PRACTICAL: 3

Aim:

Design questionnaires and other techniques to elicit requirements for the given project.

Software required:

None .

Project name:

Android application – Image Labeling, face detection

Techniques:

The following are some of the well-known requirement gathering techniques.

- **Brainstorming:**

Brainstorming is used in requirement gathering to get as many ideas as possible from group of people. Generally used to identify possible solutions to problems, and clarify details of opportunities.

- **Document Analysis:**

Reviewing the documentation of an existing system can help when creating AS–IS process document, as well as driving gap analysis for scoping of migration projects.

- **Interface analysis:**

Interfaces for a software product can be human or machine. Integration with external systems and devices is just another interface.

- **Interview:**

Interviews of stakeholders and users are critical to creating the great software. Without understanding the goals and expectations of the users and stakeholders, we are very unlikely to satisfy them.

- **Observation:**

By observing users, an analyst can identify a process flow, steps, pain points and opportunities for improvement. Observations can be passive or active (asking questions while observing).

- **Prototyping:**

Prototyping is a relatively modern technique for gathering requirements. In this approach, you gather preliminary requirements that you use to build an initial version of the solution - a

prototype.

- **Requirement Workshops:**

Workshops can be very effective for gathering requirements. More structured than a

brainstorming session, involved parties collaborate to document requirements.

- **Reverse Engineering:**

When a migration project does not have access to sufficient documentation of the existing

system, reverse engineering will identify what the system does.

- **Survey/Questionnaire:**

When collecting information from many people – too many to interview with budget and time constraints – a survey or questionnaire can be used.

➢ Questions:

1. What is the purpose of this project?

2. Who are your target audience?

3. What are the necessary core features and functionalities to be incorporated in the app?

4. What platform is to be used for application development?

5. What administrator features do you need?

6. Which machine learning platform is to be used?

7. What's your preferred programming language?

8. Which kind of images do you wish to detect?

9. What percent accuracy do you expect?

10. How much data do you think will be needed?

11. What will be the source of data required for training?

12. What criteria will you and your client use to determine project success?

13. What is the anticipated number of app users?

14. Do you want the detection to be online or offline?

15. Does the app require user authentication? Or can anybody install and use it?

16. Do you want notifications to be displayed?

17. What is your approximate budget for the project?

18. Will it be a Free App or Chargeable while Downloading?

19. What permissions should be given to the users?

20. Do you have any specific security requirements?

21. Does the app need to support multiple languages?

22. Do you have any particular Machine Learning algorithm in mind?

23. Will the solution require an in-app purchase or payment gateway integration?

24. What is the project deadline? Are there any time constraints?

25. Do you want to insert advertisements into the app?

26. Who are the stakeholders involved?

27. What might be the potential problems that might get in the way of the success of this product?

28. What are the desired compatible devices and OS versions?

29. Do you need separate designs for iOS and Android?

30. Do you have an app icon or logo already? Do you want us to design the logo or app icon for you?

31. Do you want your app portrait or landscape or both?

Conclusion:

From this practical we learned and understood about various well known requirement gathering techniques. We also made a questionnaire for our project for requirements elicitation.