Ideation Phase
Brainstorm & Idea Prioritization Template

Date	30th October 2023
Team ID	Team-592035
Project Name	Alzheimer Disease Prediction
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization:
Alzheimer's disease prediction is a crucial area that demands innovative solutions. In a brainstorming session dedicated to this, the primary goal would be to generate a broad spectrum of predictive methodologies and diagnostic tools. Encouraging a free flow of ideas, from conventional to unconventional, is vital. Participants should feel empowered to suggest various approaches, such as leveraging advanced machine learning algorithms on diverse datasets, exploring biomarkers or genetic factors, or even incorporating cutting-edge technologies like wearable devices for continuous monitoring. This open-minded environment fosters the amalgamation of diverse expertise and knowledge, ensuring a rich pool of potential solutions for Alzheimer's disease prediction.

To guide this brainstorming session, a structured following the steps is made:
Introduction and Problem Statement: Start by introducing the context of Alzheimer's disease and the importance of predictive measures. Define the problem statement, highlighting the necessity for accurate and early prediction.

Idea Generation: Encourage all team members to suggest diverse approaches and concepts, regardless of their perceived feasibility. Focus on diverse methodologies, from traditional medical assessments to tech-driven solutions.

Collaborative Development: Once ideas are presented, encourage collaboration. Participants should build upon each other's suggestions, expanding and refining the concepts together.

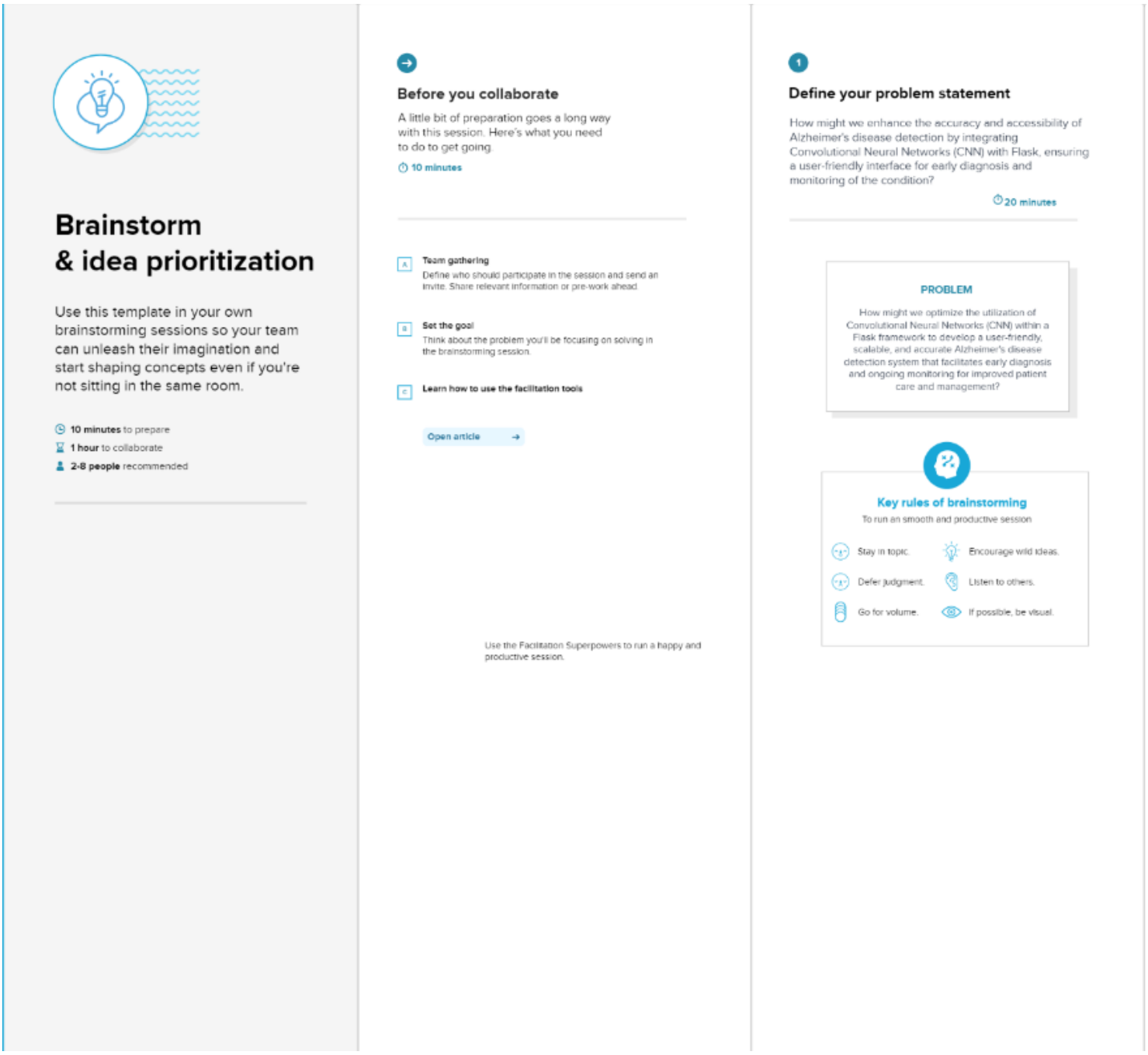
Evaluation and Prioritization: After the initial ideation, introduce a phase for evaluating the generated ideas. Discuss the feasibility, potential impact, resource requirements for each idea.

