**Phase 1: Problem Definition and Design Thinking**

The Scope of this Document is to identify the problem and develop an Earthquake prediction model to save lives and reduce property damage.

**Problem Definition:**

By research, it has been found that there are the following problems with the earthquake prediction model. The problems are listed below:

* The prediction rate of the earthquake model is not accurate. As a result, mass destructions could be witnessed.
* Earthquakes can’t be predicted so easily, because it is unpredictable.
* So, the design model must possess high probability prediction rate.
* The probability prediction rate is relatively low in present implemented models.
* This has resulted in the loss of lives and infrastructures.

**Design Thinking:**

By having understood the above problem. We would be designing a solution to solve the it.

* A python-based solution could be able to resolve the above issue.
* We would acquire the geographical data like date, time, latitude, longitude, depth and magnitude.
* The acquired data must be analysed, diagnosed and processed to get the maximum prediction rate.
* The model should contain proper coding without any errors for getting more accuracy.
* Hence the Earthquake can be predicted with as much accuracy as possible.