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IPMA6212 Assignment 2

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# QUESTION 1

### App name:

SafeComm: Improving Community Safety Through Mobile Technology

### 1. Application Description:

SafeComm is a mobile application designed to address the prevalent security concern of responding to and tracking suspicious activities in and around neighborhoods, commonly known as Neighborhood Watch. The app facilitates community members in reporting and monitoring suspicious activities, thereby fostering a safer living environment.

Key features of SafeComm include:

* **Suspicious Activity Reporting**: Users can quickly report suspicious incidents or activities they observe in their neighborhoods, including descriptions and locations. These reports are sent to local authorities and other community members who can respond appropriately.
* **Real-Time Incident Tracking**: SafeComm provides a map interface where users can view reported incidents in their area in real-time. This feature enables residents and law enforcement to monitor and track suspicious activities effectively.
* **Community Alerts**: The app allows for quick dissemination of safety announcements and alerts to the community. Whether it's a weather-related emergency, road closures, or crime alerts, users stay informed about events affecting their safety.
* **Anonymity**: Users have the option to report incidents anonymously, ensuring their safety and privacy while still contributing to community security efforts.
* **Emergency Assistance**: SafeComm includes an SOS button that allows users to request emergency services with their location and notify their emergency contacts simultaneously.
* **Home Security Resources**: The app provides users with resources and recommendations for securing their homes, including checklists and guidance on the best tools and practices.

### 2. Project Need and Problem Statement:

The need for SafeComm was identified through a series of community meetings and surveys conducted by the local municipality in response to rising concerns about safety and security in neighborhoods. Residents expressed frustration with the lack of effective communication and coordination in addressing suspicious activities, leading to a sense of vulnerability and fear.

The project aims to address the problem of inadequate reporting and response mechanisms for suspicious activities in neighborhoods. By leveraging mobile technology, SafeComm empowers residents to actively participate in community safety efforts and collaborate with local authorities, thereby enhancing overall security and well-being.

### 3. Technological Trend Implementation:

The technological trend to be implemented in SafeComm is Progressive Web Application (PWA) development.

* **What is the technological trend?**: PWAs are web applications that use modern web capabilities to provide a user experience similar to native mobile apps. They are designed to work on any device and offer features such as offline functionality, push notifications, and responsive design.

**(Adobe Ciommunications Team, 2022)**

* **Benefits for the Project**: PWAs will expedite the development process by allowing for a single codebase that works across multiple platforms, reducing the need for separate Android and iOS development timelines.
* **Potential Risks**:
  1. **Compatibility**: Some older devices or browsers may not fully support PWA features, leading to inconsistent user experiences.
  2. **Limited Functionality**: PWAs may not offer the same level of functionality or performance as native apps, potentially limiting user engagement.
  3. **Security Concerns**: As PWAs rely on web technologies, they may be susceptible to security vulnerabilities such as cross-site scripting or data breaches.
* **Benefits for Users**: PWAs provide seamless access to SafeComm across different devices and operating systems, ensuring high availability even in low or bad network areas. The simplicity and speed of PWAs make it easy for users to report incidents or request assistance quickly in emergency situations.

### 4. Major Deliverables for Project Charter:

* Project Scope Statement: Define the objectives, deliverables, and boundaries of the SafeComm project.
* Resource Plan: Identify the human, financial, and technological resources required for project implementation.
* Timeline and Milestones: Establish a timeline with key milestones for the development, testing, and deployment phases.
* Risk Management Plan: Identify potential risks and mitigation strategies to ensure the successful execution of the project.
* Communication Plan: Outline communication channels and protocols for stakeholders to stay informed and engaged throughout the project lifecycle.

**(Alexander S. Gillis, 2021) (William Malsam, 2023)**

# QUESTION 2

Work Breakdown structure  
Please refer to the attached document : WBS SafeComm.drawio.png or (WBS SafeComm.drawio) easy to zoom in and out.

# QUESTION 3

3.1) Please refer to MS Projects document.

3.2) Please refer to GitHub repo:  
 <https://github.com/just-makab/SafeComm.git>

# QUESTION 4

4.1) Please refer to MS Projects document.

4.2)

The good news is that there is a possibility of completing the SafeComm application on schedule, based on the network diagram with more accurate timeframes.  
  
The bad news is that this is not a given and here is why:

* Estimated time: we may not have accurate time estimations. It could be more difficult to build the application than anticipated, or the team might not be familiar with the selected technology. This could result in delays.
* Balancing needs vs time: to create an excellent application, we need precise user requirements and extensive testing. However, if we work on these areas for too long, the deadline may be extended.

If we wish to have a better chance of succeeding, here is what we can do:

* Communicating effectively: Clear communication is essential when It comes to working in groups. Updating each other on progress or any obstacles we may encounter facilitates teamwork in problem solving and maintaining punctuality.
* Adaptation: the created network diagram is merely a reference. Nothing about it is set in stone. However, as we go along we can modify and update it where necessary.
* Anticipating potential obstacles: if important tasks within the diagram take longer to complete, this entails giving them more time. Having a backup resource on hand or a team member who is an expert in the related field can step in when necessary. Being able to actively identify these potential risks greatly increases the projects chances of success.
* Focusing on critical path: by putting our attention on the critical path, we give ourselves more time to complete activities in case of unforeseen circumstances.

# QUESTION 5

Please refer to attatched document Q5

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