

# PREDICTION OF AIR-COOLER PERFORMANCE



# Team Members Contribution

S.no.	Reg.No.	Student Name	Contribution
1.	18BIT0003	ANUPAM KUMAR THAKUR	ML MODEL, BACKEND DEVELOPMENT
2.	18BIT0011	AYUSH KUMAR	FRONT-END DEVELOPMENT, DOCUMENTATION

# METHODOLOGY

**LINEAR  
REGRESSION  
MODEL**

**TRAINED USING AIR  
COOLER DATASET**

**TRAINED  
MODEL  
ACC-96%**

**THE PREDICTED  
EFFICIENCY OF  
COOLER IS SHOW  
TO THE USER**

**OPENWEA  
THERMAP.  
COM**

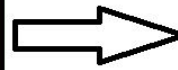
**SEND 5000 DATAS  
OF 10 CITIES**



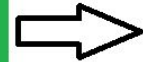
**USING API CALLS**

**FIREBASE  
FIRESTORE  
STORE THE  
DATA**

**SEND  
DATA**

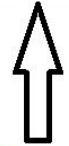


**LOCAL HARD  
WARE PERFO  
RM LOCAL  
ANALYSIS  
ML MODEL+  
DATA**



**FRONT  
END**

**USER  
INPUT**



# Methodology

There are three part of our project:

- 1.The first part is that we have collected a pre-recorded data set from internet that contain temperature, humidity and output temperature
2. Then the second part we have done is train our linear regression model to predict the output temperature based on the dataset. We have used the linear regression model to find the linearity between input and output.

#the accuracy we have achieved is around 96%

#if user want a performance for a specific location he can send us with the data collected using hardware

# METHODOLOGY

3. Come to the next part we have collected the real-time data :

Our project is about to predict the performance of air cooler. For that we have collected the data of 10 most populous cities of our country.

B. We have collected more than 5000 data in real time using weatherapi.com and stored it in firebase database. Then we copied all these data into our system (local storage).

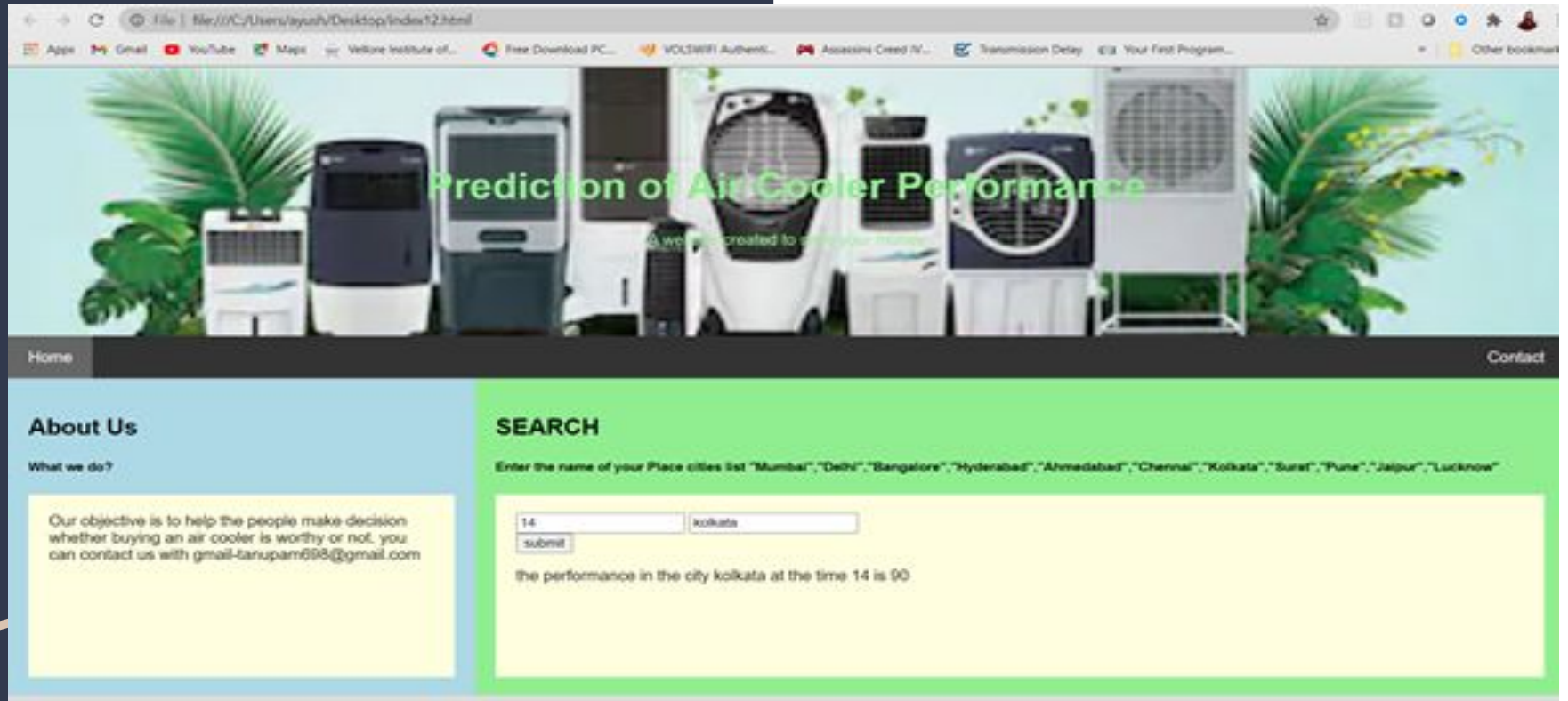
C. Then we predict the output performance using the machine learning model that we have trained with the pre-recorded data.

# Front-end Development

We have used html and css for the creation and designing of the website.

We have used javascript for the user interaction purpose and to connect the website to firebase where the data entered by the user is sent and all the data for temperature and humidity is stored. It is also being used to call the weather api.

# RESULTS



Thank You

