GUJARAT TECHNOLOGICAL UNIVERSITY

Centre for Industrial Design (Open Design School)

DESIGN ENGINEERING

CONTINUOUS ASSESSMENT CARD

COLLEGE NAME: Shantilal Shah Engineering College, Bhavnagar **COLLEGE CODE:** 043	

SUBJECT NAME: Design Engineering	
SUBJECT CODE:3140005	**SEMESTER**: 6th
BRANCH: Information Technology	**ACADEMIC YEAR**: 2023-24

TEAM NAME:	**TEAM ID:** 491594
PROJECT TITLE/DOMAIN: *My Plant Info*	

SR. NO.	TEAM MEMBER'S NAME	ENROLLMENT NO.
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INTERNAL GUIDE NAME: Bhavesh K. Borisaniya
INTERNAL GUIDE SIGN:

Head of Department   **College Seal**

MONTHLY ASSESSMENT - I (Observation, Empathy and Define Phase)
(DATE :   / /   )

1. **Why have students/team taken above mentioned domain? (Please specify the reason)** (Note: For more content or information, one may attach additional pages to this card.)

   because of all people are not aware with all plants and its information such as uses, benefits. With help of our app, they get information about it.

2. **How frequently student team has gone for observation on field, mention with date, place, time etc.? Which are the key observations that they have noticed?**

   We visited nursery on dated 29th march at the place near waghawadi road which is located in Bhavnagar. There we noticed that many rare and different species of plants.

3. **A. How many interactions/interviews team members have done?**

   We are interact with two person. First one is botanist and second one is a nursery men where we got Information About every types of plants, fruits and flower.

   B. Who are the user and various stakeholders on domain? Describe their persona (Name, age, occupation/education, roles and responsibility etc.)

   Likely to be professional plant enthusiasts, gardeners and student who are interested in Identifying different plants for their own use or for educational purpose.
   Persona: Om ,25 years old gardener. Role and responsibility: Om has a personal garden
   That he take care of in his spare time as an amateur gardener, he wants to learn more about the plants.

   C. List out the questions asked by team while having observation and interview?
   1.How important is accuracy and speed when identifying plants?
   2.what would you expect from a plant identification app?

4. **What is something special/random/unusual (i.e. activity, environment, interaction, object or user) team have observed at the domain? Please elaborate the conditions with photographs if available**.

We interaction with nursery and farmer to get information about plant name and its
detail. our team research at hill station to know some rare plant.

5. **Enlist any five major problems observed by your team in the respective domain. Mention any one for which you have empathize user the most and which might become your problem statement. Give reasons of selection of particular problem/issue based on empathy.**

Five major problem is, internet connection, scanning problem, limited dataset, This app is
available in only one or two language, Inaccurate result. Inaccurate Plant Identification:
One of the major problem observed by the team in plants identifier Domain is inaccurate
plant identification. Many users have reported that the app is not able to Correctly identify
the plant species, which can lead to incorrect information being displayed.

6. **Define your "PROBLEM DEFINITION" for the project as per below format. Which might be refine till end of Ideation phase if you wish.**

| User/ Stakeholder | Needs a way to | Problem/Needs | Because | Insights |

SUGESTIONS BY INTERNAL GUIDE:

AEIOU CANVAS SUGGESTIONS:
EMPATHY CANVAS SUGGESTIONS:
MIND MAPPING SUGGESTIONS:
GENERAL SUGESTIONS:
Overall Mark (Out of 05):

GUIDE SIGNATURE:
Date:

MONTHLY ASSESSMENT – II (Ideation and Product Development Phase)
(DATE: / /   )

1. **Explain briefly Ideation thought process and efforts of your team to reach ideas for listed problems**.

   My team and I brainstormed and researched different methods of plant identification, such as image recognition and user input. We also considered the user experience and how to make the app easy to use and visually appealing.

2. **Enlist any five effective ideas to address the probable listed problems with reason**.

   - Implementing a user-friendly interface with clear instructions and easy-to-use features to help users get accurate results.
   - Including a database of common plant species and their characteristics to help users compare their plant to known species.
   - Using image recognition technology that can identify plants from a photo, reducing the need for user input and improving accuracy.
   - Adding a community forum or Q&A section where users can ask questions and share information about their plants with other users.
   - Including a feature that allows users to save their plant identification history and revisit it later.

