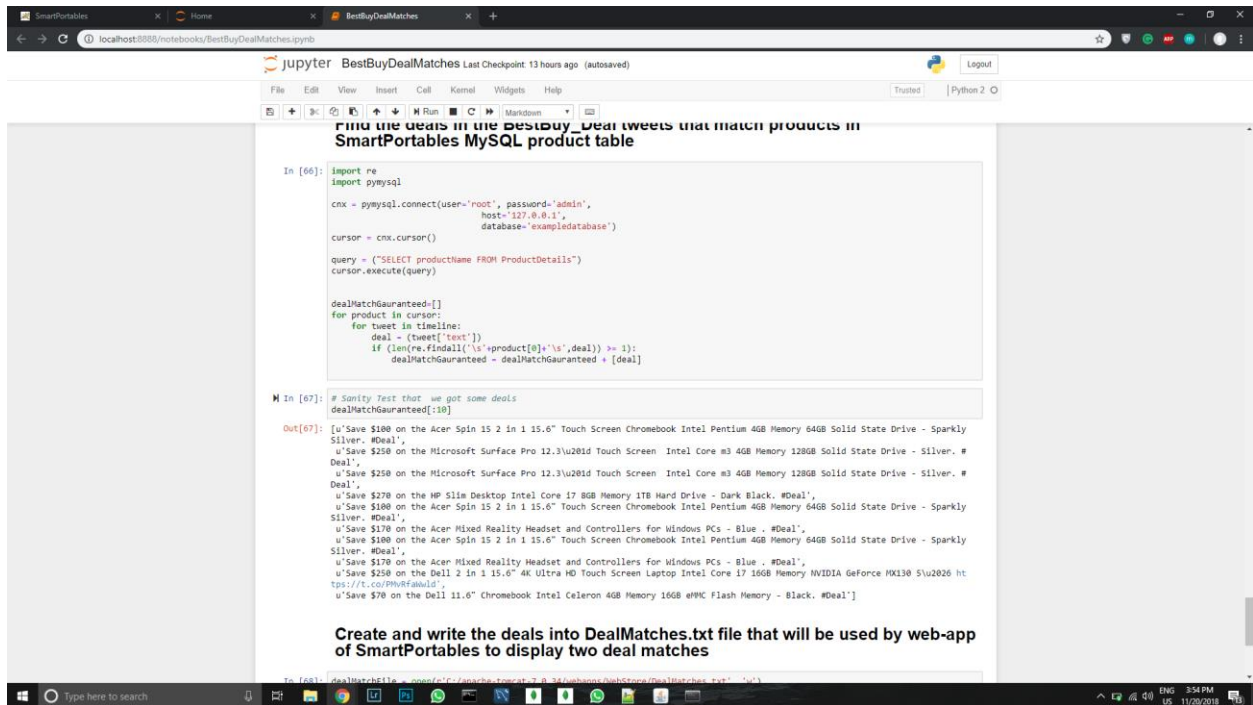


Assignment#5

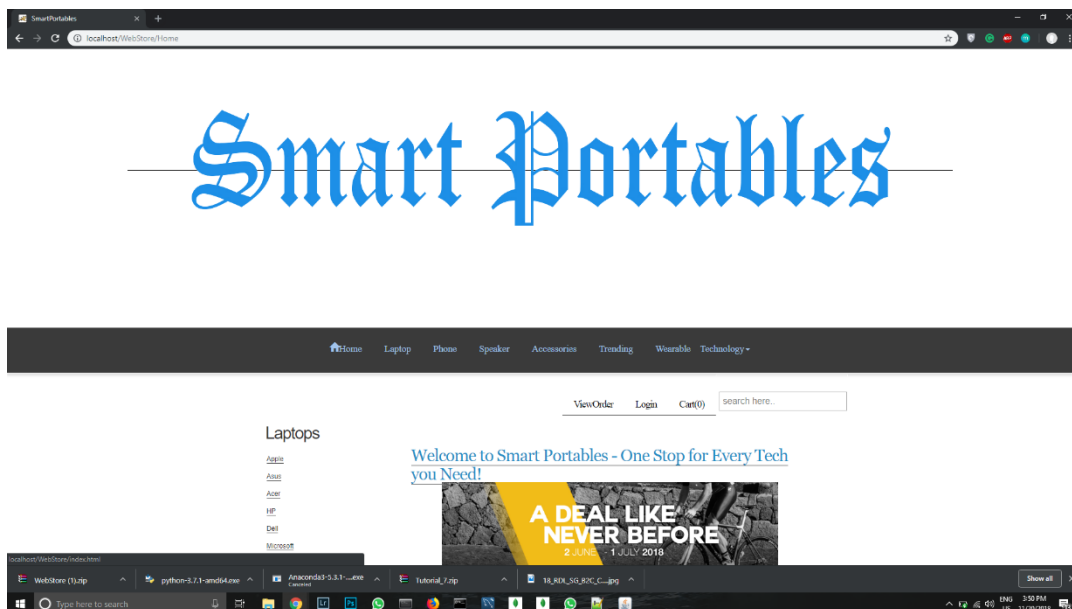
Akhil Suryadevara

