# Team Details

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| **Name** | **Section** | **SRN** |
| **ISHAAN M C** | **B** | **PES1UG22AM071** |
| **MANOJ G B** | **B** | **PES1UG22AM092** |
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# Project Title

“Predicting Earthquake Magnitude and Risk Factors Using Geospatial and Temporal Analytics”

# Possible Dataset and source

Kaggle Earthquake Dataset [[Link](https://www.kaggle.com/datasets/warcoder/earthquake-dataset)]

# Uniqueness of the topic

* It explores the **causal relationships** between various earthquake characteristics, such as magnitude, depth, and intensity, to predict seismic event outcomes.
* Utilizing both **predictive modelling** and **geospatial analytics**, the project aims to provide actionable insights for disaster preparedness and early warning systems, going beyond traditional descriptive analyses.
* The inclusion of **spatiotemporal trends** and **risk mapping** makes it highly relevant for real-world applications in earthquake-prone regions.

# Your Learning goal

* Gain proficiency in **predictive modelling** techniques, including regression and classification models, to predict earthquake characteristics and associated risks.
* Understand and apply **geospatial analytics** to identify earthquake hotspots and high-risk areas using advanced techniques like kernel density estimation (KDE) and clustering.
* Explore and utilize **causal inference** methods to determine key factors influencing earthquake significance and the likelihood of tsunami occurrence

# Reference paper, if any (provide the URL)

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| **No** | **Title** | **Link** |
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