref* the [highest scoring defender]*opinion:accomplishment positive* of the Premier League era.
- [Fàbregas] player, initially [out-muscled] opinion: general_attribute negative and [overpowered] opinion: general_attribute negative, duly [imposed his own qualities] opinion: general_attribute positive on the contest. It was [his] coref [corner] fact: pass [Costa] player [converted] fact: goal beyond [Fabianski] player, [Jordi

Amat] *player* having been preoccupied [attempting to unnerve] *fact:movement* [Branislav Ivanovic] *player* in the six-yard box.