A20391322

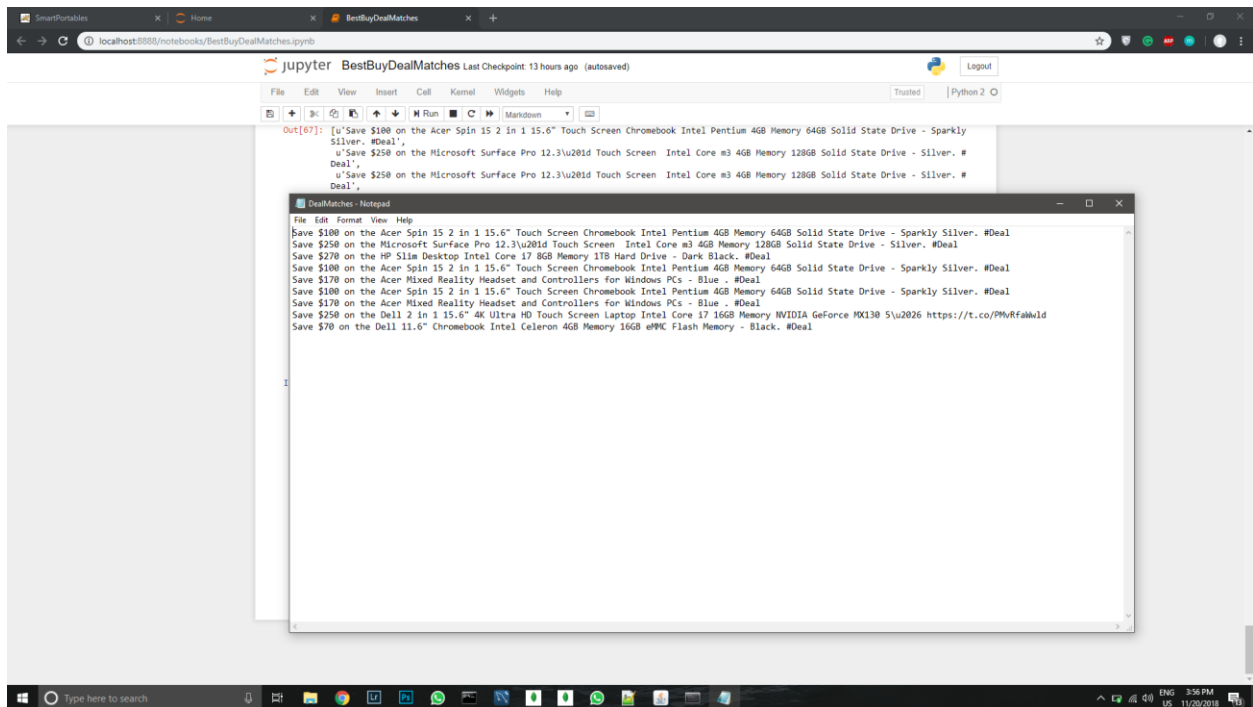
This is how our homepage would look like upon completion



