Ideation Phase Brainstorm Idea
Prioritization Template

Date	25 September 2022
Team ID	IBM-EPBL/IBM-Project-47241-1660797573
Project Name	Project – Natural Disaster Intensity Analysis and Classification Using Artificial Intelligence
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization Template:

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

Brainstorm & Idea Prioritization for "Natural Disaster Intensity Analysis and Classification Using Artificial Intelligence":

Reference: https://tinyurl.com/muralbrainstorm

Step-1: Team Gathering, Collaboration and Select the Problem Statement

Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

- 🕐 **10 minutes** to prepare
- 🏆 **1 hour** to collaborate
- 👤 **2-8 people** recommended

→

Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

🕐 10 minutes

A **Team gathering**
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B **Set the goal**
Think about the problem you'll be focusing on solving in the brainstorming session.

C **Learn how to use the facilitation tools**
Use the Facilitation Superpowers to run a happy and productive session.

Open article →

1

Define your problem statement

To classify the natural disaster based on the live image given as input by using Deep Learning.

🕐 5 minutes

> **PROBLEM**
> How might we tackle the problem of classifying the natural disaster?

Key rules of brainstorming
To run an smooth and productive session

- 😊 Stay in topic.
- 💡 Encourage wild ideas.
- 😐 Defer judgment.
- 👂 Listen to others.
- 🔋 Go for volume.
- 👁 If possible, be visual.

Step-2: Brainstorm, Idea Listing and Grouping

2

Brainstorm

Ideas related to the classification of natural disaster

⏱ 10 minutes

JEYASHREE

- Natural disasters affect the ecosystem.
- Many lives have been affected due to the natural disaster.
- Necessary for the earlier classification
- This will reduce the loss of life.
- To reduce the effects, a webpage is designed
- It classifies the natural disaster based on the image.
- Live image data are taken for classification.
- Done by using Deep Learning Techniques like CNN
- Large images are needed for better accuracy

LAKSHMI PRIYA

- To Classify the natural diasters
- naturally occuring events that cause problems to environment
- Cyclone Intensity Calculation
- Disasters like earthquake,flood, Wildfire are classify using this model.
- Work with open CV
- Deep Learning techniques have been applied
- Live Images can be captured using webcam,and then tested
- Classifies based on image
- Reduce the loss of life

KAVIPRIYA

- A natural disaster can causes loss of life and property
- AI can help response teams understand natural hazards, monitor events in real time
- AI to detect extreme events such asearthquakes
- Natural hazards can also be provoked or affected by anthropogenic factors
- Huge amount of dataset is needed for training
- In particular IML is playing an increasingly important role in disaster risk reduction
- The forecasting of extreme events and the development of hazard maps to the detection
- Scientists look for patterns in data to determine where and when natural disasters are likely to occur.
- AI can predict four types of natural disasters, including: Earthquakes

KAVIYAVARSHINI

- detect and classify the type of disaster with high accuracy rate
- developed using deep learning techniques like multilayered deep convolutin neural network
- A model to predict cyclone, earthquake,wildfire, flood has been proposed
- To carry out disaster analysis,twitter were used,where people share their views
- using two-layer architecture CNN to compare three object recog-nition techniques: linear support vector classification, linear discriminant analysis and softmax.
- With the help of neural network, it is possible to predict floods and save masses from diaster
- CNN-based simple feature extraction with a AlexNet single deconvolution (SFEwAN-SD)-based proposed approach helps develop a real time fire monitoring system
- CNN model is used to extract flood images from raw images and color filters are used to refine the desired detection
- The proposed system's efficiency and accuracy were tested on several datasets and it outperformed other methods to give the highest results.

3

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go.
In the last 10 minutes, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

⏱ 20 minutes

Technical Aspects

- A large dataset is needed for the accurate model.
- Create a user friendly GUI that helps classify the natural disaster.

Social Impacts

- Reduce the loss of life
- Earlier precaution measures

Availability of resources

- Image data needed for classification
- Enormous data is needed for classifying the image data.

People emotions

- People emotions on drastic disasters
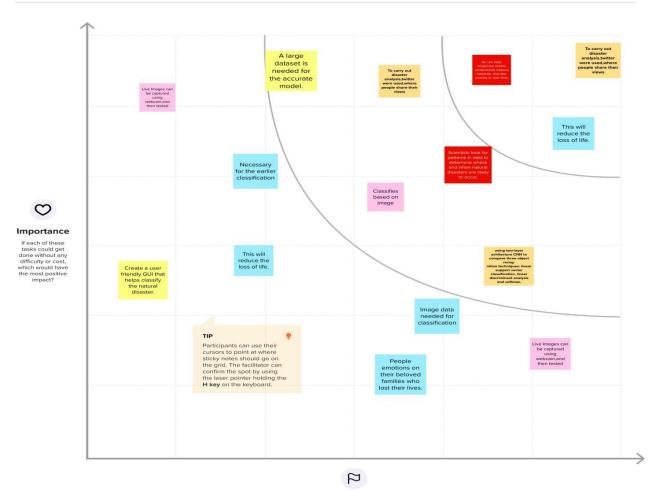- People emotions on their beloved families who lost their lives.

Step-3: Idea Prioritization

(4)

Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

🕐 **20 minutes**

♡ Importance

If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?

- Live Images can be captured using webcam,and then tested
- A large dataset is needed for the accurate model.
- To carry out disaster analysis,twitter were used,where people share their views
- AI can help response teams understand natural hazards, monitor events in real time
- To carry out disaster analysis,twitter were used,where people share their views
- This will reduce the loss of life.
- Necessary for the earlier classification
- Scientists look for patterns in data to determine where and when natural disasters are likely to occur.
- Classifies based on image
- Create a user friendly GUI that helps classify the natural disaster.
- This will reduce the loss of life.
- using two-layer achitecture CNN to compare three object recog-nition techniques: linear support vector classification, linear discriminant analysis and softmax.
- Image data needed for classification
- Live Images can be captured using webcam,and then tested

TIP

Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the **H key** on the keyboard.

- People emotions on their beloved families who lost their lives.

🏳 **Feasibility**

Regardless of their importance, which tasks are more feasible than others? (Cost, time, effort, complexity, etc.)