Report for lab assignment 9

Vipn Reddy 24

1. Question:

Image collection and sentimental analysis based on the image tags using Instagram streaming (related to your project)

a. Training Datasets: Instagram Streaming/Categorized Image (e.g., Static UEC Food Dataset) and meta data

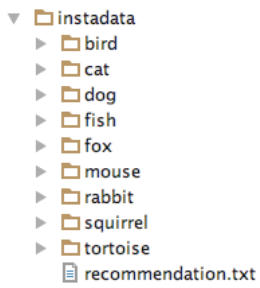
b. Testing Datasets e.g., Image, UserGroup, Category, Rating (Instagram streaming)

Description:

Training data and testing data were both collected from Instagram streaming. Here we define ten categories images to be trained: "dog", "cat", "mouse", "rabbit", "squirrel", "bird", "fox", "tortoise", "fish", which are the animal types which the user likes.

Screenshots:

Collected training data and recommendation file from Instagram.



2. Question:

Image Classification based on the categories related to your project

Description:

Testing data from device was classified by training model.

Screenshots:

Image from device:

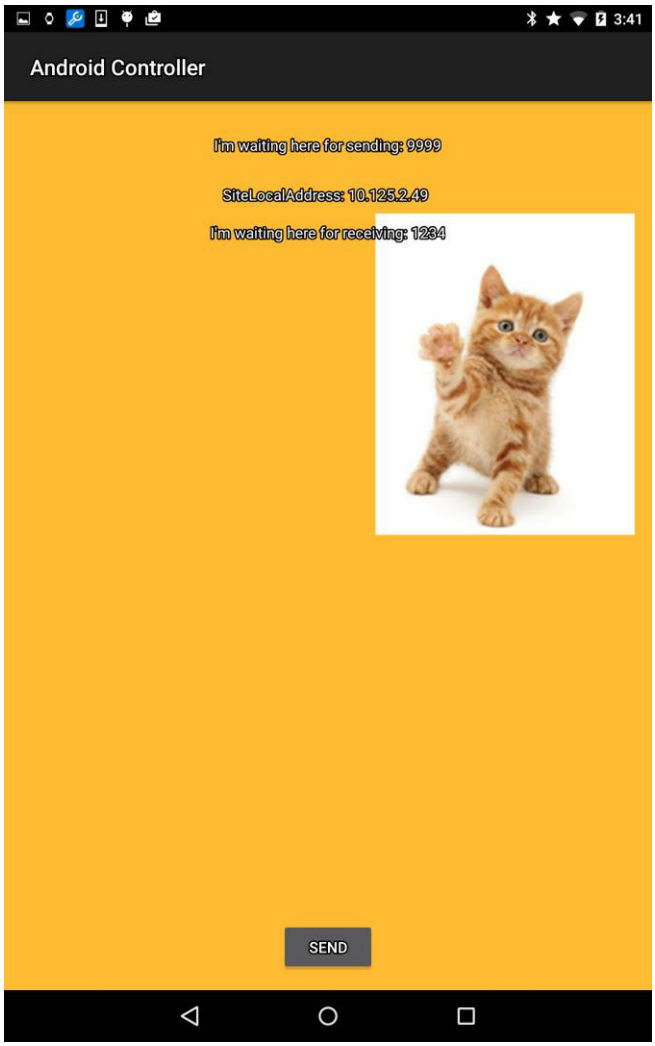
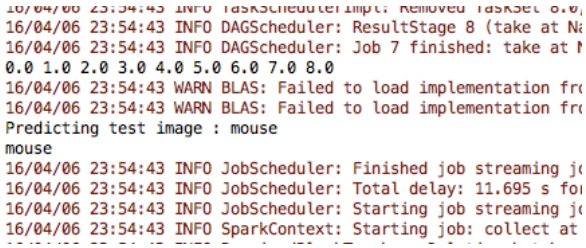


Image sent to Spark and got the classification:



3. Question:

Image-based Recommendation system (related to your own project)

a. The rating based on sentiment analysis of Instagram metadata

b. Expected outcome is to make a recommendation based on user image input or profile (e.g., preferences, location, gender, age)

Description:

We did the recommendation according to the user id (2) and give the recommendation for this person.

