



SBM COLEGE OF ENGINEERING AND TECHNOLOGY

DINDIGUL-624 005

Department of Electronics and Communication Engineering

EXPLORATORY ANALYSIS OF RAINFALL DATA IN INDIA FOR AGRICULTURE

TEAM ID:PNT2022TMID49032

PRESENTED BY

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INTRODUCTION

- ❖ Rainfall has been a major concern these days.
- ❖ Weather conditions have been changing for time being.
- ❖ Rainfall forecasting is important otherwise, it may lead to many disasters.
- ❖ Irregular heavy rainfall may lead to the destruction of crops, heavy floods that can cause harm to human life.
- ❖ It is important to exactly determine the rainfall for effective use of water resources, crop productivity, and pre-planning of water structures.



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- PROPOSED SOLUTION
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- WORKING DEMO OF THE
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- PERFORMANCE METRICS
- FUTURE SCOPE

PROBLEM STATEMENT

- ✓ Rainfall is one of the climatological data which is widely
 - ✓ Analysis of rainfall data is important
- as it facilitates policy decisions regarding the cropping pattern, sowing date, construction of roads and providing drinking water to urban and rural areas.
- ✓ The potential impacts of heavy precipitation include crop damage, soil erosion, and an increase in flood risk due to heavy rains (see the River Flooding indicator)—which in turn can lead to injuries, drownings, and other flooding-related effects on health.

