

Project Design Phase

Problem – Solution Fit Template

Date	26 June 2025
Team ID	LTVIP2025TMID38828
Project Name	Smart Sorting: Transfer Learning for Identifying Rotten Fruits and Vegetables
Maximum Marks	2 Marks

Problem – Solution Fit Template:

The Problem–Solution Fit means we've identified a real-world problem faced by our users (vendors, consumers, retailers) and developed an AI-powered solution that effectively addresses it — helping ensure the quality of fruits and vegetables in a reliable, fast, and non-expert way.

Purpose:

- **Solve quality-check problems** in fruits and vegetables by allowing users to upload images and receive AI-based classification as *Healthy* or *Rotten*.
- **Increase adoption** by making the solution easy to use via a web application — no technical knowledge required.
- **Sharpen user communication** by showing confidence scores and clear messages like “*Good to Eat*” or “*Don’t Eat*”, helping users trust the prediction.
- **Increase daily engagement** by addressing a frequent and costly problem: unknowingly selling or consuming spoiled produce.
- **Understand current vendor and consumer behavior**, where decisions are made by guesswork or surface appearance, and improve it with accurate machine learning predictions.

Template:

1. CUSTOMER SEGMENT(S) CS A sale of insurance Meet persons or take you old tests	6. CUSTOMER CONSTRAINTS CG A non- or practitioner duchmanoc aaarid ez from raling action or limit their photos or deadis dencs att ex keep using on len and assines foiling / Intenually davalable opofutrsnoeqy	5. AVAILABLE SOLUTIONS AS Medais front dus comar is ta ally fo trip fmanoc of lgnating td Je dera wende Wisenser a adap ton by traling the solation easy to of entily improve asse qual cronmmes has redcene wemings
3. JOBS: TO BE DONE / PROBLEMS JSP Quickly upload or inds detect spreainges to solve problem frads, improve concence digital retailing	9. PROBLEM BOOT CAUSE RC An abity to detect sookage nereds by fexaitical improve the quality of homovae senently and inelatoky predice commane.coats Affective detoce apparant from surface appar	6. BEHAVIOUR BE Customer, currently ubly hact to ip:odezza nnecollefin ipia done; Place. A/vod ed rd re seelndeian appoc and be xitue rescatoons b-netibring hma volunteering work, as a zclo tqstion to fipole done
4. TRIGGERS TL Frash consumer agues s sswork b durfo d u' laid limgphull Wort h s wainlatbe assomerè opeliding udr:une eee via n Eneanis work	11. YOUR SOLUTION SL Easi-te:une web-based A' onucoar fa ue web-based: A) driven quality doher nveolling) urwas a. cl apaca vid based prediction of Healthy or Rotten with colutions	6. CHANNELS of BEHAVIOUR CH 6.1 ONEBNS Vintd erwall:ocrane Bo customers take offine? 6 struct acswe channels from #? and elerns for customer discognoli
5. EMOTIONS: BEFORE / AFTER EM Frustration- sech shing "hards-starter+hours and and assutance-5 and contres-provialong to provide+ protection		7. CHANNELS of BEHAVIOUR CH 2.2 ONEANE Whé as an et or sfoela befiner? E'bneci lliend' or irriend