Ideation Phase
Brainstorm & Idea Prioritization Template

Date	18 February 2026
Team ID	LTVIP2026TMIDS62006
Project Name	Smart Sorting: Transfer Learning for identifying rotten fruits and vegetables
Maximum Marks	4 Marks

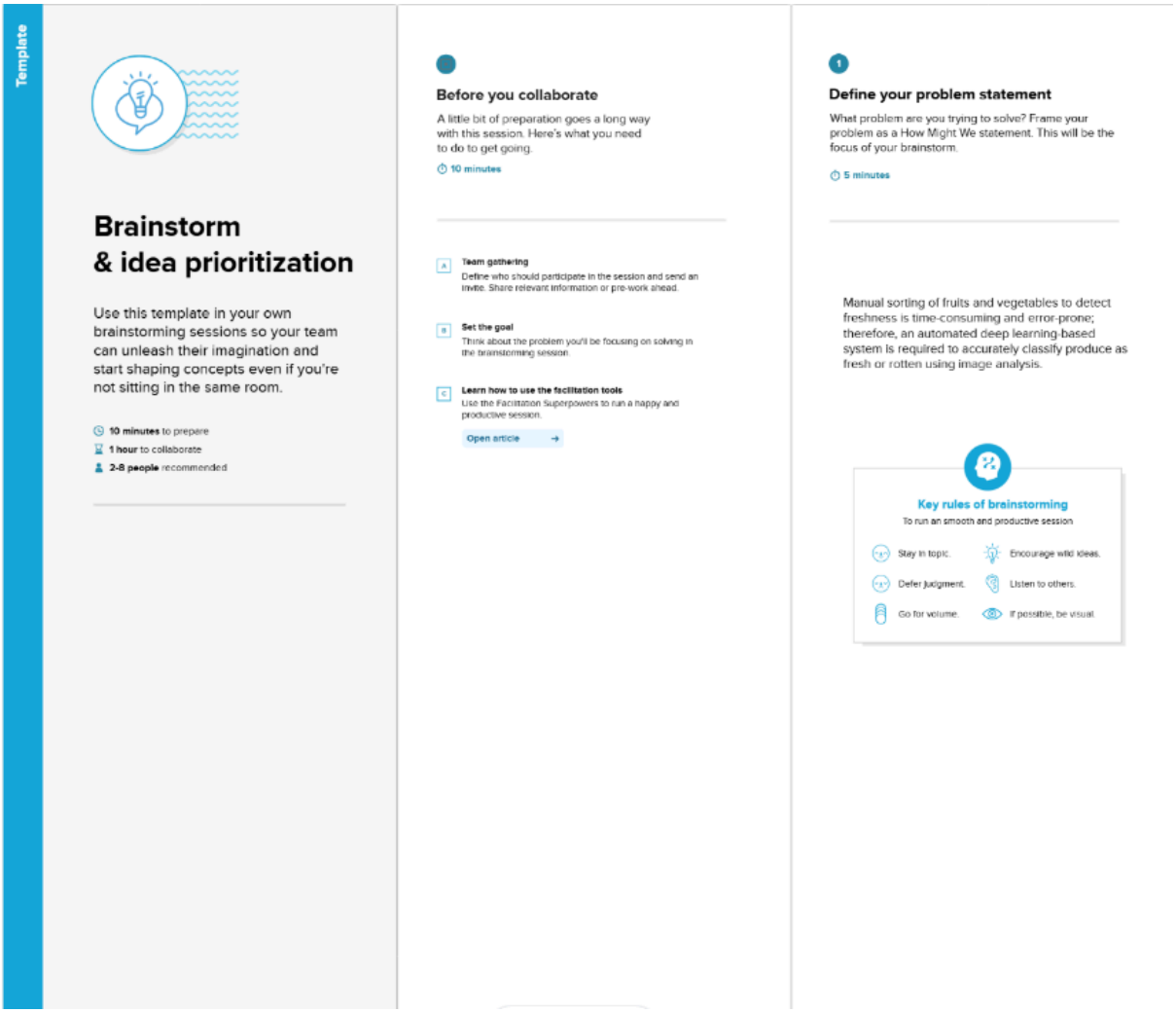
Brainstorm & Idea Prioritization Template:

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.

