Points can be added to the paper

* If you remove the length constraint from the proposed fsm we will get a a fsm which can accept a tweet of infinite words
* Hence a finite state machine on infinite words can be formed
* tweets ending with @U\_NAME are rejected (to cross check on tweets with only @U\_NAME)

hence the reversal property gets hampered in case of tweets starting with @U\_NAME

* tweet with urls(context derived from vid/img/audio) cann't be used through the model
* Transition from q3 to q1 with input RT is discarded as

Q3\*RT-> q1

Won’t provide any meaning like

Eg-

@apple RT @aplusk: Sending love & light to everyone @Apple & the entire Jobs family.Today we lost a Giant who will be missed even by those who ...

Doesn’t give any meaning as it tries to retweet and converse at the same time .

Our model assumes tweets are not of this type.

* Initial nfa-e is there with extra one state , the next nfa-e is not there in account so no need to specify all diagrams. First nfa-e -----(methods,minimisation)---final dfa

**TO DO list**

1.implement fsm for 3 methods fsm

2.write code for these 3 methods

3.prove the properties of fsm in validation fsm

4.update java parser

**Previous derivation**

Q0=lambda

Q1=Q0.RT+Q4.RT

=RT+Q4.RT

Q2=Q0.@+Q1.@+Q3.@+Q4.@

Q3=Q2.U\_NAME

Q4=ENG+Q3.ENG+Q4.ENG +Q6.TREND

Q5= Q0.T +Q3.T+Q4.T

Q6=Q4. #+Q5. #

To find the RE for state Q4 which is a final state we expressed every other term in terms of Q4, so that we can use Arden’s theorem

Q0 and Q1 need no more modification.

Q2=@+RT.@+Q4(RT.@+@) +Q2.U\_NAME.@

= (@+RT.@+Q4. (RT.@+@)). (U\_NAME.@) \* [using Arden’s theorem]

Q3=Q2.U\_NAME= (@+RT.@+Q4. (RT.@+@)). (U\_NAME.@) \*. U\_NAME

Q4 don’t need modification.

Q5=(Q4+Q6). T+ Q5. T [using Arden’s theorem]

=(Q4+Q6). T+--------------------------------------------i1

Q6=Q4. #+Q5. #

=Q4. # +(Q4+Q6). T+. # [using previous expression of Q5]

=Q4. (#+ T+#) +Q6.T+. # [using Arden’s theorem]

=Q4. (#+T+#). (T+ #) \*

Putting value of Q6 in i1

We get

Q5=Q4. (T++(#+T+#). (T+#) \* T+) ---------------------------------------i2

Now putting values in terms of Q4 IN

Q4=ENG+Q3.ENG+Q4.ENG+Q5.ENG+Q6.TREND

We get

Q4= [ ENG +

(@+RT.@) (U\_NAME.@) \*.U\_NAME.ENG

] +

Q4. [ ENG +

(@+RT.@) (U\_NAME. @) \*.U\_NAME.ENG +

(T+ + (#+ T+. #). (T+#) \*. T+). ENG +

(#+T+. #). (T+. #) \*. TREND

]

Now using Arden’s theorem, we get RE for Q4 and hence for the FSM as follows

Q4= [ ENG + (@+RT.@) (U\_NAME.@) \*.U\_NAME.ENG]. [ ENG + (@+RT.@) (U\_NAME. @) \*.U\_NAME.ENG + (T+ + (#+ T+. #). (T+#) \*. T+). ENG + (#+T+. #). (T+. #) \*. TREND] \*

And for Q5 we put the obtained value of Q4 in i2

Q5= Q4. (T++(#+T+#). (T+#) \* T+)

= [ ENG + (@+RT.@) (U\_NAME.@) \*.U\_NAME.ENG]. [ ENG + (@+RT.@) (U\_NAME. @) \*.U\_NAME.ENG + (T+ + (#+ T+. #). (T+#) \*. T+). ENG + (#+T+. #). (T+. #) \*. TREND] \*. (T++(#+T+#). (T+#) \* T+)