Model Building

Configuring the Learning Process

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Project Name : Emerging Methods for early Detection Of forest fire

```
'''import model building libraries'''

#to define linear initialisation import sequential

from keras.models import  Sequential

#to add layers import Dense

from keras.layers import Dense

#to create Convolution kernel import Covolution2D

from keras.layers import Convolution2D

#import Maxpooling Layer

from keras.layers import Dense

from keras.layers import Convolution2D

#import Flatten Layer

from keras.layers import Flatten

#import  maxpooling layer

from keras.layers import MaxPooling2D

import warnings
warnings.filterwarnings('ignore')

#initializing model
model=Sequential()
```

Adding CNN Layer

Task 1:

```
#add cnn layer

model.add(Conv2D(filters=32,kernel_size=2,padding="same",activation
="relu"))
```

```
model.add(MaxPooling2D(pool_size=2))
model.add(Conv2D(filters=64,kernel_size=2,padding="same",activation="r
elu"))
model.add(MaxPooling2D(pool_size=2))
```

Task 2:

```
#flattening layer
model.add(Flatten())
```

Task 3:

```
#Adding PoolingLayer

model.add(MaxPooling2D(pool_size=(2,2)))
```

Adding Dense Layer

```
#adding DenseLayer

model.add(Dense(500,activation="relu"))

model.add(Dense(2,activation="softmax"))

print("Adding dense layer on top")
model.add(layers.Dense(64, activation='relu'))
model.add(layers.Dense(10))
print("Complete architecture of the model")
model.summary()
```

Configuring the Learning Process

```
#Configuring the learning process


model.compile(loss='binary_crossentrophy',optimizer="adam",
metrices=["accuracy"])
```