

Meeting Notes: First Requirements Elicitation for Emotion Surveillance Mobile Application

Date: June 26, 2024

Attendees:

- **Product Owner (PO):** John Smith
- **Project Manager (PM):** Sarah Johnson
- **Developer (Dev):** Mark Lee

Meeting Start Time: 10:00 AM

1. Introduction

PO (John Smith): Good morning, everyone. Thanks for joining. The primary goal of today's meeting is to kick off our project on building an emotional surveillance app. I want to go through the key features and ensure we're all on the same page.

PM (Sarah Johnson): Good morning, John. That sounds good. Let's make sure we cover all the essential points so we can start planning the project timeline and resources.

Dev (Mark Lee): Morning, everyone. I'm eager to hear about the features and understand the technical requirements.

2. Main Goal

PO (John Smith): The main objective is to create an app that can analyze users' emotions through various inputs like voice, text, and facial expressions. Based on these emotions, the app will provide tailored responses and advertisements. Let's break this down into key features.

3. Key Features

PO (John Smith): The primary features we need to focus on are:

1. Emotion Detection:

- **Voice Analysis:** This involves using voice modulation and tone to detect emotions such as happiness, sadness, anger, etc.

- **Text Analysis:** We'll analyze the sentiment of written text from messages, social media, or notes.
- **Facial Expression Recognition:** This will use the camera to read facial cues and determine emotional states.
- 2. **Tailored Responses:**
 - Based on the detected emotion, the app will provide appropriate responses. For example, comforting messages if the user is sad or motivational quotes if they are feeling low.
- 3. **Personalized Advertisements:**
 - Show ads relevant to the user's emotional state. For instance, if the user is happy, show ads for celebration-related products like party supplies.

PM (Sarah Johnson): This sounds comprehensive. For each of these features, we need to identify the technologies and resources required. Mark, what are your thoughts on the technical side?

Dev (Mark Lee): For voice analysis, we'll need to integrate with a robust speech-to-text and emotion detection API. Text analysis will require natural language processing (NLP) capabilities. Facial expression recognition will need a reliable computer vision framework, possibly using machine learning models pre-trained on emotion detection.

4. Discussion on Each Feature

PM (Sarah Johnson): Let's discuss each feature in detail.

- **Voice Analysis:**
 - **Dev (Mark Lee):** We can use services like Google's Cloud Speech-to-Text or IBM's Watson for speech recognition and emotion detection. We need to evaluate their accuracy and ease of integration.
- **Text Analysis:**
 - **Dev (Mark Lee):** NLP libraries like NLTK or spaCy could be used, but we might need a custom model trained specifically for sentiment analysis related to our use cases.
- **Facial Expression Recognition:**
 - **Dev (Mark Lee):** OpenCV combined with a machine learning model like a convolutional neural network (CNN) trained on facial emotions could be an option. We'll also need to address privacy concerns related to camera access.

PM (Sarah Johnson): Excellent. We'll need to prepare a detailed technical specification for each feature. Also, considering privacy concerns, we'll have to ensure all user data is handled securely and in compliance with regulations.

5. Next Steps

PO (John Smith): For our next meeting, let's have a draft of the technical specifications and a high-level project plan. We'll meet again on July 3, 2024, to discuss this further and make any necessary adjustments.

PM (Sarah Johnson): I'll prepare the project plan and resource allocation. Mark, can you start evaluating the APIs and libraries we discussed?

Dev (Mark Lee): Absolutely. I'll look into the options and prepare a comparison for our next meeting.

6. Conclusion

PO (John Smith): Great progress today, everyone. Thank you for your input. Let's reconvene next week with our findings.

Meeting End Time: 10:45 AM

Next Meeting:

- **Date:** July 3, 2024
 - **Agenda:** Review technical specifications, project plan, and resource allocation.
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