

## Ideation Phase

### Define the Problem Statements

Date	30 January 2026
Team ID	LTVIP2026TMIDS75799
Project Name	Smart Sorting: Transfer Learning for Identifying Rotten Fruits and Vegetables
Maximum Marks	2 Marks

#### Customer Problem Statement Template:

Users often struggle to visually identify whether fruits or vegetables are still fresh or have begun to rot. This leads to unnecessary waste or potential health risks.

**How might we help users accurately identify fruit and vegetable quality using a simple, AI-powered image-based web tool?**

I am	Describe customer with 3-4 key characteristics — <i>who are they?</i>	a consumer, vendor, or farmer who wants to check the freshness of fruits and vegetables without expert knowledge or lab equipment.
I'm trying to	List their outcome or "job" they care about — <i>what are they trying to achieve?</i>	quickly and accurately identify whether fruits or vegetables are healthy or rotten before selling, buying, or consuming them.
but	Describe what problems or barriers stand in the way — <i>what bothers them most?</i>	I often find it hard to visually detect spoilage, especially when symptoms are subtle or internal.
because	Enter the "root cause" of why the problem or barrier exists — <i>what needs to be solved?</i>	I lack the tools, time, or expertise to evaluate the quality manually and confidently.
which makes me feel	Describe the emotions from the customer's point of view — <i>how does it impact them emotionally?</i>	frustrated, uncertain, and worried about food safety, financial loss, or wastage.

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I am                    I'm trying to                    But                    Because                    Which makes me feel

a fruit vendor

check if the fruits I'm selling are fresh or rotten

it's hard to detect spoilage just by looking at them

I don't have any tool or expertise to identify early signs of rotting

uncertain and worried about losing customers

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<b>Problem Statement (PS)</b>	<b>I am</b>	<b>I'm trying to</b>	<b>But</b>	<b>Because</b>	<b>Which makes me feel</b>
PS-1	a fruit vendor who sells produce daily in local markets	ensure I sell only fresh, healthy fruits to customers	it's hard to detect spoilage just by looking at the fruit	I don't have tools or knowledge to identify subtle signs of rotting	uncertain, worried about customer satisfaction and loss of sales
PS-2	a health-conscious consumer who buys fruits and vegetables regularly	make sure the food I eat is safe and fresh	sometimes I can't tell if a fruit is healthy or starting to spoil	outer appearance can be misleading and I lack expert knowledge	frustrated and anxious about food safety and health risks
PS-3	a supermarket staff responsible for quality checking produce	quickly check if items on shelves are still good	manual inspection takes time and isn't always accurate	I manage hundreds of items and don't have time to check each one carefully	overwhelmed and afraid of customer complaints or returns
PS-4	an online grocery delivery startup founder	ensure only fresh produce is delivered to customers	quality issues are often discovered only after dispatch	no smart system to check images of produce before delivery	concerned about negative reviews and business reputation