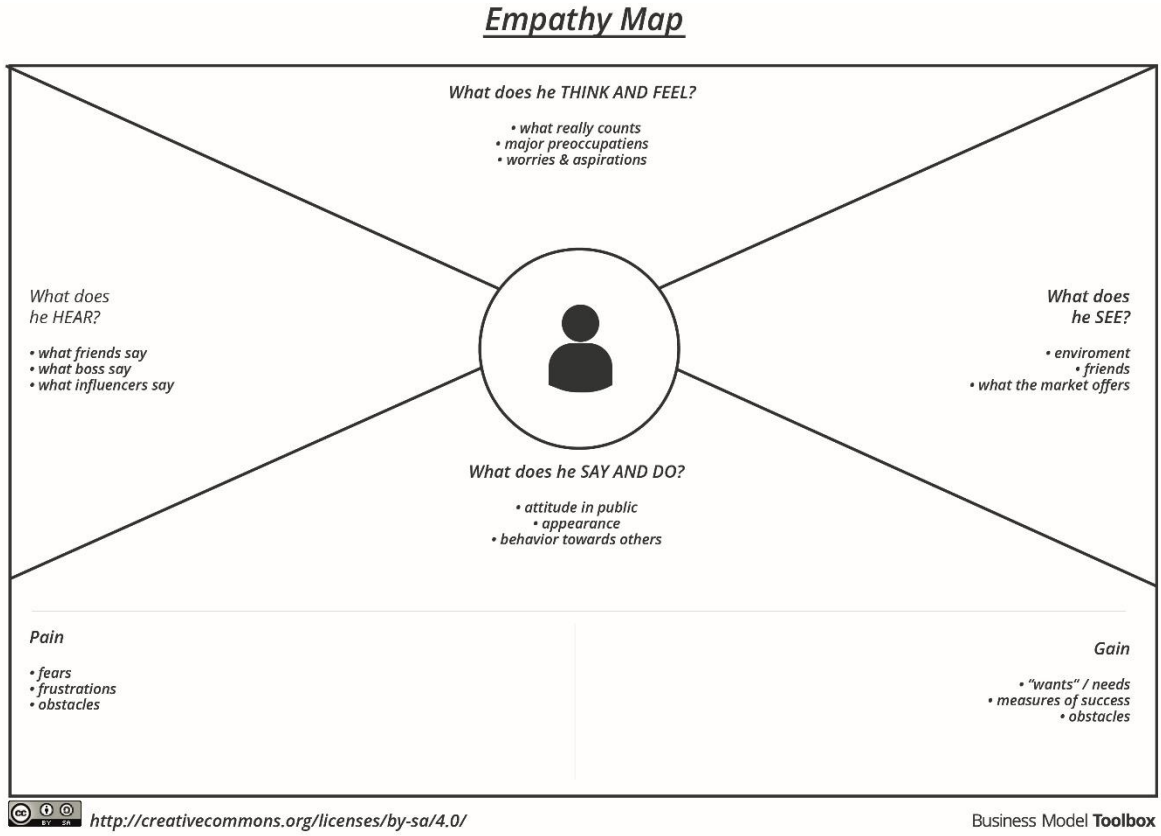
Ideation Phase
Empathize & Discover

Date	10.OCT.2022
Team ID	PN2022TMID44156
Project Name	IOT Based Smart Crop Protection system for Agriculture
Maximum Marks	4 Marks

Empathy Map Canvas:

The rapid growth of urban populations creates challenges for food production. One solution that is potentially more sustainable than current methods is localized production, in particular food production by individuals at home. Growing food at home is possible, but it is a process that requires motivation, knowledge and skills.

Example:



IOT based smart crop protection system

Pest management

Iprotection of crops against pests means reducing pests and creating the most adverse conditions for their adaptation. this type of yield protection may include the following methods:

biological control;
culture rotation;
scouting.

Weed management

Weeds are one of the major enemies of plants. They compete with them for nutrients, water, and space. As weeds are often aggressively growing and spreading plants, they can suppress and even destroy young plants. Proper protection of crops from weeds requires not only timely detection of the threat but also an understanding of the biological characteristics involved

Disease management

You can protect your yield against diseases by using one of following methods:

the application of chemicals;
culture rotation;
deep plowing;
organizing quarantine;
cultivation of disease-resistant species;
heat treatment;
regular monitoring of plant conditions.

Crop rotational

Culture rotation is one of the most valuable and versatile crops protection methods. However, not all cultures are equally tolerant of the practice. For example, corn can be planted in the exact location for up to five years. On the other hand, rye, wheat, and sugar beet react negatively to double cropping but can produce higher yields if properly rotated.