

The background features a white central area framed by red geometric shapes at the top and bottom. These shapes are composed of various triangles and polygons, creating a modern, architectural look.

CORONA VIRUS PROBABILITY DETECTOR

**Healthy,
safe and
productive lives**

The background of the slide features a white central area with red geometric shapes at the top and bottom. These shapes are composed of various triangles and polygons, creating a modern, abstract design.

Hello, everyone, my name is Nitin Kumar and I'm 2nd-year B.tech student from computer science branch.

So finally I made a web-application (Corona Virus Probability Detector), And I have used Machine Learning(ML) Technology for this Project.

I have used some Data, and Data is taking from Infected or non-infected people with the Coronavirus, I have trained the Data through the Machine Learning because In Machine Learning Data has to be Trained.

The background of the slide features a red geometric pattern consisting of various triangles and polygons, creating a modern, abstract look. The pattern is more prominent at the top and bottom edges, with a white central area where the text is located.

And I have used fake Data because I don't have real Data, And the actual Data will be provided by the Government.

So I accepted Covid-19 solution challenge, and I create a web-application.

So Through this web application, you can estimate the likelihood of getting Infected with the Corona Virus.

If you are 20-40 Percent likely to be Infected with the Corona Virus, So actually you are not infected with the virus, And on the other side, If you are 50-80 per cent likely to be Infected with the Corona Virus, So actually you are Infected with the Virus.

You can check the Probability with help of this Tool, and can go to the Hospital for its verification, and clear your doubts.

And I have trained the Data through the Machine Learning, So through this Tool, You can estimate the Probability of Infected virus.

So I fill the data.....

And as You can see the probability of Infected with the coronavirus..%.

I used these technology stack for this project..

- 1. ML(Machine Learning)**
- 2. Flask**
- 3. Bootstrap**

**For the Frontend(Bootstrap, Flask)
And for the Backend(ML).**

For the prediction of the Probability of Coronavirus, I have used some Virus Symptoms Factors like Cough, Fever, Breathing and Age etc.

So You can Add all Requirement Data in Web-Application.... and finally as You can see your probability of Infection Virus.

If You doubt yourself whether you are Infected with the Virus or not? Then You can visit my website and fill all symptoms and then clear your doubt.

So through this web application, you can overcome the work of Doctors and Government employees.

And finally You will be satisfied with your doubt.

The bottom of the slide features two red geometric shapes. On the left, there is a large red triangle pointing upwards. On the right, there is a smaller red triangle pointing downwards. These shapes are positioned at the bottom edge of the slide, partially overlapping the white background.

How to use this **Web-Application:**

If You doubt yourself whether you are Infected with the Virus or not? So You write all requirements Data (Symptoms) like Fever, Age, and Headache etc in this website.

And then in the next step, you see the Possibility of Infected virus in this website, If your Probability is showing low percentage, You are then satisfied with your doubt that you are not Infected with the Virus.

And in opposition, If Your Probability is showing high percentage, So you are Infected with the virus.

And finally, you completely satisfied with your doubt that you are infected with the virus or not?

And with this web application, you are also helping the Doctors and Government.



Work of Web-Application:

This Web-application completely based on Machine-Learning, and this is the backend part of it, And on the other side, I have done it with Bootstrap and Flask for the Frontend part.

So I have trained the Data through Machine Learning, and then Machine Learning predicts the Probability of Infected virus.

Through this Machine-Learning, you predict approximately 98 % accuracy with the fake data, because I don't have real data.

The bottom of the slide features two red geometric shapes. On the left, there is a large, dark red triangle pointing upwards. On the right, there is a smaller, bright red triangle pointing upwards. These shapes are positioned at the bottom corners of the slide, creating a decorative footer area.


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The idea of Approach:

Actually, with the help of this Web-Application, you can help the Government and Doctors, because through this Web-Application the work of Doctor's and Government can be reduced.

And after checking the probability of infected virus, So you can verify through the doctors.

**So through this web application, you can clear your doubts, So anybody has doubt yourself whether you are Infected with the Virus or not?
So before the hospital checkup, you can clear your doubts through this Web-Application.**

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Corona Virus Probability Detector

Enter fever value

102

Enter your Age

21

headache

Yes

cough

No cough

breathing

No Difficulty

tiredness

Severe tiredness

submit

Corona Virus Infection F

+

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Corona Virus Detector

Home

About us

Contact us

Search

Search

Corona Virus Probability Detector

Thanks for using Covid-19 Probability Detector

This Web-Application created by NKB

Patient's Probability of Infection is 39.0

[Go Back](#)

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ENG

IN

2:53 PM

3/25/2020

💬

Visual Studio Code interface showing a Python Flask application named 'mai.py'.