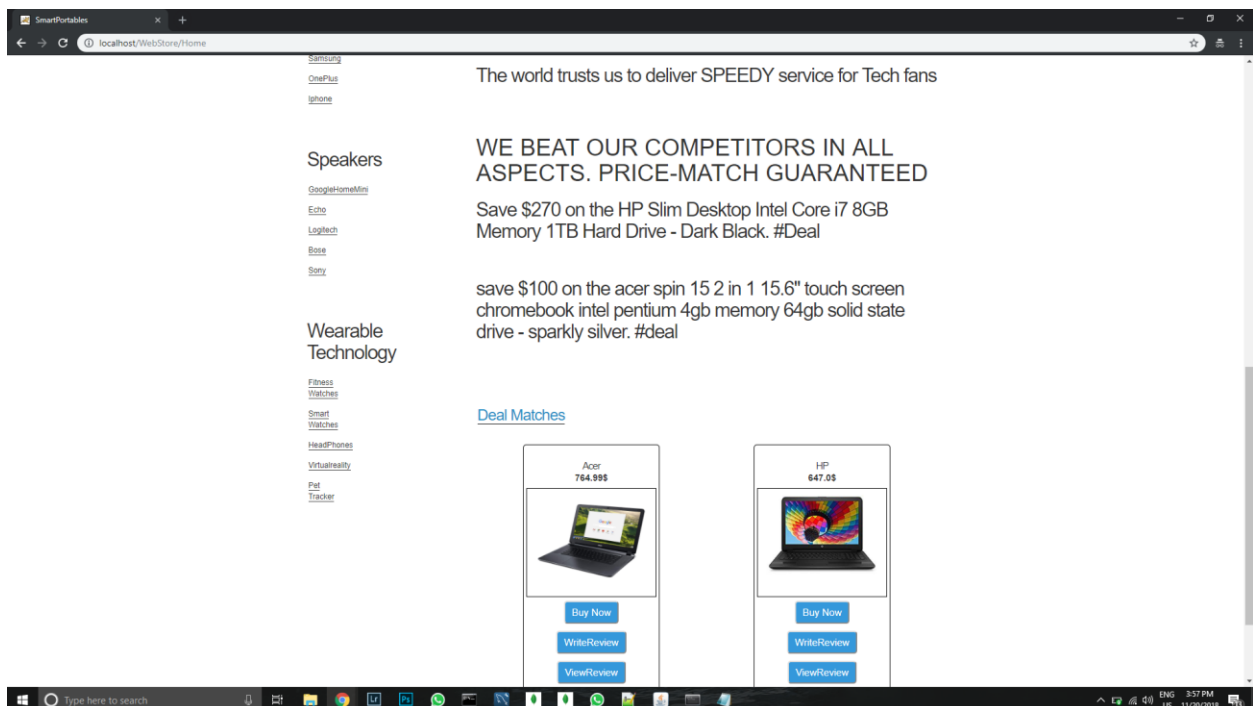
Upon execution of the given python script we would get the tweets



We could see them in the output file



We could see the first 2 best deals here



Later upon recommending the “Product Recommender” python script.