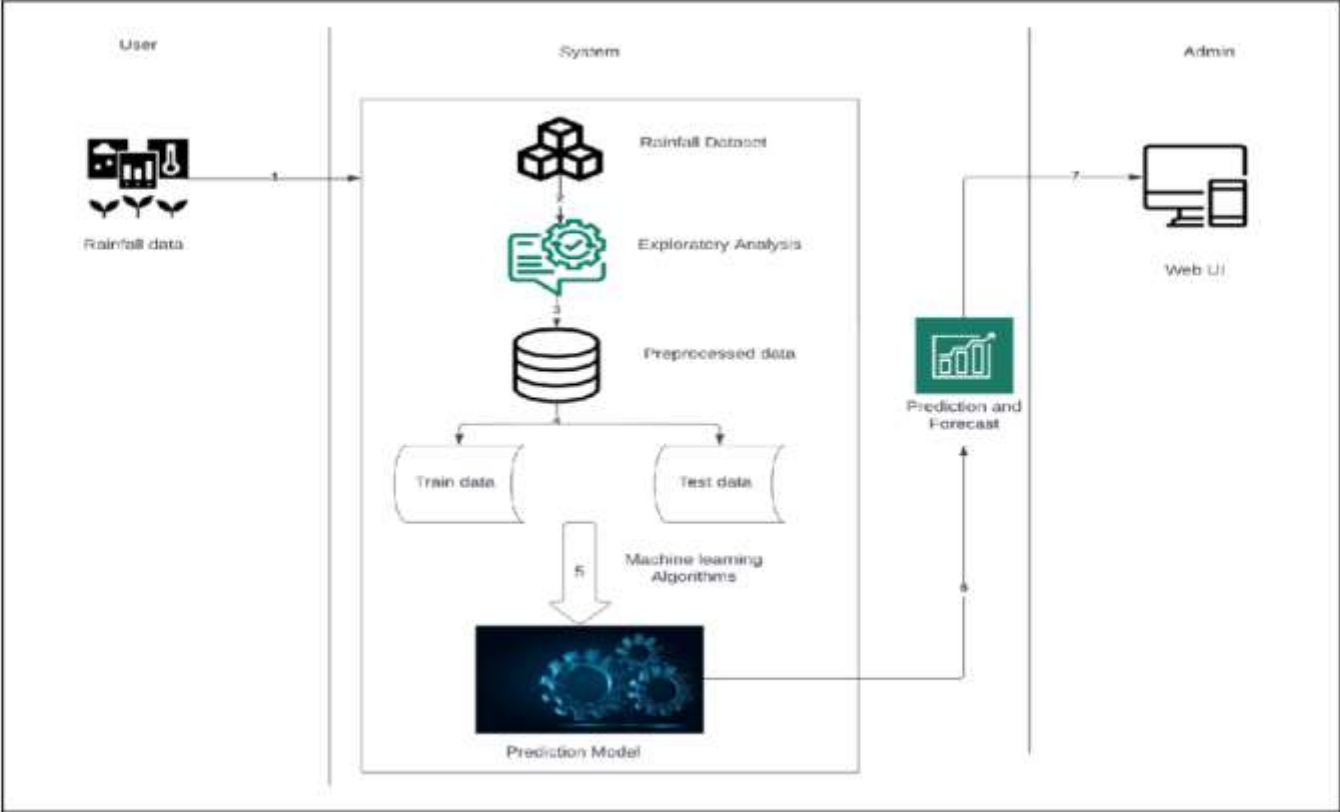


PROPOSED SOLUTION

- problem statement(problem to be solved)
- idea/solution description
- Novelty /uniqueness
- Social impact/customer satisfaction
- Business model(revenue model)
- Scalability

TECHNICAL ARCHITECTURE

Technical Architecture:



WORKING DEMO OF THE PROJECT

The screenshot displays the IBM Cloud dashboard interface. At the top, there's a navigation bar with the IBM Cloud logo, a search bar, and user information (SALA PRIYADHARSHIN). Below this, the main dashboard area features a 'For you' section with several service cards. The first card is 'Build', which is highlighted in blue and contains the text: 'Explore IBM Cloud with this selection of easy starter tutorials and services.' To its right are four other cards, each with a cloud icon and a title: 'Get Started with Watson Studio', 'Build a web app with Watson Speech to Text', 'Get started with Watson Discovery', and 'Build with Watson'. Each card also includes a brief description and a 'Popular' badge. The bottom of the dashboard has a row of links: 'User access', 'Manage alerts', 'News', 'View all', and 'Planned maintenance'. The overall design is clean and modern, with a dark theme.

IBM Cloud

Dashboard

For you

Select an option

Build

Explore IBM Cloud with this selection of easy starter tutorials and services.

Get Started with Watson Studio

Get started with using AI and Cloud Object Storage in 15 minutes.

Popular 3 hr

Build a web app with Watson Speech to Text

Deploy a conversational interface compatible with any application, device, or channel.

Getting started 15 min

Get started with Watson Discovery

Get up to speed on Watson Discovery with step-by-step tutorials, deep-dive videos, and complete examples of working code.