Selection and Refinement: Prioritizing the most promising concepts based on the evaluation. Start refining these selected ideas, considering their practicality, ethical implications, and potential impact on Alzheimer's disease prediction.

Action Plan: Develop an action plan for implementing or further researching the top ideas. Assign responsibilities and create a roadmap for turning these concepts into actionable strategies.
Remember, the key to successful brainstorming is an environment where no idea is dismissed outright, and all contributions are valued. This template is designed to harness the collective creativity of the team, fostering an atmosphere where imagination flourishes, leading to innovative and potentially groundbreaking solutions for Alzheimer's disease prediction.

Referral Link –

https://app.mural.co/t/aiml6099/m/aiml6099/1698954302438/068792fc5ec7eb18f5a9c5d4f119cf8d4721efc5?sender=u0f4ec11dc1d88b4bed3d4675



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Brainstorm

1. **CNN Model Refinement**: Enhance CNN architecture using diverse brain imaging datasets for accurate Alzheimer's detection.
2. **Flask Integration for User-Friendly Interface**: Integrate Flask to develop an accessible web platform for easy brain image uploads and quick, informative results.

20 minutes

Person 1

- Understand the disease by breaking down it's biological mechanisms.
- Get regular physical exercise and high quality sleep.
- Overview of existing diagnostic tools such as PET scans,cognitive and genetic tests.
- Participate in cognitiive activities to keep brain active.

Person 2

- Maintain blood glucose,blood pressure,weight and blood lipids.
- Practice yoga daily to keep your brain calm.
- Ensuring transparency and accountability in AI assistant diagnosis.
- Cross validation and testing to ensure model reliability.

Identifying and Understanding known risk factors.

Person 3

- Developing ML,Deep learning models for Alzheimer's prediction.
- Identify the risk factors such as age,genetics,life style.
- Impact of Alzheimer's on behavior progession and cognitive functions in different stages.
- Maintain good health condition,relief stress and head /brain injuries.

Person 4

- Early detection of Alzheimer's using neuroimaging,biomarkers and cognitive assessments through flask app
- Privacy concerns in handling patient data.
- Crucial features(biomarkers) extraction and normalization.
- Maintain healthy diet patterns(with sufficient intake of vitamins,carbohydrates).

3

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, 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

TIP

Deep Learning Techniques
#DeepLearning
#NeuralNetworks
#MachineLearningModels
Detection Methods
#EarlyDiagnosis
#AIAlgorithms
#PredictiveModeling

- Understand the disease by breaking down it's biological mechanisms.
- Overview of existing diagnostic tools such as PET scans,cognitive and genetic tests.
- Cross validation and testing to ensure model reliability.
- Developing ML,Deep learning models for Alzheimer's prediction.
- Impact of Alzheimer's on behavior progession and cognitive functions in different stages.
- Ensuring transparency and accountability in AI assistant diagnosis.
- Early detection of Alzheimer's using neuroimaging,biomarkers and cognitive assessments through flask app

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

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.