

FASHION REDEFINED WITH VIRTUAL GROOMING AND SHOPPING ASSISTANT

Team name :
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"Fashion is not something that exists in dresses only. Fashion is in the sky, in the street. Fashion has to do with ideas, the way we live, what is happening."

Fashion always has this "transformation" which takes time to time without any delay! When it comes to online shopping, we don't really have this experience of getting clothes as we see it in the shops physically. For that apps have been introduced but there are consequences where people lack in choosing outfits suiting them which can be recommended with the help of AI technology using our model. Deep learning model has been created which is a type of machine learning based on artificial neural networks in which multiple layers of processing are used to extract progressively higher-level features from data. we have included more than 44,000 images for the dataset and the chatbot we have made is highly interactive with features of IBM Watson Studio.

Novelty/Uniqueness

- > Attractive and unique interface/ UI UX resulting from our team's creativity
- > Chatbot that provides output and recommendations for different age groups
- > Constant compliments by chatbot for the most optimal dress recommendations to increase user satisfaction.
- > Detailed input obtaining for precise recommendation
- > Additional feature of providing information on clothing stores and discounts based on users' preference of clothes.
- > suggestions based on new trends in the market
- > Updates on new offers and ongoing trends

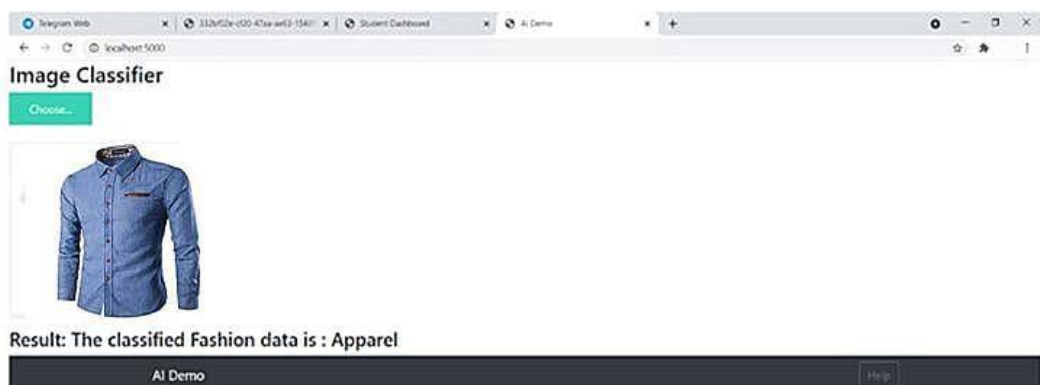
Business Impact

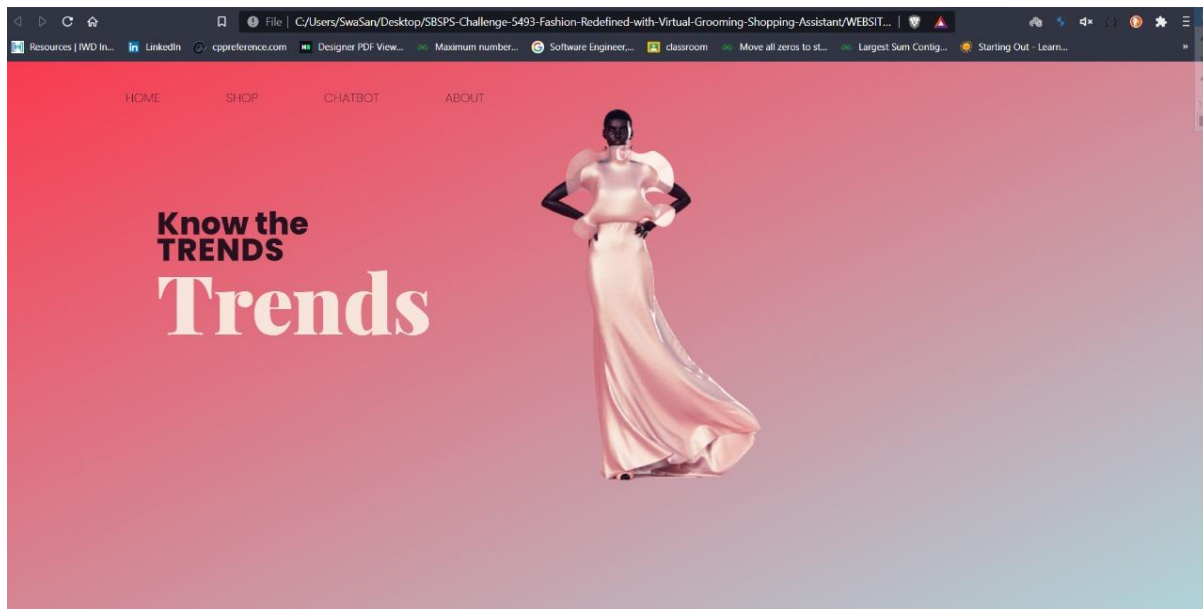
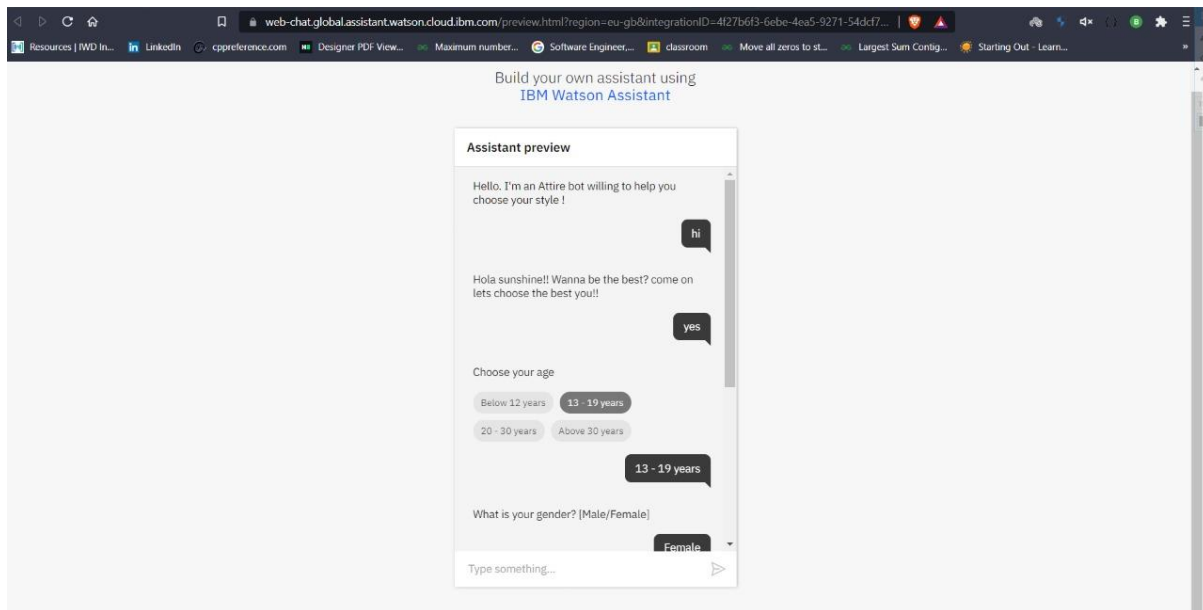
The application if deployed, would be user friendly with the implementation of chatbot enhancing ze's interaction with it.