The screenshot displays a Jupyter Notebook environment with the following code:

```

Returns:
A dict where keys are user (raw) ids and values are lists of tuples:
... [[raw item id, rating estimation), ...] of size n.
...

# First map the predictions to each user.
top_n = defaultdict(list)
for uid, iid, true_r, est, _ in predictions:
    top_n[uid].append((iid, est))

# Then sort the predictions for each user and retrieve the k highest ones.
for uid, user_ratings in top_n.items():
    user_ratings.sort(key=lambda x: x[1], reverse=True)
    top_n[uid] = user_ratings[:n]

return top_n

# First train an SVD algorithm on the movieLens dataset.
data = Dataset.load_from_file(file_path, reader=reader)
trainset = data.build_full_trainset()
algo = SVD()
algo.fit(trainset)

# Then predict ratings for all pairs (u, i) that are NOT in the training set.
testset = trainset.build_anti_testset()
predictions = algo.test(testset)

top_n = get_top_n(predictions, n=4)

# Print the recommended items for each user
for uid, user_ratings in top_n.items():
    print(uid, [iid for (iid, _) in user_ratings])

out = open(pr_file_path+'matrixFactorizationBasedRecommendations.csv', 'wb')
output_csv.writer(out)

for uid, user_ratings in top_n.items():
    output_csv.writerow([uid, [iid for (iid, _) in user_ratings]])

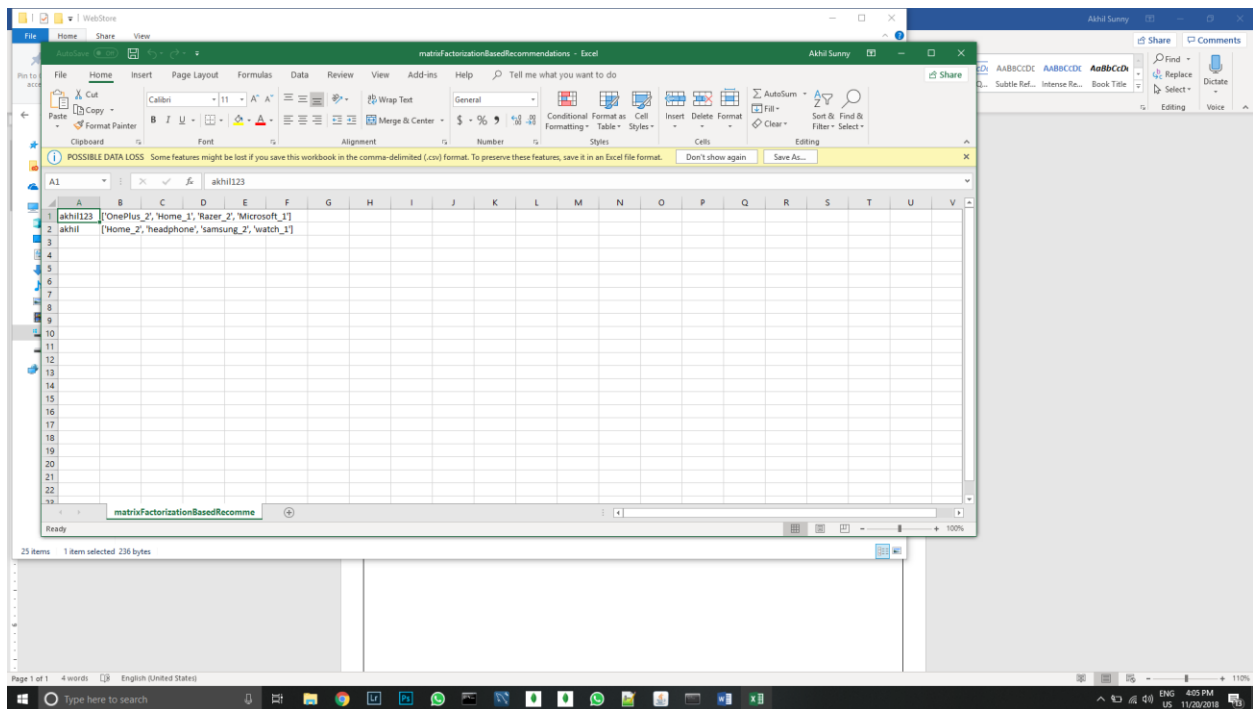
out.close()

('akhil123', ['OnePlus_2', 'Home_1', 'Razer_2', 'Microsoft_1'])
('akhil', ['Home_2', 'headphone', 'samsung_2', 'watch_1'])

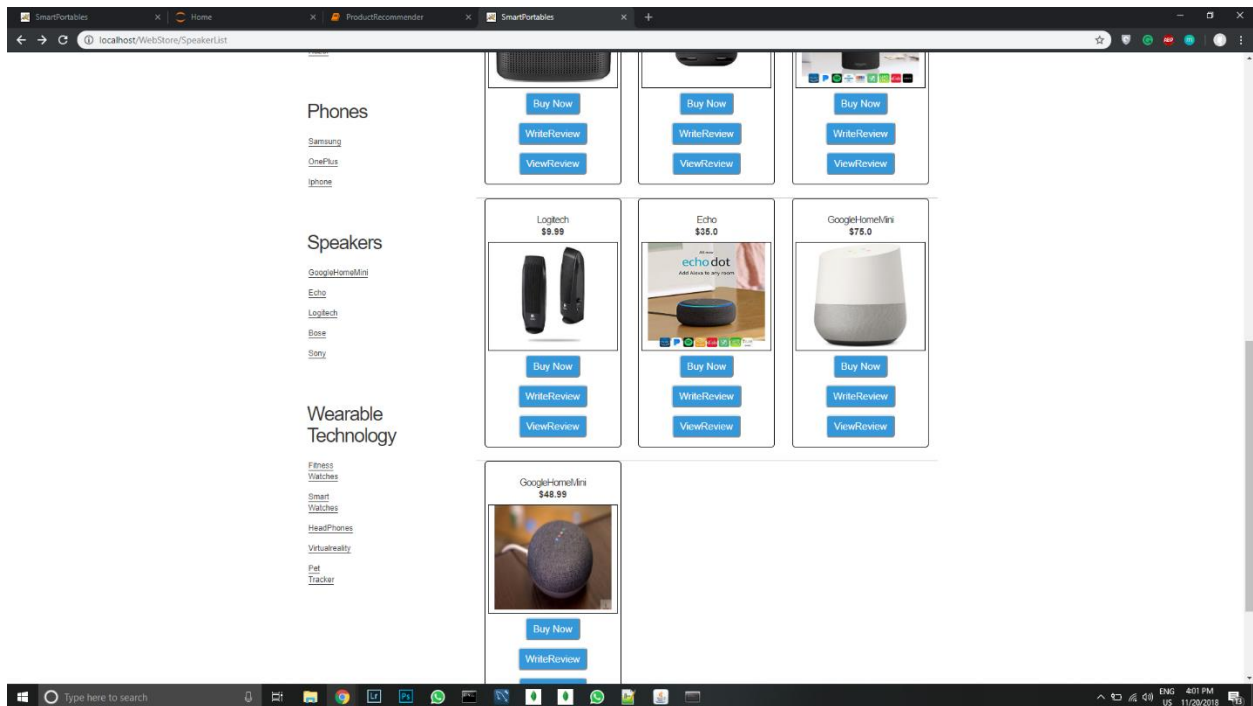
```

