

## Real-time banana harvest readiness prediction using mobile SE-enhanced YOLO classification

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### SUPPLEMENTARY FILE

### INTERVIEW QUESTIONNAIRE

#### Questionnaire for Banana Harvesting Cutter Mobile Application (User and Admin flow)

**1. Do you have banana harvesting experience?**

- a. Yes
- b. No

**2. What operating system your phone uses?**

- a. Android
- b. iOS (Apple)
- c. Other

**3. What is your age?**

- a. 18-24
- b. 25-34
- c. 35-44
- d. 45-54
- e. 55-64
- f. 65 and over

**4. What is your sex?**

- a. Male
- b. Female
- c. Prefer not to say

**5. How would you describe your general experience with mobile phone applications?**

- a. I frequently use various mobile phone apps.
- b. I occasionally use mobile phone apps.
- c. I rarely use mobile phone apps.

**6. Which of the following types of applications do you use most often? (select all that apply)**

- a. Social media apps (e.g., WhatsApp, Facebook, Instagram, Twitter)
- b. Productivity apps (e.g., Calendar, Notes, Task Management)
- c. Entertainment apps (e.g., Netflix, general games)
- d. Utility apps (e.g., weather, Google Maps, online banking)
- e. Other (please specify): \_\_\_\_\_

**7. Do you have any prior experience using apps related to agriculture or harvesting?**

- a. Yes
- b. No

**8. If you answered 'Yes' to the previous question, please briefly describe your experience:**

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**9. What do you consider to be the primary reason for using this banana harvesting cutter app?**

- a. To learn the ideal harvesting time of the banana
- b. To manage and track my banana harvesting activities
- c. To improve efficiency and productivity in banana harvesting
- d. Other (please specify): \_\_\_\_\_

**10. How comfortable are you with using new technologies and mobile phone applications?**

- a. Very comfortable.
- b. Somewhat comfortable
- c. Neutral
- d. Somewhat uncomfortable
- e. Very uncomfortable

**11. Do you have any specific goals or expectations from using this application?**

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**12. Are there any additional features or functionalities you would like to see in this applications?**

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**13. Does the colour of the buttons suit the usability?**

- a. Yes
- b. No

**14. How is the colour contrast between the background and the main components (e.g., button, text area, radio button) as well as between the buttons and the text inside them?**

- a. Excellent
- b. Good
- c. Fair
- d. Poor

**15. Does the logo look alright?**

- a. Yes
- b. No (please provide suggestions): \_\_\_\_\_

**16. Is the font size of the text suitable?**

- a. Suitable
- b. Needs to be larger
- c. Needs to be smaller

**17. What should be the predefined language of the text?**

- a. Default operating system language
- b. Portuguese (PT)
- c. English (EN)

## User and Admin Flow Questions

**18. Was it easy to find and understand the relevant fields on each screen (e.g., sign-in fields, selection**

**options, form inputs)?**

a. Yes

b. No (please specify): \_\_\_\_\_

**19. Was the placement of text fields (e.g., user ID, password, email) satisfactory?**

a. Yes

b. No (please specify): \_\_\_\_\_

**20. Did you encounter any issues entering information (e.g., email, password, user ID)?**

a. Yes (please specify): \_\_\_\_\_

b. No

**21. Were the error messages clear and easy to understand if any issues occurred?**

a. Yes

b. No (please specify): \_\_\_\_\_

**22. Were the buttons (e.g., Login, Next, Submit) intuitive and easy to find?**

a. Yes

b. No (please specify): \_\_\_\_\_

**23. Was it easy to navigate through the screens?**

a. Yes

b. No (please specify): \_\_\_\_\_

**24. Were the purposes of each screen and its options (e.g., selecting an area, uploading images) clear?**

a. Yes

b. No (please specify): \_\_\_\_\_

**25. Did you find the options to take actions (e.g., upload an image, take a photo of a banana bunch) clear and understandable?**

a. Yes

b. No (please specify): \_\_\_\_\_

**26. Were the icons and buttons' labels clear and suggestive of their purpose?**

a. Yes

b. No (please specify): \_\_\_\_\_

**27. Did the application functions (e.g., image capture, error messages) work as expected?**

a. Yes

b. No (please specify): \_\_\_\_\_

**28. Were the results or predictions provided by the app clear and helpful?**

a. Yes

b. No (please specify): \_\_\_\_\_

**19. Was it easy to view and manage images (e.g., selecting, uploading, viewing in gallery)?**

a. Yes

b. No (please specify): \_\_\_\_\_

**30. Were the success messages clear and satisfying after completing an action (e.g., submission, user creation)?**

a. Yes

b. No (please specify): \_\_\_\_\_

**31. Did you understand the next steps after receiving a success message?**

a. Yes

b. No (please specify): \_\_\_\_\_

**32. Was the process of confirming actions (e.g., deleting a user) clear and necessary?**

a. Yes

b. No (please specify): \_\_\_\_\_

**33. Overall, how satisfied are you with the application's user interface?**

a. Very satisfied

b. Satisfied

c. Neutral

d. Unsatisfied

e. Very unsatisfied

**34. Are there any features you found missing or would like to see added?**

a. Yes (please specify): \_\_\_\_\_

b. No

**35. Do you have any additional comments or suggestions for improvement?**

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