package com.twitter.follow\_recommendations.flows.post\_nux\_ml

import com.twitter.finagle.stats.StatsReceiver

import com.twitter.follow\_recommendations.common.base.CandidateSourceRegistry

import com.twitter.follow\_recommendations.common.base.EnrichedCandidateSource

import com.twitter.follow\_recommendations.common.candidate\_sources.addressbook.ForwardEmailBookSource

import com.twitter.follow\_recommendations.common.candidate\_sources.addressbook.ForwardPhoneBookSource

import com.twitter.follow\_recommendations.common.candidate\_sources.addressbook.ReverseEmailBookSource

import com.twitter.follow\_recommendations.common.candidate\_sources.addressbook.ReversePhoneBookSource

import com.twitter.follow\_recommendations.common.candidate\_sources.crowd\_search\_accounts.CrowdSearchAccountsSource

import com.twitter.follow\_recommendations.common.candidate\_sources.top\_organic\_follows\_accounts.TopOrganicFollowsAccountsSource

import com.twitter.follow\_recommendations.common.candidate\_sources.geo.PopCountrySource

import com.twitter.follow\_recommendations.common.candidate\_sources.geo.PopCountryBackFillSource

import com.twitter.follow\_recommendations.common.candidate\_sources.geo.PopGeohashQualityFollowSource

import com.twitter.follow\_recommendations.common.candidate\_sources.geo.PopGeohashSource

import com.twitter.follow\_recommendations.common.candidate\_sources.ppmi\_locale\_follow.PPMILocaleFollowSource

import com.twitter.follow\_recommendations.common.candidate\_sources.real\_graph.RealGraphOonV2Source

import com.twitter.follow\_recommendations.common.candidate\_sources.recent\_engagement.RecentEngagementNonDirectFollowSource

import com.twitter.follow\_recommendations.common.candidate\_sources.recent\_engagement.RepeatedProfileVisitsSource

import com.twitter.follow\_recommendations.common.candidate\_sources.salsa.RecentEngagementDirectFollowSalsaExpansionSource

import com.twitter.follow\_recommendations.common.candidate\_sources.sims.LinearRegressionFollow2vecNearestNeighborsStore

import com.twitter.follow\_recommendations.common.candidate\_sources.sims\_expansion.RecentEngagementSimilarUsersSource

import com.twitter.follow\_recommendations.common.candidate\_sources.sims\_expansion.RecentFollowingSimilarUsersSource

import com.twitter.follow\_recommendations.common.candidate\_sources.stp.OnlineSTPSourceScorer

import com.twitter.follow\_recommendations.common.candidate\_sources.stp.OfflineStrongTiePredictionSource

import com.twitter.follow\_recommendations.common.candidate\_sources.triangular\_loops.TriangularLoopsSource

import com.twitter.follow\_recommendations.common.candidate\_sources.user\_user\_graph.UserUserGraphCandidateSource

import com.twitter.follow\_recommendations.common.models.CandidateUser

import com.twitter.product\_mixer.core.functional\_component.candidate\_source.CandidateSource

import javax.inject.Inject

import javax.inject.Singleton

@Singleton

class PostNuxMlCandidateSourceRegistry @Inject() (

crowdSearchAccountsCandidateSource: CrowdSearchAccountsSource,

topOrganicFollowsAccountsSource: TopOrganicFollowsAccountsSource,

linearRegressionfollow2vecNearestNeighborsStore: LinearRegressionFollow2vecNearestNeighborsStore,

forwardEmailBookSource: ForwardEmailBookSource,

forwardPhoneBookSource: ForwardPhoneBookSource,

offlineStrongTiePredictionSource: OfflineStrongTiePredictionSource,

onlineSTPSource: OnlineSTPSourceScorer,

popCountrySource: PopCountrySource,

popCountryBackFillSource: PopCountryBackFillSource,

popGeohashSource: PopGeohashSource,

recentEngagementDirectFollowSimilarUsersSource: RecentEngagementSimilarUsersSource,

recentEngagementNonDirectFollowSource: RecentEngagementNonDirectFollowSource,

recentEngagementDirectFollowSalsaExpansionSource: RecentEngagementDirectFollowSalsaExpansionSource,

recentFollowingSimilarUsersSource: RecentFollowingSimilarUsersSource,

realGraphOonV2Source: RealGraphOonV2Source,

repeatedProfileVisitSource: RepeatedProfileVisitsSource,

reverseEmailBookSource: ReverseEmailBookSource,

reversePhoneBookSource: ReversePhoneBookSource,

triangularLoopsSource: TriangularLoopsSource,

userUserGraphCandidateSource: UserUserGraphCandidateSource,

ppmiLocaleFollowSource: PPMILocaleFollowSource,

popGeohashQualityFollowSource: PopGeohashQualityFollowSource,

baseStatsReceiver: StatsReceiver,

) extends CandidateSourceRegistry[PostNuxMlRequest, CandidateUser] {

import EnrichedCandidateSource.\_

override val statsReceiver = baseStatsReceiver

.scope("post\_nux\_ml\_flow", "candidate\_sources")

// sources primarily based on social graph signals

private[this] val socialSources = Seq(

linearRegressionfollow2vecNearestNeighborsStore.mapKeys[PostNuxMlRequest](

\_.getOptionalUserId.toSeq),

forwardEmailBookSource,

forwardPhoneBookSource,

offlineStrongTiePredictionSource,

onlineSTPSource,

reverseEmailBookSource,

reversePhoneBookSource,

triangularLoopsSource,

)

// sources primarily based on geo signals

private[this] val geoSources = Seq(

popCountrySource,

popCountryBackFillSource,

popGeohashSource,

popGeohashQualityFollowSource,

topOrganicFollowsAccountsSource,

crowdSearchAccountsCandidateSource,

ppmiLocaleFollowSource,

)

// sources primarily based on recent activity signals

private[this] val activitySources = Seq(

repeatedProfileVisitSource,

recentEngagementDirectFollowSalsaExpansionSource.mapKeys[PostNuxMlRequest](

\_.getOptionalUserId.toSeq),

recentEngagementDirectFollowSimilarUsersSource,

recentEngagementNonDirectFollowSource.mapKeys[PostNuxMlRequest](\_.getOptionalUserId.toSeq),

recentFollowingSimilarUsersSource,

realGraphOonV2Source,

userUserGraphCandidateSource,

)

override val sources: Set[CandidateSource[PostNuxMlRequest, CandidateUser]] = (

geoSources ++ socialSources ++ activitySources

).toSet

}