<u>**Project Proposal Document**</u>

<u>**Title of the Project:**</u> Weather 24/7

<u>**Submitted By :**</u>

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1   **Title of the Project:** Weather 24/7

2   **Project Rationale:**

2.1   Background:

In the modern world, there is an ever-increasing demand for more accurate weather forecasts. The needs for weather prediction are many. From factories to farms, from satellite launching stations to commerce and industries, and even from the general public there is a persistent demand for more reliable weather forecasts. In the present air-age, the exact knowledge of the coming weather is more than necessary. Weather includes temperature, humidity, climate, etc. In Weather 24/7, we forecast all these conditions and their effects. In Weather 24/7, we study the routine of wind, cloud, and seasons. It shows us when and how there will be a change in the weather, if it is going to rain or not or how much it is going to rain. It can even tell us how many days it is going to rain. In Weather 24/7, we can learn about the weather in different areas. It has great importance in our life as we can schedule our daily routine activities with the help of Weather 24/7.

2.2   Scope :

Several other websites show us the weather condition in any area along with weather prediction. But, this web application offers a unique user interface that is more user-friendly and provides some more information such as proper clothing recommendations if a user wants to visit someplace and alerts the user whether it

will be safe for him to visit a place based on the predicted weather. As in the modern world, we immensely rely on the weather for doing our future activities. It is essential to have an accurate weather forecasting web application such as Weather 24/7. There are various uses of weather forecasting in day-to-day life, it can be as simple as deciding whether to take an umbrella with you on your work or major role-playing uses like getting information about the weather for agriculture and farming purposes, implementation of livestock protection initiatives, satellite launching initiatives, etc. So this project will be beneficial for all of humanity.

3　Project Objectives :

- This web application allows the user to check the weather condition instantly of any place at any time.
- Alerts the user if the weather where he wants to visit is not suitable for the human condition.
- Alerts the user for crisis weather moments such as cyclones, blizzards.
- Benefit the whole internet by predicting the weather.

4　Cost and Benefit :

4.1　Project Cost :

- For this project, the only cost will be the time given to it to gain knowledge about how to build a software system using the systematic processes, methods, and techniques for software design, implementation, and testing.

4.2　Project Benefit :

- A regular user will know whether to take an umbrella or a sun-glass.
- Deep-sea fishermen will know if it will be safe to go out fishing or not.
- Agricultural industries will know when to irrigate different categories of crops based on the weather prediction.
- Implementation of livestock protection initiatives can be done depending on the weather forecast.
- Airlines arrival or departure time can be scheduled depending on the weather forecast.

5 Project Approach :

- Identify the Requirements and Architecture of the proposed project.
- Design the wireframe of Weather 24/7 web application.
- Implement the proposed features via using React.js as front-end and Django as the back-end of the web software. While using Visual Studio Code as the IDE.
- Design a proper database model with SQL/PostgresSQL if it is needed.
- Testing the implemented code to ensure the quality of each smaller unit.
- Take reviews of the web software Weather 24/7 from our Supervisor.
- We will divide our work feature by feature for developing the proposed project Weather 24/7.
- Ensuring that proper memory utilization is maintained while implementing the web software.
- Ensuring that our proposed software has efficiency in responsiveness and processing time.
- Ensuring that the web software is understandable, usable, and compatible with web systems that the users use.
- Deliver the software before a given deadline.

6 Project Plan :

- Initiation completed: 24th January, 2022.
- Requirement Engineering completed: 25th January, 2022.
- Design completed: 7th February, 2022 (Estimated).
- Implementation completed: 20th March, 2022 (Estimated).
- Presentation completed: Depends on our Supervisor.

7 Project Team :

- **Project Group:** A
- **Team Member 1:** SH-01, Tahmid Mosaddek
- **Team Member 2:** FH-97, Kazi Shadman Sakib

8   Conclusion :

Any user of this web application can know about the ins and outs of the weather of today and tomorrow. This application can also help airlines companies, agricultural organizations, and several other organizations whose activities depend on the weather.