

# Sample Project Proposal

Project Title: Al-Based Flood Prediction Model

#### 1. Project Introduction

Team Name: Flood Savers

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### 2. Problem Description

Bangladesh experiences significant annual damage due to flooding. The lack of accurate flood prediction leads to severe loss of life and property. Existing flood warning systems are often inadequate and ineffective.

## 3. Proposed Solution

We plan to develop an Al-based model that analyzes historical rainfall and river water level data to provide early flood warnings. This model will enable authorities and communities to prepare in advance and reduce the impact.

## 4. Technology and Data

 Data Sources: Bangladesh Meteorological Department, River Water Level Monitoring Systems

• Al Technology: Machine Learning algorithms such as Random Forest and LSTM

• **Programming Language:** Python

• Visualization: Tableau

## 5. Implementation Plan

- Data collection and preprocessing
- Al model training and validation
- Evaluation of prediction accuracy
- Future development of a user-friendly web or mobile application

## 6. Potential Impact

- Early warnings to save lives and protect property
- Enable faster governmental response and preparedness
- Minimize agricultural and infrastructural damage

#### 7. Presentation Plan

We will present the information clearly and concisely in a well-structured PDF presentation to ensure judges understand the importance and feasibility of the project.

By reviewing this sample proposal, participants will gain a clear idea of how to structure and present their own Al project ideas effectively.