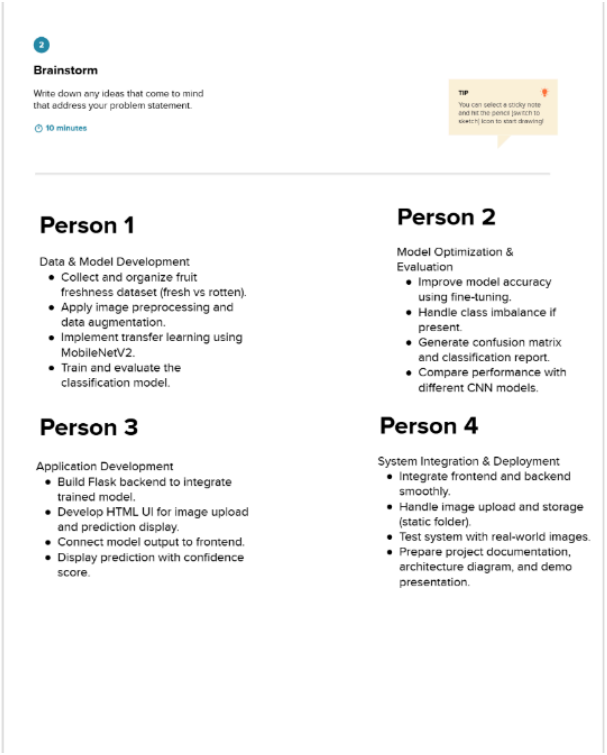
Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

Reference: https://www.mural.co/templates/brainstorm-and-idea-prioritization

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



Step-2: Brainstorm, Idea Listing and Grouping



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Brainstorm

Write down any ideas that come to mind that address your problem statement.

10 minutes

TIP

You can select a sticky note and hit the pencil [switch to sketch] icon to start drawing!

Person 1

Data & Model Development

- Collect and organize fruit freshness dataset (fresh vs rotten).
- Apply image preprocessing and data augmentation.
- Implement transfer learning using MobileNetV2.
- Train and evaluate the classification model.

Person 2

Model Optimization & Evaluation

- Improve model accuracy using fine-tuning.
- Handle class imbalance if present.
- Generate confusion matrix and classification report.
- Compare performance with different CNN models.

Person 3

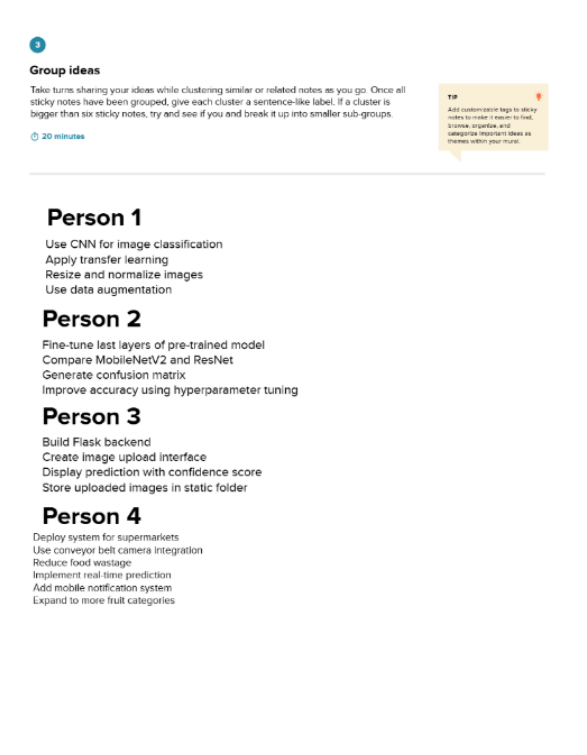
Application Development

- Build Flask backend to integrate trained model.
- Develop HTML UI for image upload and prediction display.
- Connect model output to frontend.
- Display prediction with confidence score.

Person 4

System Integration & Deployment

- Integrate frontend and backend smoothly.
- Handle image upload and storage (static folder).
- Test system with real-world images.
- Prepare project documentation, architecture diagram, and demo presentation.



