Unified Communication App

The police department is looking for a user-friendly app to share their thoughts, media, information and ideas just like you do on WhatsApp! It should be a complete official communication tool for the Police. It can later be scaled into different specializations depending on the needs of various internal departments. It can also be interfaced with official databases based on specific access and privileges.

This being the final objective, the coding fraternity is requested to facilitate creating an app that can share all media forms across all contacts in general and specific requirements demanded. Features like location sharing must be enabled which provides the concept of time and space for Police tasks. And on the lighter side it should take care of any recreational activity or share a joke, the app must be able to do that.

Response

Write down the Synopsis of the Problem Statement selected. (100 words) \*

The digital tools available for communication in our personal lives are far advanced than our workplaces. By applying a combined field of human-centered design, systems engineering, and data analytics, a digital solution has the potential to drive changes to employee behavior and performance. The app will provide the administration a scalable communication channel to reach the personnel with messaging that is personalized, timely, and relevant for their role and situation. The application should be adaptable to diverse use cases in terms of defining the recipients for messages, the type of media and content, and trigger for messages (automated versus manual).

1. Motivation: Why do you think this problem is worth solving? What are the foreseeable outcomes? (75 words) \*

Communication is the life blood of any unit, be it a family, a small business, or a state-wide police workforce. Personalized, relevant, and timely communication can help the police organization to meet tactical needs such as to be responsive to emerging events or long term objectives like building a workforce culture. This will in turn lead to positive engagement, improved employee experience, and performance improvements for the workforce.

2. Explain how you would build your product within the 36 hours and explain in detail the architecture and tools you are likely to use (50 words) \*

The administration layer will be built in Salesforce Marketing tool to customize content and recipients for the communication. The workforce personnel experience will be built using Microsoft Xamarin platform to create iOS and Android apps.

3. Please list possible Input test cases and the Output you expect (50 words) \*

***Workforce-wide communication:*** Administrator creates notification to announce recipients for

Chief Minister’s Medal for Police Personnel

***Segmented communication:*** Targeted communication only for DSP and SP officers in the state about an emerging public safety situation

***Personalized communication:*** Customized congratulatory messages to personnel on the day of service anniversary

4. Explain your choice of the dataset for experimentation: Why do you think the data you are planning to use is relevant and sufficient? Please cite the source if the data is public or argue for a choice of synthetic data generation. (75 words) [Please mention "not required" if no dataset is needed ] \*

We will require publicly available information on Karnataka State Police organization such as number of commissionerates, ranges, districts, hierarchy and roles of officers etc.

5. Parsimony Sourcing: Are you going to use large heterogeneous virtual computing power (Colab/AWS/G-Cloud etc)? If Yes, why? (30 words) \*

No. In future state, a cloud architecture is recommended for scalability - this will reduce cost when the solution needs to grow for state-wide user base.

6. Please list the Laptop/Desktop/HW configuration you're planning to use. (50 words) \*

MacBook Pro, HP Elitebook

7. Have you participated in any hackathon and secured a prize? \*

No