Recommended 3 hr

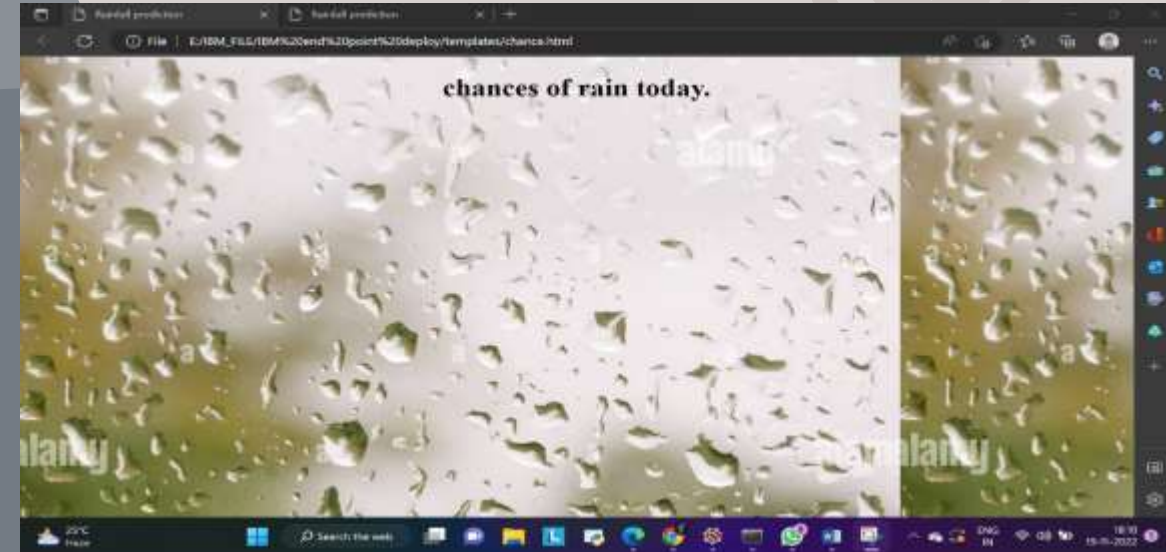
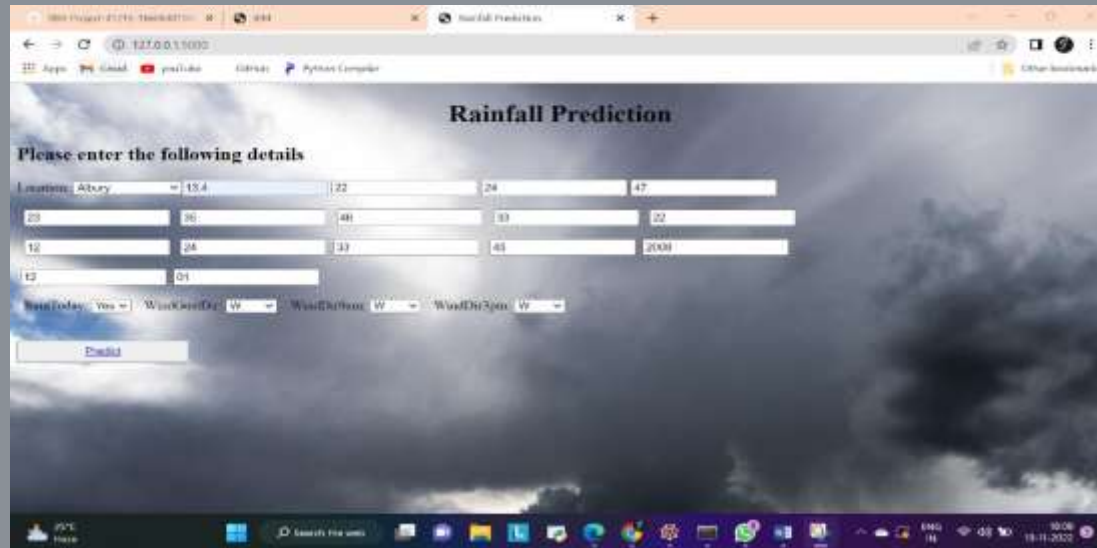
Build with Watson

Chatbots, insights, recognizers, and more. Explore the AI platform for business.

Popular 3 min

User access Manage alerts **News** View all Planned maintenance View all

PERFORMANCE METRICS



FUTURE SCOPE

- ❑ PREDICTING WEATHER ACCURATELY DOESN'T JUST HELP OUR DAILY LIVES BUT HAS DEEPER IMPACT FOR FOOD SECURITY AND DISASTER MANAGEMENT.
- ❑ GOOD NEWS FOR MONSOON-DEPENDENT INDIA IS THAT WE ARE GETTING BETTER AT PREDICTING.
- ❑ NEW TECHNOLOGIES, SUCH AS INTERNET OF THINGS (IOT) AND ARTIFICIAL INTELLIGENCE (AI) ARE HELPING METEOROLOGICAL EXPERTS TO GIVE BETTER INFORMATION TO PREDICT AGRICULTURAL OUTPUT AND NATURAL DISASTERS.

GITHUB LINK: <https://github.com/IBM-EPBL/IBM-Project-36417-1660294977>



THANK YOU