# PahiroAl

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## Introduction

Modern smartphone app LandslideGuard is transforming catastrophe readiness. It keeps you updated on landslip threats in your area with real-time monitoring and rapid alarms.

LandslideGuard uses random forest classifier of machine learning and predicts whether a certain area is at risk from landslide or not.

## Problem

Nepal faces a significant landslide problem due to its geological, topographical and climate factors. Besides those other key reasons include:

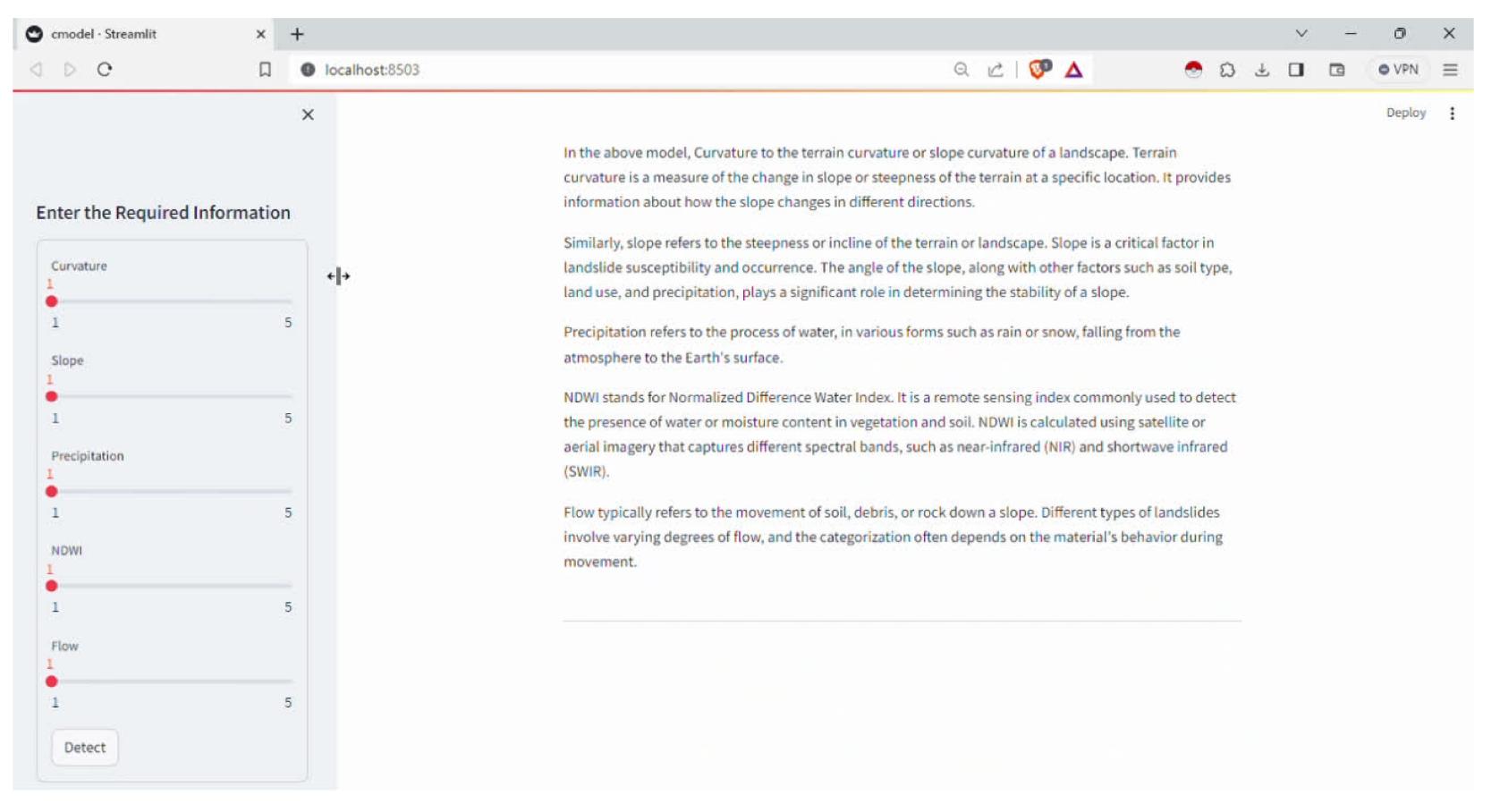
- Seismic Vulnerability
- Heavy Monsoon Rainfall
- Deforestation
- Climate Change
- Population Density

## Solution

Using the data set we searched from the Nepal Landslide Institution data collection, we found the possible solutions:

- Utilizing a machine learning model to predict the landslide.
- On a wide scale, we can sensors to assist and warn nearby residents and travelers.
- This program makes use of historical data to assist the sensors in alerting nearby residents and travelers.
- It helps in minimization of loss of life and property

#### Demo Video



#### Conclusion and Discussion

# This concludes our presentation.

- The basic takeaway from our prototype is the use of machine learning models for the greater good and sustainable future.
- By the implementation of this app, the yearly mortality rate due to landslides can be greatly reduced.
- This app being easy to use and ready to access can make it popular among various people as it contains different additional features as well. (eg: weather forecast, map with danger zones and safe zones etc.)