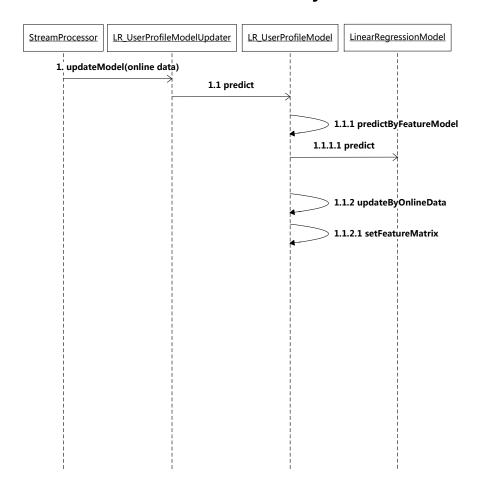
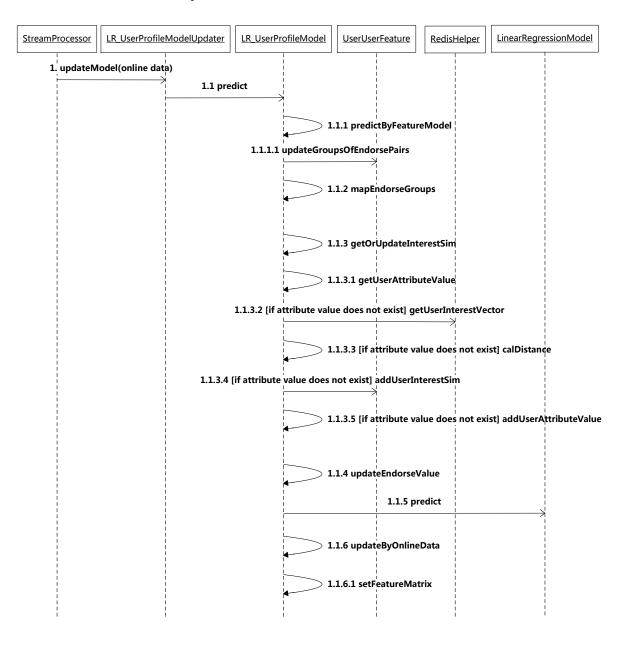
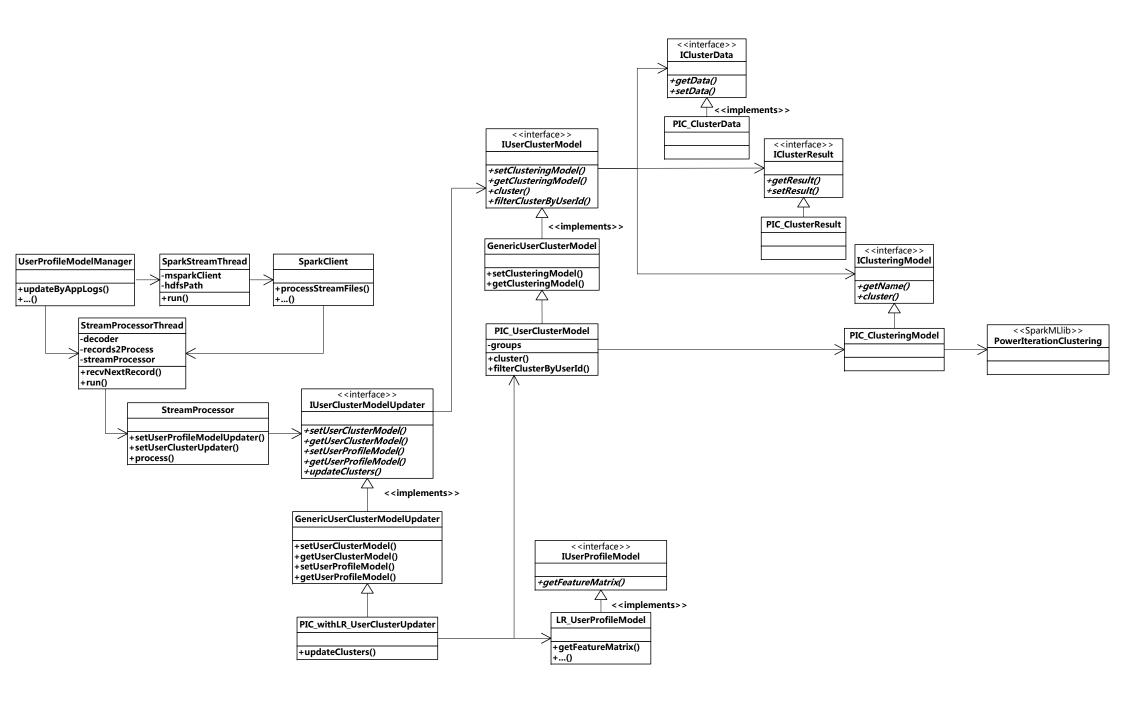


