

NASA

Heading: Will It Rain On My Parade?

Subtitle: Predicting Outdoor Weather Using
NASA Satellite Data

Bottom Text:

Developed by Team CodeExploitrz

NASA Space Apps Challenge 2025

Image Prompt: A glowing Earth from space with
a satellite orbiting, storm clouds forming on one
side, dark blue galaxy background.

- Title: Understanding the Challenge
- Text:
- Outdoor activities are often disrupted by unexpected rain.
- Our goal is to help users predict and plan events using NASA Earth observation data.
- Image Prompt: A satellite observing a storm system over a city, lightning visible in the distance, viewed from orbit.

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- Title: Data We Use
- Text (bullet points):
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- NASA Earth Observation Datasets (GPM, MODIS, AIRS)
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- OpenWeatherMap APIs for real-time forecasting
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- Processed satellite imagery and rainfall data
- Image Prompt: Diagram-style visual of Earth with data lines connecting satellites to servers and a web dashboard.

Title: Our Smart Forecasting Tool

Text:

Our web app analyzes rainfall probability, temperature, and cloud density to predict weather for saved events.

Key Features:

🔑 Real-time event tracking

✉ Email alerts

☁ Rain & temperature forecasts

Image Prompt: Futuristic weather dashboard interface projected in space with graphs and rain icons.

Title: Architecture & Technology
Text:

Flask (Python) Backend

HTML, CSS, JavaScript Frontend

Leaflet.js + Chart.js for Visualization

RESTful APIs for NASA Data Access

Image Prompt: Stylized architecture diagram — backend server connected to frontend UI with Earth imagery in the background.



Results & Impact

Title: Results & Impact

Text:

Our project empowers communities to plan confidently using space-based weather insights.

It promotes open NASA data and sustainable event planning worldwide.

Image Prompt: People enjoying an outdoor event under clear skies while satellites monitor from orbit.

Team CodeExploitrz

Title: Meet the Team

Text:

Muhammad Suleman

Muhammad Daniyal Faheem

Muhammad Sudais Usmani

Muhammad Shoaib

Muhammad Hussain Ali

Momal Naz

Footer:

🔗 GitHub: <https://github.com/Dit-Developers/2025-NASA-Space-Apps-Challenge>

Image Prompt: Team silhouettes standing in front of a glowing Earth with data trails, symbolizing global collaboration.