3. **Explain the most effective possible solution proposed for the problem.**

   The most effective possible solution for the problem of plant identification is to use a combination of image recognition technology and user input.

4. **Explain the features, functions and working principles/technology/pattern of your proposed solution.**

   The proposed solution for plant identification involves a combination of image recognition technology and user input. Here is how it would work:

   1. User takes a photo of their plant and uploads it to the app.

   2. The app uses image recognition technology to identify the plant species based on the photo.

3. If the app cannot identify the plant based on the photo, it prompts the user to provide additional information such as the plant's location, leaf shape, and flower color.

5. **Enlist major advantages and disadvantages (at least three) of the proposed solution.**

   Advantages:
   1. Provides accurate plant identification results.
   2. Can be used to identify plants for scientific research purpose.
   3. Can help user learn more about the plants in their environment.

   Disadvantages:
   1. May not be able to identify all plant species with 100% accuracy.
   2. Requires a reliable internet connection to work properly.
   3. May not work well in low light or other challenging conditions.

6. **Briefly mention refinement on PDC based on User/Stakeholder's feedback on your concept**.

   Based on user/stakeholder feedback, some possible refinements to the Product Development Canvas for the plant identification app could include:

   1. Improving the accuracy of the image recognition technology by incorporating more advanced machine learning algorithms.

   2. Adding more detailed information about plant care, such as soil pH requirements or temperature tolerance.

   3. Including a feature to allow users to save and organize their plant identification results.

   4 Adding a social sharing feature to allow users to share their plant identification results with friends and family.

SUGESTIONS BY GUIDE:

IDEATION CANVAS SUGGESTIONS:
PRODUCT DEVELOPMENT CANVAS SUGGESTIONS:
LEARNING NEEDS MATRIX SUGGESTIONS (in case of 4th Sem and onwards):
GENERAL SUGGESTIONS:
Overall Mark, considering assessment I (Out of 05):

GUIDE SIGNATURE:
Date:

1. **Which theoretical subjects/concepts are involved with your project? How it is useful to your project?**

   The theoretical subject are a secret life of plants and Plant symmetric: A phylogenetic approach. With help of this subject, we have information about trees and plants name, their origin and their benefits.

2. **Which software/design tool/Skills you have learned/applied during the project? Explain the features of it**.

   During the project we learned software such as visual studio and android studio. In visual Studio we learned common languages like c, java and python.

   In Android studio we learned how to create mobile app using it.

3. **Explain the prototype/model prepared by the student/team.**

   In prototype, first page is about identify page where user can identify or upload image via Gallery.

   In profile page user can sign in or login and retrieve their data.

   In save page user can save information in favorite list.

   In search page user search any plant by it's name.

4. **What are the materials, technology, things have utilized to make the prototype/model?**
   Laptop, Microsoft word, Microsoft PowerPoint and smartphone. this materials and
   technology we are utilized to make prototype.

5. **How many Iterations have you done to reach final solution? Explain modification/revise parameters/characteristics for each iteration.**
   one iteration is occurs during this project is image quality is good.

   for this solution we suggest user to take photo to right distance and angle.

6. **What is the scope of the project? How you are planning to implement it in future?**

   The scope of project is provide a various type of plant information . you can identify your
   Plant and gate its information properly. This app save your time and give all information in
   Minimum time duration

SUGESTIONS BY EVALUATOR:

PROTOTYPE/MODEL SUGGESTIONS:
GENERAL SUGESTIONS:
Overall Mark, considering assessment I & II (Out of 10):

Department/Interdepartmental Evaluator name and sign:
Guide sign:
Date:

FINAL ASSESSMENT AT THE END OF SEMESTER

EVALUATOR MEMBERS DETAILS:

NAME	INSTITUTE & DEPARTMENT	SIGN.
1.		
2.		
3.		

ASSESSMENT SUMMARY:

CONTINUOUS ASSESSMENT SUMMARY:	MARKS OBTAINED
MONTHLY ASSESSMENT - I	
MONTHLY ASSESSMENT - II	
MONTHLY ASSESSMENT - III	
TOTAL (Out of 20)	
FINAL EVALUATION/VIVA MARKS (Out of 80)	
TOTAL (Out of 100)	

EXAMINER COMMENTS/SUGGESTIONS:

DATE:

INTERNAL GUIDE SIGN   **HOD SIGN**   **COLLEGE SEAL**