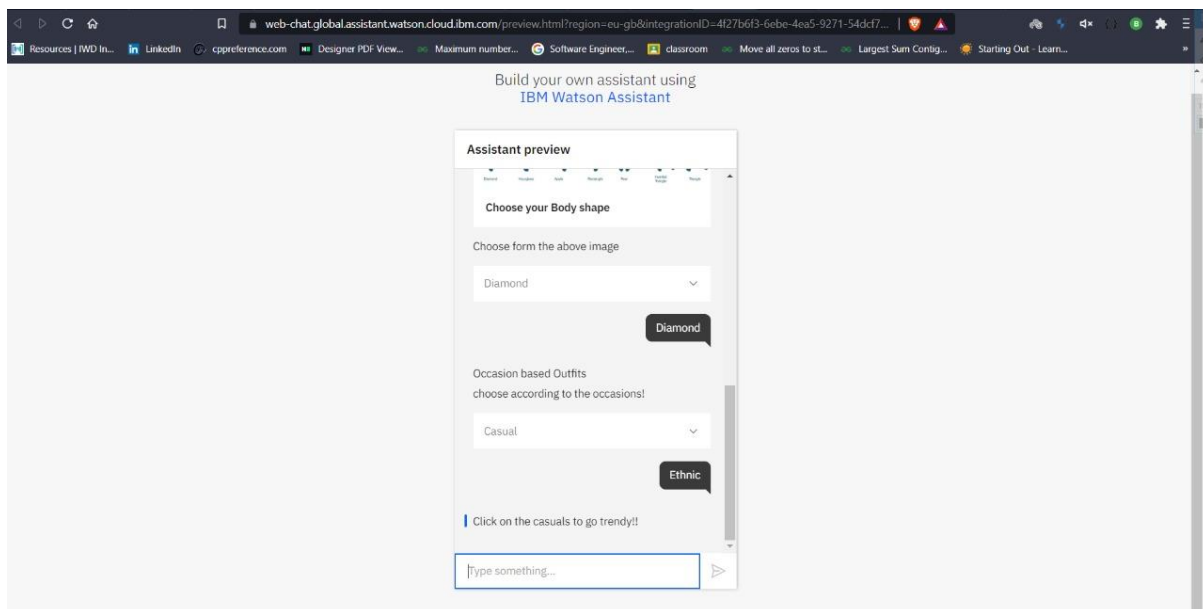
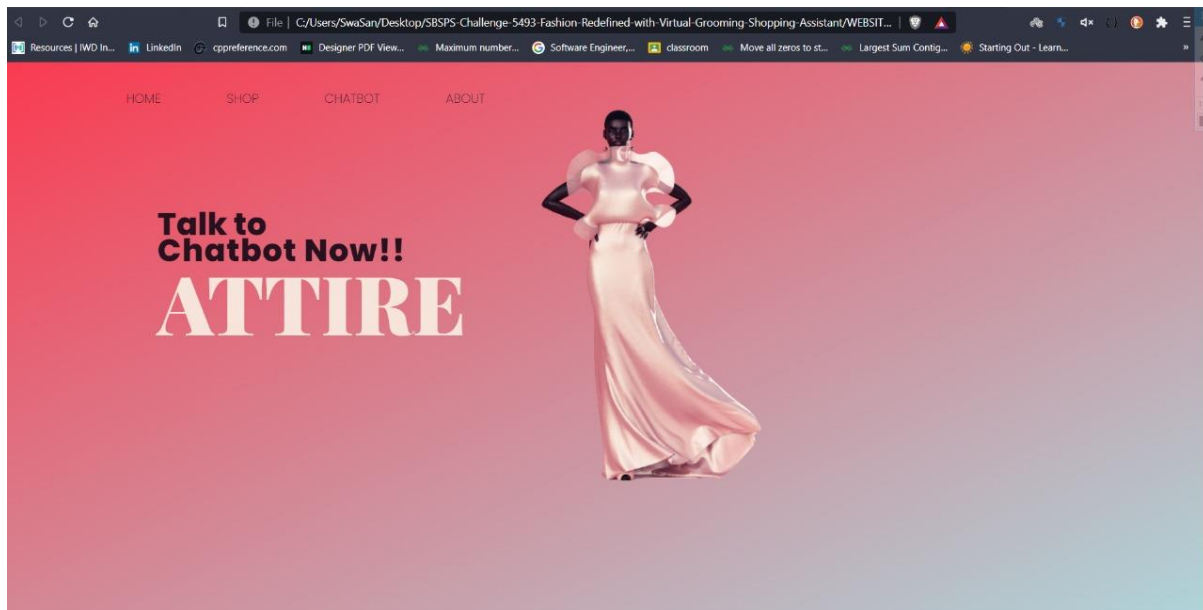
This would have a wide scope as most of the clothing brands and popular E-commerce apps like Amazon, Ebay and Shein would profit by the variety of choices they provide to customers using the virtual grooming application. Not only that, the user would have the platform to realize what type of fashionable clothing would suit him/her the best, and prefer the recommended clothes hopefully.