EXPLORER:

- OPEN EDITORS
 - index.html templates
 - show.html templates
 - mytraining.py templates
 - mai.py
- CORONA
 - .ipynb_checkpoints
 - Corona solution by NKB-checkpoin...
 - templates
 - index.html
 - mytraining.py
 - show.html
 - Corona solution by NKB.ipynb
 - data.csv
 - mai.py
 - model.pkl

mai.py:

```
1 from flask import Flask, render_template, request
2 app = Flask(__name__)
3 import pickle
4
5 file = open('model.pkl', 'rb')
6 clf = pickle.load(file)
7 file.close
8
9
10 @app.route('/', methods=["GET", "POST"])
11 def hello_world():
12     if request.method == "POST":
13         myDict = request.form
14         fever = int(myDict['fever'])
15         headache = int(myDict['headache'])
16         age = int(myDict['age'])
17         cough = int(myDict['cough'])
18         breathing = int(myDict['breathing'])
19         tiredness = int(myDict['tiredness'])
20
21         inputFeatures = [fever, headache, age, cough, breathing, tiredness]
22         infprob = clf.predict_proba(inputFeatures)[0][1]
23         print(infprob)
```

TERMINAL:

```
* Restarting with stat
* Debugger is active!
* Debugger PIN: 416-127-018
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
127.0.0.1 - - [25/Mar/2020 14:48:24] "GET / HTTP/1.1" 200 -
0.3910582531946117
127.0.0.1 - - [25/Mar/2020 14:53:23] "POST / HTTP/1.1" 200 -
```

STATUS BAR: Python 3.8.2 32-bit, 0 errors, 0 warnings. Ln 20, Col 1, Spaces: 4, UTF-8, CRLF, Python.

Windows Taskbar: Search bar, taskbar icons (File Explorer, Edge, etc.), system tray (date/time: 2:53 PM 3/25/2020).

Visual Studio Code interface showing a Python file named `mytraining.py` being edited. The file contains code for loading data from `data.csv`, splitting it into training and testing sets, training a Logistic Regression model, and saving the model as `model.pkl`.

```
14
15 if __name__ == "__main__":
16     df = pd.read_csv('data.csv')
17     train, test = data_split(df,0.2)
18     X_train = train[['fever','headache','age','cough','breathing','tiredness']].to_numpy()
19     X_test = train[['fever','headache','age','cough','breathing','tiredness']].to_numpy()
20
21     Y_train = train[['probability']].to_numpy().reshape(528 ,)
22     Y_test = test[['probability']].to_numpy().reshape(132 ,)
23
24     clf = LogisticRegression()
25     clf.fit(X_train,Y_train)
26
27     file = open('model.pkl','wb')
28     pickle.dump(clf,file)
29     file.close
30
31
```

The interface also shows the Explorer sidebar with the file structure, the Terminal panel with debug output, and the status bar at the bottom indicating the Python 3.8.2 32-bit environment.

EXPLORER

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TERMINAL

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[]
```

Python 3.8.2 32-bit 0 0 0

Ln 1, Col 1 Spaces: 4 UTF-8 CRLF Python

Type here to search

2:54 PM 3/25/2020

File Edit Selection View Go Run Terminal Help

show.html - corona - Visual Studio Code

EXPLORER

index.html show.html X mytraining.py mai.py

OPEN EDITORS

index.html templates
X show.html templates
mytraining.py templates
mai.py

CORONA

.ipynb_checkpoints
Corona solution by NKB-checkpoin...
templates
index.html
mytraining.py
show.html
Corona solution by NKB.ipynb
data.csv
mai.py
model.pkl

templates > show.html > ...

1 <!doctype html>
2 <html lang="en">
3 <head>
4 <!-- Required meta tag
5 <meta charset="utf-8">
6 <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
7
8 <!-- Bootstrap CSS -->
9 <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css" integ
10
11 <title>Corona Virus Infection Probability Detector</title>
12 </head>
13 <body>
14
15
16
17 <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
18 Corona Virus Detector
19 <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarSupportedContent
20
21 </button>
22
23 <div class="collapse navbar-collapse" id="navbarSupportedContent">

This attribute contains the value for the http-equiv or name attribute, depending on which is used.

DEBUG CONSOLE PROBLEMS OUTPUT TERMINAL

1: Python

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[]

Python 3.8.2 32-bit 0 0

Ln 1, Col 1 Spaces: 2 UTF-8 CRLF HTML

Type here to search

2:54 PM 3/25/2020

File Edit Selection View Go Run Terminal Help

index.html - corona - Visual Studio Code

EXPLORER

OPEN EDITORS

index.html templates

show.html templates

mytraining.py templates

mai.py

CORONA

.ipynb_checkpoints

Corona solution by NKB-checkpoin...

templates

index.html

mytraining.py

show.html

Corona solution by NKB.ipynb

data.csv

mai.py

model.pkl

templates > index.html > html > body > div.container > h2.text-center.mt-3

```
1 <!doctype html>
2 <html lang="en">
3   <head>
4     <!-- Required meta tags -->
5     <meta charset="utf-8">
6     <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
7
8     <!-- Bootstrap CSS -->
9     <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css" integ
10
11     <title>Corona Virus Infection Probability Detector</title>
12   </head>
13   <body>
14
15     <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
16       <a class="navbar-brand" href="#">Corona Virus Detector</a>
17       <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarSupportedContent
18         <span class="navbar-toggler-icon"></span>
19       </button>
20
21       <div class="collapse navbar-collapse" id="navbarSupportedContent">
22
23
```

DEBUG CONSOLE

PROBLEMS

OUTPUT

TERMINAL

1: Python

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127.0.0.1 - - [25/Mar/2020 14:53:23] "POST / HTTP/1.1" 200 -
[]

Python 3.8.2 32-bit

Type here to search

Ln 45, Col 16 Spaces: 2 UTF-8 CRLF HTML

2:54 PM 3/25/2020

The slide features a white background with large, red, three-dimensional geometric shapes at the top and bottom. These shapes are composed of various triangles and polygons, creating a modern, abstract design. The word "THANKS" is centered in the middle of the slide in a bold, dark gray, sans-serif font.

THANKS