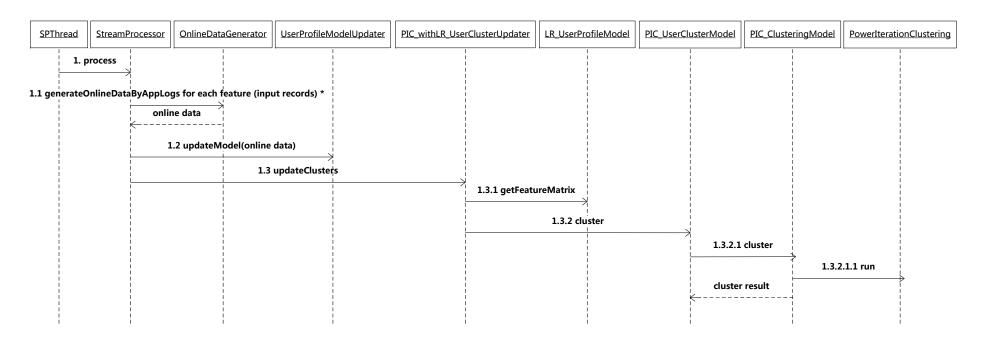
## **Update UserMerchantFeature Model by online data**

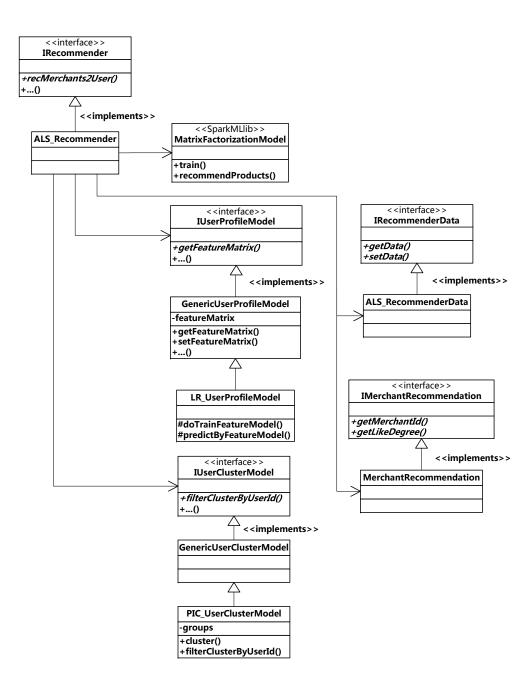


## **Update UserUserFeature Model by online data**









<u>UserProfileModel</u> Client ALS\_Recommender MatrixFactorizationModel <u>UserClusterModel</u> 1. getInstance 2. recMerchants2User 2.1 getDataFromUserProfileModel 2.1.1 getFeatureMatrix recommender data 2.2 train 2.3 recommendProducts 2.4 filterClusterByUserId similiar users 2.5 [for each similiar user] \* recommendProducts 2.6 [for each similiar user] \* combine recommended merchants 2.7 reorder recommender merchants