EARTHQUAKE PREDICTION USING AI, MACHINE LEARNING AND PYTHON PROGRAMMING LANGUAGE

DATE	28-09-2023
TEAM ID	PROJ-212172_TEAM_I
PROJECT NAME	Earthquake Prediction Model using PYTHON
MAXIMUM MARK	

PROBLEM DEFINITION:

In this presentation, I will said you through how to create a program for the task of Earthquake Prediction using Machine Learning , Artificial Intelligence (AI) and the Python programming language. Predicting earthquakes is one of the great unsolved problems in the earth sciences.

With the increase in the use of technology, many seismic monitoring stations have increased, so we can use machine learning, Artificial Intelligence (AI) and other data-driven methods to predict earthquakes.

It is well known that if a disaster occurs in one region, it is likely to happen again. Some regions have frequent earthquakes, but this is only a comparative amount compared to other regions.

So, predicting the earthquake with date and time, latitude and longitude from previous data is not a trend that follows like other things, it happens naturally.

Earthquake prediction models are used in various applications such as forecasting seismic activity, land use planning, emergency management, and damage assessment .

For instance, geospatial technologies offer a means by which earthquake occurrence can be predicted or foreshadowed; managed in terms of levels of preparation related to land use planning; availability of emergency shelters, medical resources, and food supplies; and assessment of damage and remedial priorities.

Some countries are more prone to earthquakes than others because they are located within regions of high tectonic activity. According to the data compiled by Statista, China is the most earthquake-prone country in the world. Between 1990 and 2022, China experienced 182 recorded earthquakes.

Other countries with high earthquake frequency include Indonesia, Iran, and Turkey. Hence this Earthquake prediction model is very useful for such countries.