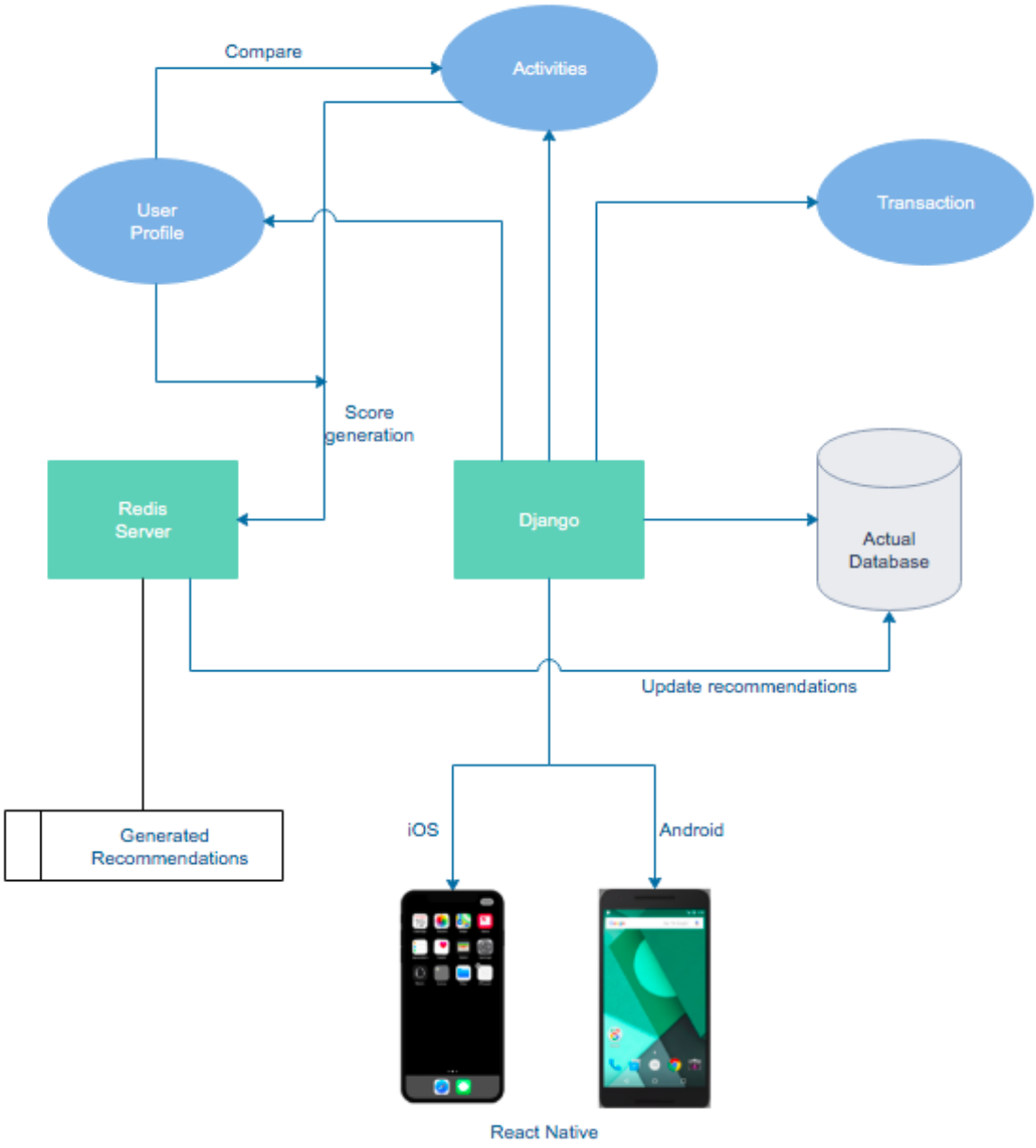

- Here we have Django framework which is connected to the actual database. Django framework contains user profile, activities and transactions. As soon as user creates profile he/she can add interests of their own.
- The user's interests and activity lists are run through a recommendation engine. The recommendation engine actually compares each value of the activity list with the user's interest to create a score using cosine similarity. Then redis server will store these generated scores from the previous comparison which later store back into actual database, from which we can recommend user's activities.
- We are using Django to build the entire backend and python.
- We are using REST APIs to get data from Django and react native(json) to design front end iOS and android application.

- In recommendation engine we have two REST API endpoints train and predict.
  /train – calls engine.train() which precomputes item similarities based on their descriptions in training_data.csv using TF-IDF and cosine similarity.
  /predict – given an activity_id, returns the precomputed 'most similar' activities.