



Center for Research in Urdu Language Processing
National University of Computer and Emerging Sciences, Lahore Pakistan

Internal Reference No:

Revision History:

Name	Change Date	Version	Description of Changes
Shanza Nayyer	5 th Nov, 04	0.1	Created
Kiran Khurshid	9 th Feb, 05	0.2	Removed ANIM feature and added SEMTYPE feature as recommended by the Semantic Analysis Team
Shanza Nayyer	20 th Jun, 05	0.3	Revised some features based on some modifications

POS ID: EPOS105

Part of Speech Name: Noun

Part of Speech String: n

Lexical Entry Template:

<word>: n, ^ PRED = '<logical form of word>', ^ NUM= {SG / PL}, ^ NCOUNT= {POS / NEG/BOTH}, ^ GEND= {M / F / NULL}, ^ NTYPE= {PROPER / COMMON}, ^ SEMTYPE = {HUMAN / ANIMAL / UNANIM_CONC / ABSTRACT}.

Sample Lexical Entry:

tables : n, ^ PRED = 'table_n', ^ NUM= PL, ^ NCOUNT= POS, ^ NTYPE= COMMON, ^ SEM_TYPE = UNANIM_CONC.

*Note that in the above lexical entry, gender value of *table* is NULL hence is not given.

Description: A noun is the name of a person, place, thing, or idea. Whatever exists, we assume, can be named, and that name is a noun [1].

The following features are attached to a noun:

NUM (Number) can be: SG (singular): *Example:* Child, Man, girl
 PL (plural): *Example:* Children, men, girls
 Both: *Example:* Fish
 It cannot be null.

GEND (Gender) can be: M (masculine): *Example:* Man, boy
 F (feminine): *Example:* Girl, woman
 Both M and F: *Example:* cat, snake
 NULL: *Example:* table, chair, cat (when used as 'it')

Note that NULL is not a value. If GENDER feature is not added to a lexical entry, then this means that its value is NULL.

NCOUNT can be:

(things that can be counted and number can be inserted before the noun are countable.

POS (positive): *Example:* books, trees
 NEG (negative): *Example:* dancing, acquisition, money, time
 Both: *Example:* game as an object (COUNT) or as a plot (NONCOUNT)
 It cannot be null.



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NTYPE (noun type) can be:

PROPER: *Example: James, Harry, Dick, Pakistan (all names)*
COMMON: *Example: cat, dog, table, rock*
It cannot be null or both (proper and common).

SEMTYPE (semantic type) can be:

HUMAN: *Example: boy, girl*
ANIMAL: *Example: cow, eagle, shark, sheep*
UNANIM_CONC: *Example: tree, table, water, air*
ABSTRACT: *Example: happiness, idea*
It cannot be null.

Noun also has a feature named PERSON but as in nouns its value is always 3rd person, hence this can be enforced in the grammar rule.

The detail of the feature values is discussed in analysis section.

Examples:

- 1) Rabia, Maria, Sabeen and Sameen went to school.
- 2) Pakistan and India have fought many wars.

POS Status: Active

Reference:

[1] <http://webster.commnet.edu/grammar/nouns.htm>

Related Rules: EGR120, EGR008

Related POS: EPOS109

Replaces: EPOS002

Reason: New release

Replaced by: -

Reason: -



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Analysis: Following is the in-depth analysis of the rule.

Analysis: Nouns can be of many types. First they can be categorized as “Common nouns” and “Proper nouns”. A *proper noun* names a specific person, place, or thing (Carlos, Queen Marguerite, Middle East, Jerusalem, Malaysia, Presbyterianism, God, Spanish, Buddhism, the Republican Party). It is almost always capitalized. On the other hand, *common nouns* name everything else. They are usually not capitalized [1].

Nouns can be classified further as *count nouns*, which name anything that can be counted (four books, two continents, a few dishes, a dozen buildings); *mass nouns* (or non-count nouns), which name something that can't be counted (water, air, energy, blood); and *collective nouns*, which can take a singular form but are composed of more than one individual person or items (jury, team, class, committee, herd) [1].

It may be noted that some words can be either a count noun or a non-count noun depending on how they're being used in a sentence [1]:

- Example:* i) He got into trouble. (non-count)
ii) He had many troubles. (countable)
iii) Experience (non-count) is the best teacher.
iv) We had many exciting experiences (countable) in college.

Nouns can be in the subjective, possessive, and objective case. The word *case* defines the role of the noun in the sentence. Is it a subject, an object, or does it show possession? [1]

- Example:* i) The English professor [subject] is tall.
ii) He chose the English professor [object].
ii) The English professor's [possessive] car is green.

To distinguish proper from common nouns the property NTYPE is used. It is assigned values as NTYPE= proper/common. Proper and common noun are not categorized by separate POS for the reason being that proper noun can syntactically occur at the same place as common noun can with certain restrictions on its specifier.

Result: We decided on the above analysis. The possessive/genitive form of noun is made by using apostrophe POS as given in EPOS006.

Future Work:

Although a feature has been introduced to distinguish between animate and inanimate nouns, the semantic checks on them will be added later to it.