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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

Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

Person 1

Use CNN for image classification
Apply transfer learning
Resize and normalize images
Use data augmentation

Person 2

Fine-tune last layers of pre-trained model
Compare MobileNetV2 and ResNet
Generate confusion matrix
Improve accuracy using hyperparameter tuning

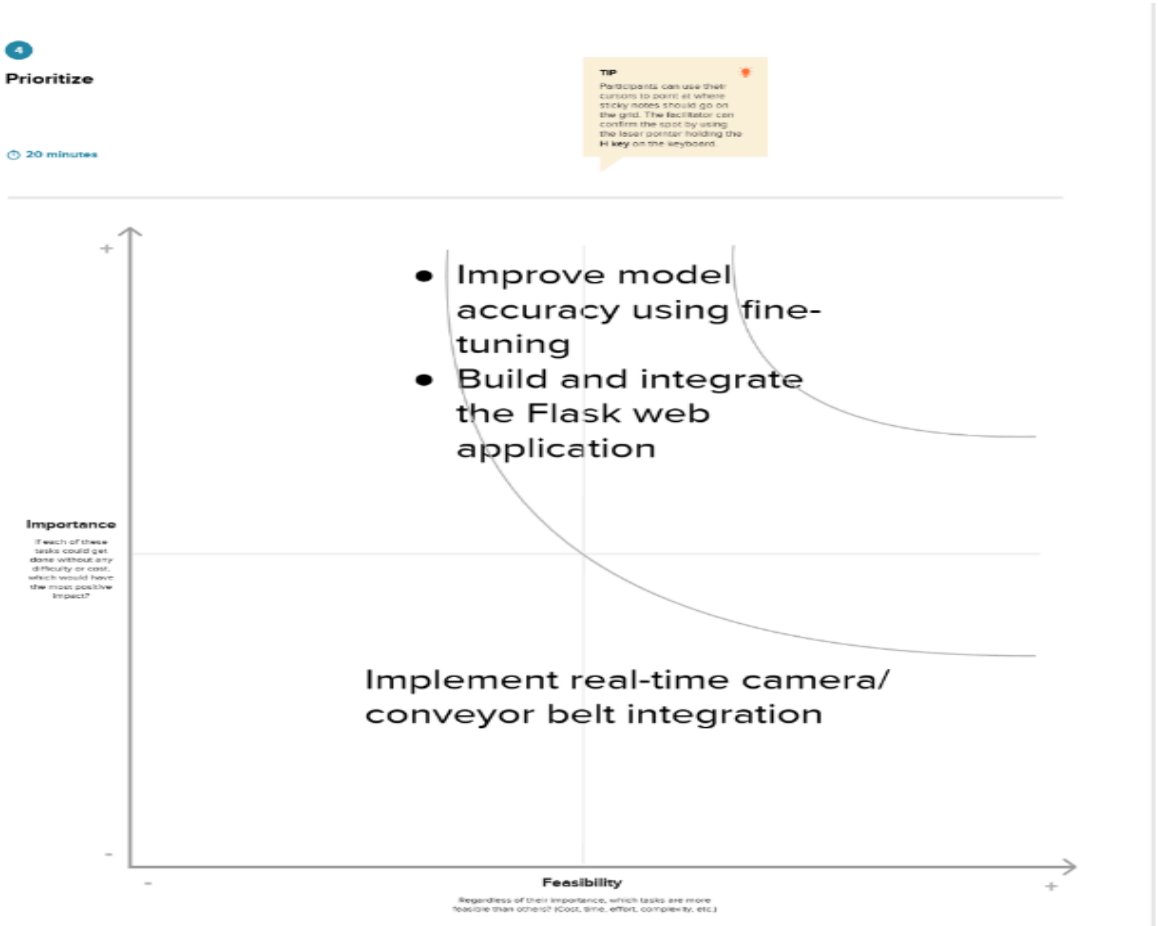
Person 3

Build Flask backend
Create image upload interface
Display prediction with confidence score
Store uploaded images in static folder

Person 4

Deploy system for supermarkets
Use conveyor belt camera integration
Reduce food wastage
Implement real-time prediction
Add mobile notification system
Expand to more fruit categories

Step-3: Idea Prioritization



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Prioritize

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.

- Improve model accuracy using fine-tuning
- Build and integrate the Flask web application

Implement real-time camera/ conveyor belt integration

Importance

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

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Feasibility

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

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