package com.twitter.recos.user\_tweet\_entity\_graph

import com.twitter.graphjet.algorithms.RecommendationType

import com.twitter.recos.model.Constants

import com.twitter.recos.graph\_common.NodeMetadataLeftIndexedPowerLawMultiSegmentBipartiteGraphBuilder.GraphBuilderConfig

/\*\*

\* The class holds all the config parameters for recos graph.

\*/

object RecosConfig {

val maxNumSegments: Int = 8 // this value will be overwritten by a parameter from profile config

val maxNumEdgesPerSegment: Int = 1 << 27 // 134M edges per segment

val expectedNumLeftNodes: Int = 1 << 24 // 16M nodes

val expectedMaxLeftDegree: Int = 64

val leftPowerLawExponent: Double = 16.0 // steep power law as most nodes will have a small degree

val expectedNumRightNodes: Int = 1 << 24 // 16M nodes

val numRightNodeMetadataTypes: Int =

RecommendationType.METADATASIZE.getValue // two node metadata types: hashtag and url

val graphBuilderConfig = GraphBuilderConfig(

maxNumSegments = maxNumSegments,

maxNumEdgesPerSegment = maxNumEdgesPerSegment,

expectedNumLeftNodes = expectedNumLeftNodes,

expectedMaxLeftDegree = expectedMaxLeftDegree,

leftPowerLawExponent = leftPowerLawExponent,

expectedNumRightNodes = expectedNumRightNodes,

numRightNodeMetadataTypes = numRightNodeMetadataTypes,

edgeTypeMask = new UserTweetEdgeTypeMask()

)

val maxUserSocialProofSize: Int = 10

val maxTweetSocialProofSize: Int = 10

val maxTweetAgeInMillis: Long = 24 \* 60 \* 60 \* 1000

val maxEngagementAgeInMillis: Long = Long.MaxValue

println("RecosConfig - maxNumSegments " + maxNumSegments)

println("RecosConfig - maxNumEdgesPerSegment " + maxNumEdgesPerSegment)

println("RecosConfig - expectedNumLeftNodes " + expectedNumLeftNodes)

println("RecosConfig - expectedMaxLeftDegree " + expectedMaxLeftDegree)

println("RecosConfig - leftPowerLawExponent " + leftPowerLawExponent)

println("RecosConfig - expectedNumRightNodes " + expectedNumRightNodes)

println("RecosConfig - numRightNodeMetadataTypes " + numRightNodeMetadataTypes)

println("RecosConfig - salsaRunnerConfig " + Constants.salsaRunnerConfig)

}