package com.twitter.simclusters\_v2.summingbird.common

import com.twitter.algebird.DecayedValueMonoid

import com.twitter.algebird.Monoid

import com.twitter.algebird\_internal.injection.AlgebirdImplicits

import com.twitter.algebird\_internal.thriftscala.{DecayedValue => ThriftDecayedValue}

import com.twitter.bijection.Bufferable

import com.twitter.bijection.Injection

import com.twitter.bijection.scrooge.CompactScalaCodec

import com.twitter.simclusters\_v2.summingbird.common.Monoids.ClustersWithScoresMonoid

import com.twitter.simclusters\_v2.summingbird.common.Monoids.MultiModelClustersWithScoresMonoid

import com.twitter.simclusters\_v2.summingbird.common.Monoids.MultiModelPersistentSimClustersEmbeddingLongestL2NormMonoid

import com.twitter.simclusters\_v2.summingbird.common.Monoids.MultiModelPersistentSimClustersEmbeddingMonoid

import com.twitter.simclusters\_v2.summingbird.common.Monoids.MultiModelTopKTweetsWithScoresMonoid

import com.twitter.simclusters\_v2.summingbird.common.Monoids.PersistentSimClustersEmbeddingLongestL2NormMonoid

import com.twitter.simclusters\_v2.summingbird.common.Monoids.PersistentSimClustersEmbeddingMonoid

import com.twitter.simclusters\_v2.summingbird.common.Monoids.ScoresMonoid

import com.twitter.simclusters\_v2.summingbird.common.Monoids.TopKClustersWithScoresMonoid

import com.twitter.simclusters\_v2.summingbird.common.Monoids.TopKTweetsWithScoresMonoid

import com.twitter.simclusters\_v2.thriftscala.FullClusterIdBucket

import com.twitter.simclusters\_v2.thriftscala.\_

import com.twitter.summingbird.batch.Batcher

import com.twitter.tweetypie.thriftscala.StatusCounts

object Implicits {

// -------------------- Monoids -------------------- //

implicit val decayedValueMonoid: DecayedValueMonoid = DecayedValueMonoid(0.0)

implicit val thriftDecayedValueMonoid: ThriftDecayedValueMonoid =

new ThriftDecayedValueMonoid(Configs.HalfLifeInMs)(decayedValueMonoid)

implicit val scoresMonoid: ScoresMonoid = new Monoids.ScoresMonoid()

implicit val clustersWithScoreMonoid: ClustersWithScoresMonoid =

new Monoids.ClustersWithScoresMonoid()(scoresMonoid)

implicit val multiModelClustersWithScoresMonoid: Monoid[MultiModelClustersWithScores] =

new MultiModelClustersWithScoresMonoid()

implicit val topKClustersWithScoresMonoid: Monoid[TopKClustersWithScores] =

new TopKClustersWithScoresMonoid(

Configs.topKClustersPerEntity,

Configs.scoreThresholdForEntityTopKClustersCache

)(thriftDecayedValueMonoid)

implicit val topKTweetsWithScoresMonoid: Monoid[TopKTweetsWithScores] =

new TopKTweetsWithScoresMonoid(

Configs.topKTweetsPerCluster,

Configs.scoreThresholdForClusterTopKTweetsCache,

Configs.OldestTweetFavEventTimeInMillis

)(thriftDecayedValueMonoid)

implicit val topKTweetsWithScoresLightMonoid: Monoid[TopKTweetsWithScores] =

new TopKTweetsWithScoresMonoid(

Configs.topKTweetsPerCluster,

Configs.scoreThresholdForClusterTopKTweetsCache,

Configs.OldestTweetInLightIndexInMillis

)(thriftDecayedValueMonoid)

implicit val MultiModeltopKTweetsWithScoresMonoid: Monoid[MultiModelTopKTweetsWithScores] =

new MultiModelTopKTweetsWithScoresMonoid(

)(thriftDecayedValueMonoid)

implicit val persistentSimClustersEmbeddingMonoid: Monoid[PersistentSimClustersEmbedding] =

new PersistentSimClustersEmbeddingMonoid()

implicit val persistentSimClustersEmbeddingLongestL2NormMonoid: Monoid[

PersistentSimClustersEmbedding

] =

new PersistentSimClustersEmbeddingLongestL2NormMonoid()

implicit val multiModelPersistentSimClustersEmbeddingMonoid: Monoid[

MultiModelPersistentSimClustersEmbedding

] =

new MultiModelPersistentSimClustersEmbeddingMonoid()

implicit val multiModelPersistentSimClustersEmbeddingLongestL2NormMonoid: Monoid[

MultiModelPersistentSimClustersEmbedding

] = new MultiModelPersistentSimClustersEmbeddingLongestL2NormMonoid()

// -------------------- Codecs -------------------- //

implicit val longIntPairCodec: Injection[(Long, Int), Array[Byte]] =

Bufferable.injectionOf[(Long, Int)]

implicit val simClusterEntityCodec: Injection[SimClusterEntity, Array[Byte]] =

CompactScalaCodec(SimClusterEntity)

implicit val fullClusterIdBucket: Injection[FullClusterIdBucket, Array[Byte]] =

CompactScalaCodec(FullClusterIdBucket)

implicit val clustersWithScoresCodec: Injection[ClustersWithScores, Array[Byte]] =

CompactScalaCodec(ClustersWithScores)

implicit val topKClustersKeyCodec: Injection[EntityWithVersion, Array[Byte]] =

CompactScalaCodec(EntityWithVersion)

implicit val topKClustersWithScoresCodec: Injection[TopKClustersWithScores, Array[Byte]] =

CompactScalaCodec(TopKClustersWithScores)

implicit val fullClusterIdCodec: Injection[FullClusterId, Array[Byte]] =

CompactScalaCodec(FullClusterId)

implicit val topKEntitiesWithScoresCodec: Injection[TopKEntitiesWithScores, Array[Byte]] =

CompactScalaCodec(TopKEntitiesWithScores)

implicit val topKTweetsWithScoresCodec: Injection[TopKTweetsWithScores, Array[Byte]] =

CompactScalaCodec(TopKTweetsWithScores)

implicit val pairedArrayBytesCodec: Injection[(Array[Byte], Array[Byte]), Array[Byte]] =

Bufferable.injectionOf[(Array[Byte], Array[Byte])]

implicit val entityWithClusterInjection: Injection[(SimClusterEntity, FullClusterIdBucket), Array[

Byte

]] =

Injection

.connect[(SimClusterEntity, FullClusterIdBucket), (Array[Byte], Array[Byte]), Array[Byte]]

implicit val topKClustersCodec: Injection[TopKClusters, Array[Byte]] =

CompactScalaCodec(TopKClusters)

implicit val topKTweetsCodec: Injection[TopKTweets, Array[Byte]] =

CompactScalaCodec(TopKTweets)

implicit val simClustersEmbeddingCodec: Injection[SimClustersEmbedding, Array[Byte]] =

CompactScalaCodec(SimClustersEmbedding)

implicit val persistentSimClustersEmbeddingCodec: Injection[PersistentSimClustersEmbedding, Array[

Byte

]] =

CompactScalaCodec(PersistentSimClustersEmbedding)

implicit val statusCountsCodec: Injection[StatusCounts, Array[Byte]] =

CompactScalaCodec(StatusCounts)

implicit val thriftDecayedValueCodec: Injection[ThriftDecayedValue, Array[Byte]] =

AlgebirdImplicits.decayedValueCodec

implicit val batcher: Batcher = Batcher.unit

}