# Project Phase 6: Security Recommendations

**Group Members: -**

1. **Naeem, Zain**
2. **Obsa, Falmata**
3. **Puri, Navkirat**
4. **Fatema Ali, Tanzela**

Institution: SAIT

Course Number: CPRG-303

Instructor: Dr Kamini

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**Security Recommendation:** Ensure that our Study Planner App requests only the minimum set of permissions necessary for its functionalities.

<https://github.com/OWASP/owasp-mstg/blob/master/Document/0x05h-Testing-Platform-Interaction.md#testing-app-permissions-mstg-platform-1>

Ensuring robust security measures in our Study Planner App is paramount to safeguarding user data and maintaining user trust. One key recommendation for a future feature implementation is to request only the minimum set of permissions necessary. This approach not only enhances user privacy but also reduces the app's attack surface, mitigating potential risks associated with unauthorized access or data breaches. By carefully considering and implementing this recommendation in future feature development, we prioritize user confidentiality while ensuring the app's functionality remains efficient and secure. Our commitment to following industry best practices, as outlined in the provided checklist, underscores our dedication to delivering a secure and reliable user experience.

**a. What is your security recommendation? Why did you choose it?** Our security recommendation is to ensure that our Study Planner App only requests the minimum set of permissions necessary for its functionalities. We chose this recommendation because unnecessary permissions can increase the app's attack surface, potentially exposing user data or device functionality to malicious actors. By limiting permissions to only what is essential, we reduce the risk of privacy breaches and enhance overall app security.

**b. Who does the recommendation benefit (end-user, developer, etc.)?** This recommendation primarily benefits end-users and developers. End-users experience improved privacy and security as their sensitive data is less likely to be accessed without permission. Developers benefit from reduced complexity in managing permissions, leading to more streamlined app development and maintenance processes.

**c. If the recommendation was found somewhere other than the provided checklist, include a link to it.** The recommendation to request only the minimum set of permissions necessary is part of the provided checklist itself, specifically listed under the "Platform Interaction" section.

**d. When would the recommendation have to be implemented (based on how serious the security risk is)?** The recommendation should be implemented during the app's development phase to mitigate potential security risks from unnecessary permissions. It is essential to prioritize this implementation early to establish a strong foundation for app security and privacy.

**e. Why do you think your project needs your recommendation?** Our Study Planner App needs this recommendation because it deals with user data, including task details, reminders, and potentially user credentials if login functionality is included. Limiting permissions to only what is necessary ensures that sensitive information is protected and reduces the risk of unauthorized access or data breaches.

**f. How do you think your recommendation could be applied?** To apply this recommendation, we will:

* Conduct a thorough review of our app's functionalities to identify the specific permissions required for each feature.
* Remove any permissions that are not directly related to essential app functionalities.
* Implement runtime permission requests where applicable, requesting permissions only when they are needed during app usage.

**I. How feasible would the implementation be?** Implementing this recommendation is feasible as it aligns with Google's best practices for Android app development. We will ensure thorough testing to verify that removing unnecessary permissions does not impact the app's functionality negatively.