We would get the recommendations and can see them in the output files too.

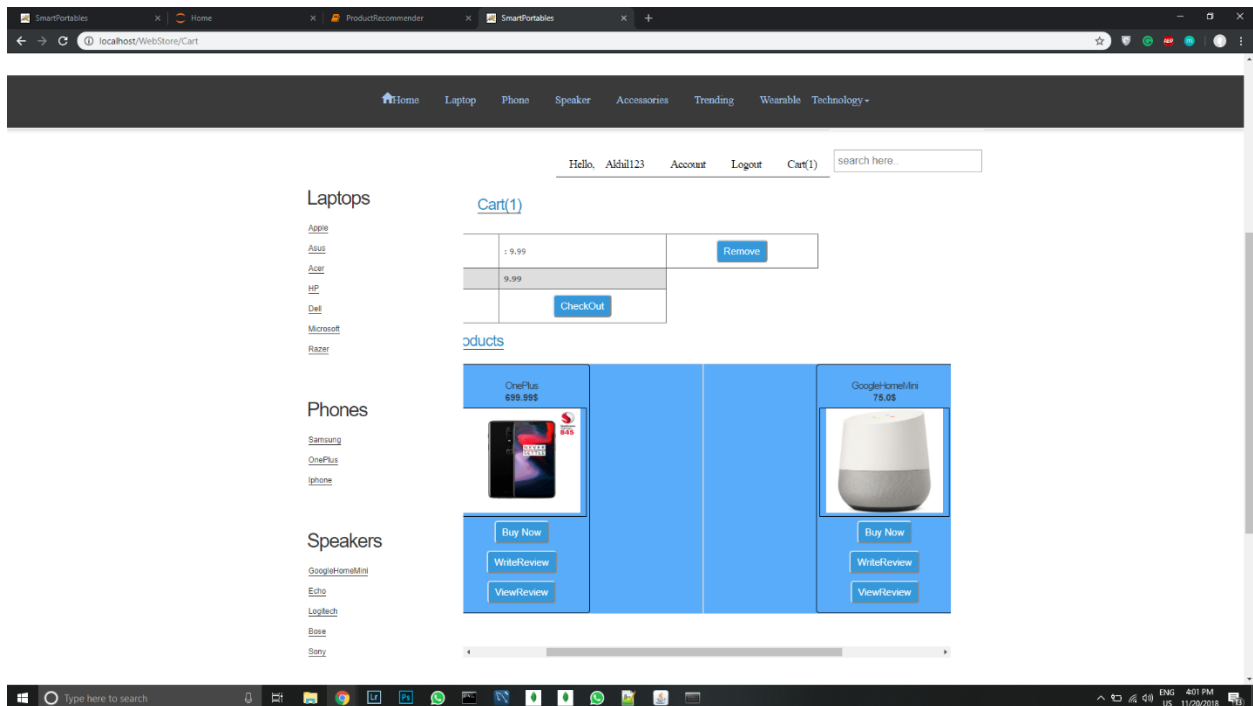
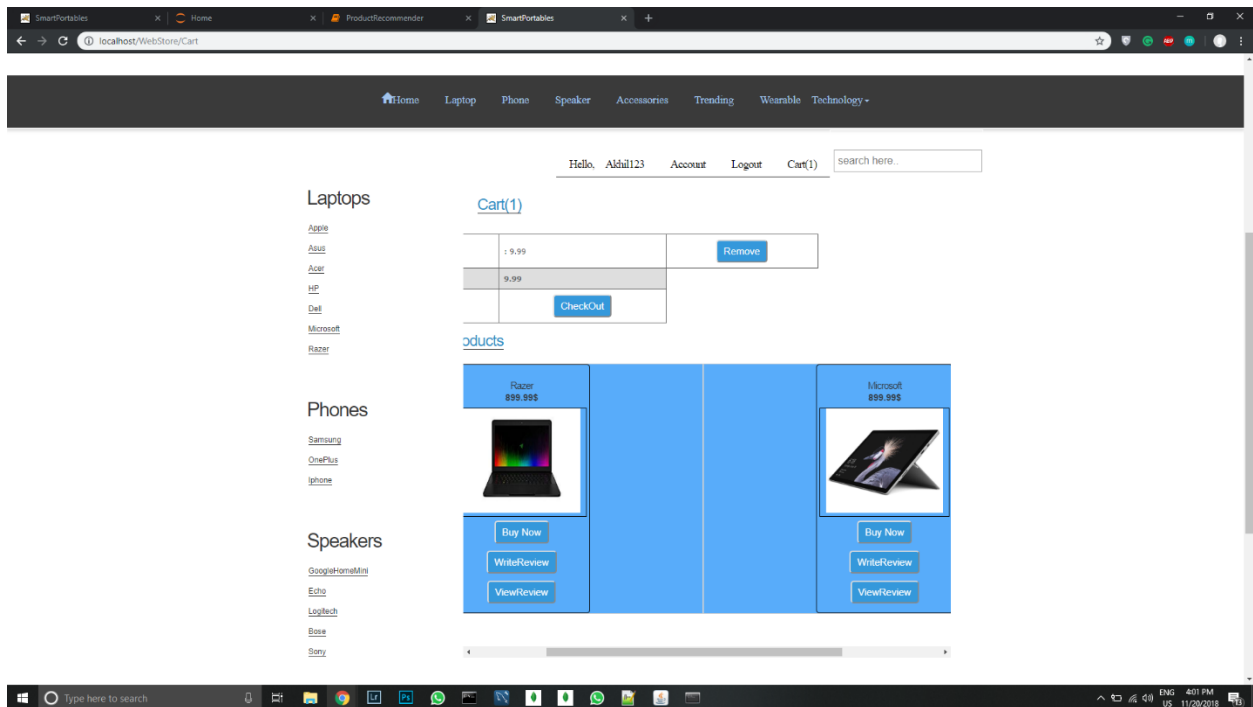
[illegible]