Screenshots:

```
16/04/07 15:38:08 INFO TaskSetManager: Finished
Category recommended for you:
Rating(1,4,2.746520747058148)
 1: fish
Rating(1,8,2.7696727736995252)
 2: squirrel
Rating(1,8,2.7696727736995252)
 3: squirrel
Rating(1,5,2.3658216968831347)
 4: fox
Rating(1,5,2.3658216968831347)
 5: fox
Rating(1,5,2.3658216968831347)
 6: fox
Rating(1,5,2.3658216968831347)
 7: fox
Rating(1,2,2.7458398728611573)
 8: cat
Rating(1,2,2.7458398728611573)
 9: cat
Rating(1,2,2.7458398728611573)
10: cat
Rating(1,3,2.899951807081844)
11: dog
Rating(1,3,2.899951807081844)
12: dog
Rating(1,3,2.899951807081844)
13: dog
Rating(1,3,2.899951807081844)
14: dog
Rating(1,3,2.899951807081844)
15: dog
Rating(1,7,2.6388992784671856)
16: rabbit
Rating(1,7,2.6388992784671856)
17: rabbit
Rating(1,7,2.6388992784671856)
```

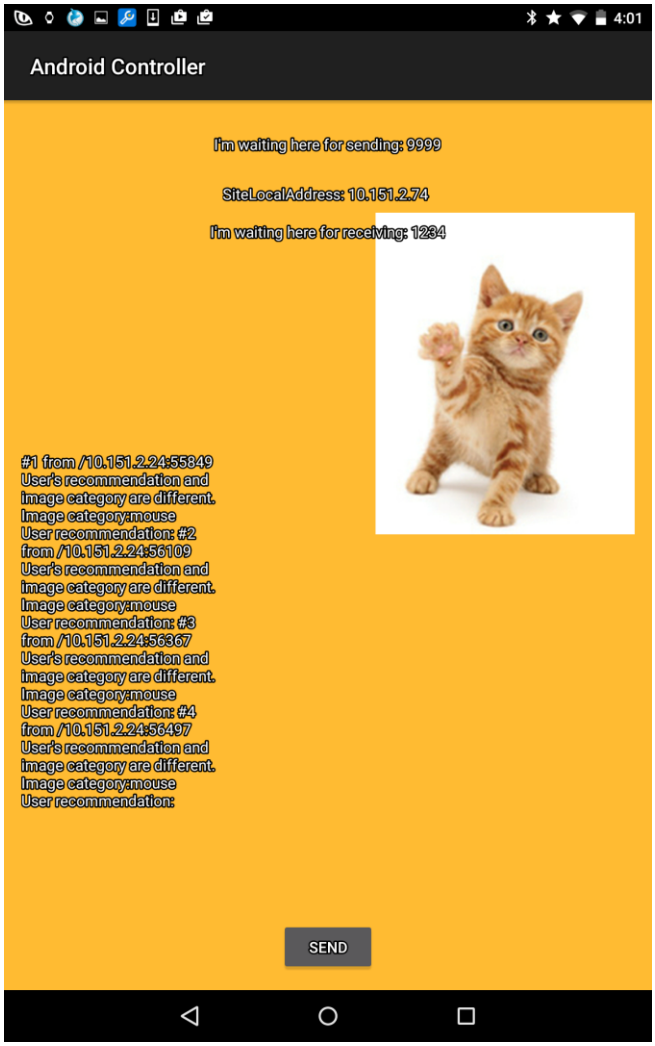
4. Question:

Instagram trend notification to smartphone/smartwatch

Description:

If the image category matches the categories that recommend to the person, the "consistent" notification will be sent to the device. If they don't match, the "inconsistent" notification will be also sent.

Screenshots:


4:01
Android Controller
I'm waiting here for sending: 9999
SiteLocalAddress: 10.151.2.74
I'm waiting here for receiving: 1234
#1 from /10.151.2.24:55849
User's recommendation and
image category are different.
Image category:mouse
User recommendation: #2
from /10.151.2.24:56109
User's recommendation and
image category are different.
Image category:mouse
User recommendation: #3
from /10.151.2.24:56367
User's recommendation and
image category are different.
Image category:mouse
User recommendation: #4
from /10.151.2.24:56497
User's recommendation and
image category are different.
Image category:mouse
User recommendation:
SEND