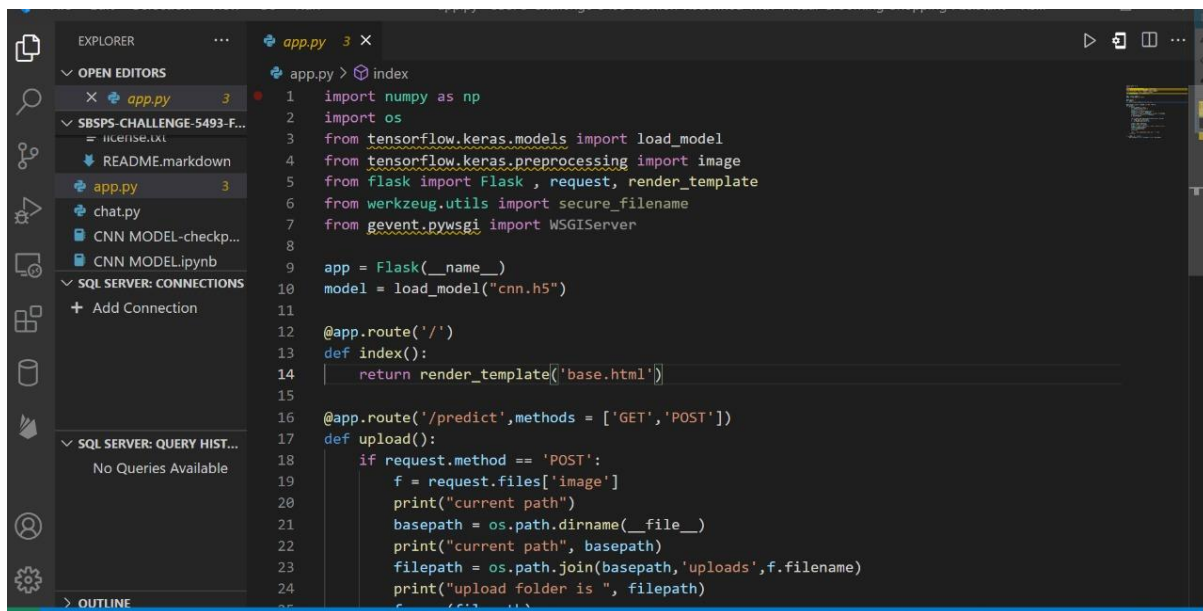
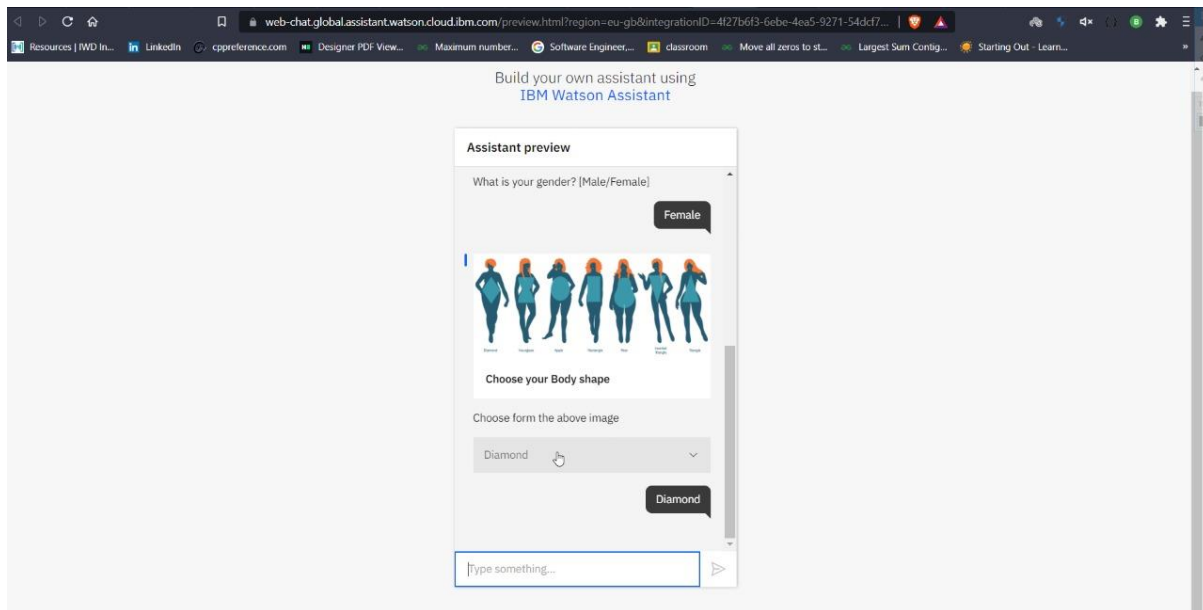
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jupyter testing Last Checkpoint: 08/07/2021 (autosaved)
File Edit View Insert Cell Kernel Help Not Trusted Python 3 (ipykernel)
In [340]: pred=model.predict_classes(x)
In [341]: pred
Out[341]: array([28], dtype=int64)
In [342]: pred[0]
Out[342]: 28
In [343]: index=['belt', 'cap', 'cosmetics', 'men's pant', 'men's shirt', 'men's shoe', 'men's slipper', 'men's trouser', 'men's tshirt',
+
In [344]: dress_index[pred[0]]
In [345]: dress
Out[345]: "women's tshirt"
In [ ]:
In [ ]:
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jupyter CNN MODEL Last Checkpoint: 08/07/2021 (autosaved)
File Edit View Insert Cell Kernel Help Trusted Python 3 (ipykernel)
In [159]: model.add(Dense(units = 128, kernel_initializer = "random_uniform", activation = "relu" ))
In [160]: model.add(Dense(units = 35, kernel_initializer = "random_uniform", activation = "softmax" ))
In [161]: model.compile(loss = "categorical_crossentropy", optimizer = "adam", metrics = ["accuracy"])