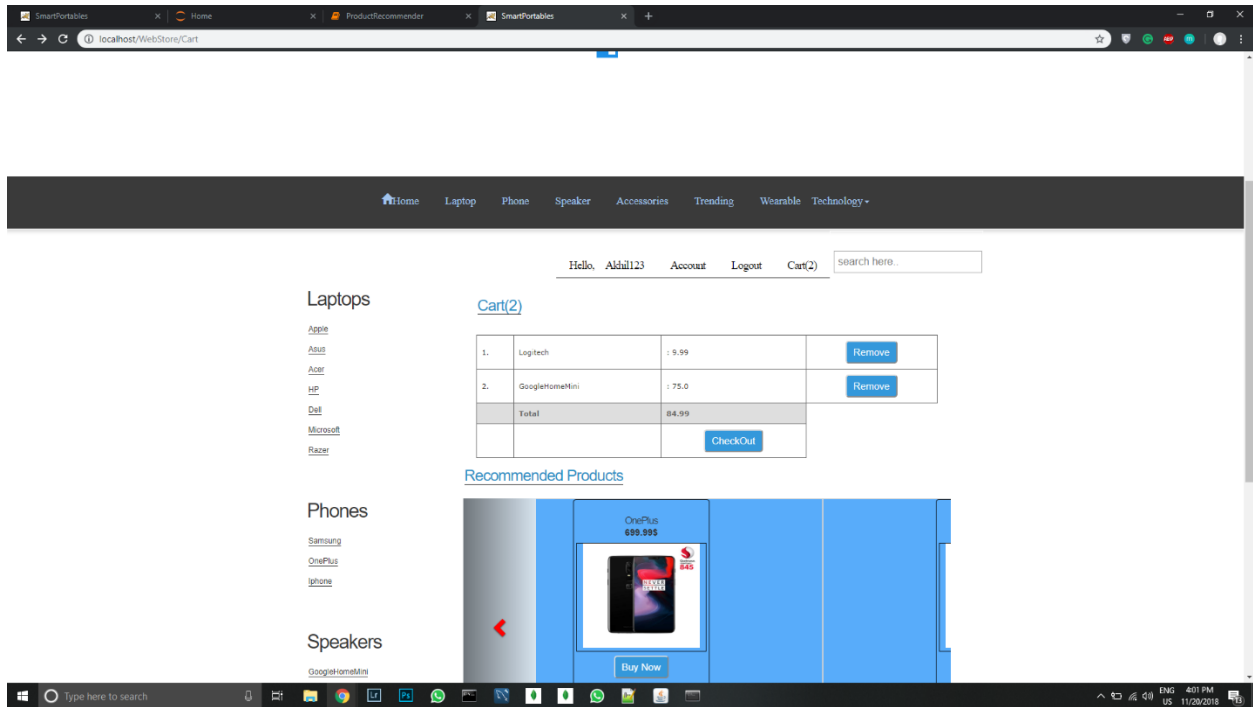
Upon selecting a particular product now



We would get all the four recommendations shown in output file with the help of carousel



We could add them to cart and click check out.



Rest of all works as usual. Thanks!