Features Chosen: pB , pI

pB = probability that current token is the beginning of a noun group {0,1}
pI = probability that current token is inside of a noun group {0,1}

priorTag, currentTag, nextTag determine the truth value of the features.

The term "noun-group" includes:
NN, NNP, NNS, DT, JJ, PRP

```
    #if a noun-group token is preceded by whitespace or a non noun-group token
    if (((priorTag == "") or (priorTag != "NN" and priorTag != "NNP" and priorTag != "NNS" and
priorTag != "DT" and priorTag != "JJ" and priorTag != "PRP")) and (currentTag == "NN" or currentTag
== "NNP" or currentTag == "NNS" or currentTag == "JJ" or currentTag =="DT" or currentTag ==
"PRP")):

        #if a determiner or adjective
        if (currentTag == "DT" or currentTag == "JJ"):

            #precedes a non noun-group token
            if (nextTag == "JJ" or nextTag == "NN" or nextTag == "NNP" or nextTag == "NNS"):
                return "pB=1 pI=0 B-NP"
            else:
                return "pB=0 pI=0 O"
        else:
            return "pB=1 pI=0 B-NP"

    #else if a noun-group token is preceded by a noun-group token
    elif (priorTag == "NN" or priorTag == "NNP" or priorTag == "NNS" or priorTag == "JJ" or priorTag
== "DT" or priorTag == "PRP") and (currentTag == "NN" or currentTag == "NNP" or currentTag ==
"NNS" or currentTag == "JJ" or currentTag =="DT" or currentTag =="PRP"):
        return "pB=0 pI=1 I-NP"

    else:
        return "pB=0 pI=0 O"
```