In [ ]: model.fit_generator(x_train, steps_per_epoch = len(x_train), epochs = 35, validation_data = x_test, validation_steps = len(x_test))
Epoch 1/35
314/314 [=====] - 66s 212ms/step - loss: 0.4197 - accuracy: 0.8598 - val_loss: 6.0936 - val_accuracy: 0.4445
Epoch 2/35
314/314 [=====] - 65s 208ms/step - loss: 0.3829 - accuracy: 0.8735 - val_loss: 6.3226 - val_accuracy: 0.4298
Epoch 3/35
314/314 [=====] - 65s 206ms/step - loss: 0.3861 - accuracy: 0.8710 - val_loss: 6.4391 - val_accuracy: 0.4420
Epoch 4/35
314/314 [=====] - 65s 207ms/step - loss: 0.3611 - accuracy: 0.8806 - val_loss: 6.7889 - val_accuracy: 0.4538
Epoch 5/35
314/314 [=====] - 65s 208ms/step - loss: 0.3491 - accuracy: 0.8797 - val_loss: 6.9471 - val_accuracy: 0.4640
Epoch 6/35
314/314 [=====] - 65s 208ms/step - loss: 0.3257 - accuracy: 0.8910 - val_loss: 7.0509 - val_accuracy: 0.4471
Epoch 7/35
314/314 [=====] - 65s 208ms/step - loss: 0.3284 - accuracy: 0.8904 - val_loss: 6.8250 - val_accuracy: 0.4471
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Project Description Video : <https://youtu.be/tOZpYbL3F9o>

THANK YOU