Team Quaternary:

ST10019838 - Damian Dare

ST10019972 - Guillaume Swanevelder

ST10091991 - Christiaan Versfeld

ST10158660 - Ruan Zwarts

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Lecturer: Mr Handsome Mpofu

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OPSC7312 POE – AI Writeup

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# INTRODUCTION

Throughout the development of the group project, AI tools like ChatGPT and Claud AI served as valuable resources for troubleshooting and debugging, specifically with Firebase configuration, Git version control, and Kotlin error resolution.

# USED COMPONENTS

Here is a detailed account of how the team used AI tools:

## Firebase Setup and Push Notifications

**Usage:** AI tools provided detailed guidance on integrating Firebase Cloud Messaging. This included step-by-step instructions for configuring the google-services.json file, updating Gradle files, and implementing FirebaseMessagingService. When errors emerged, such as configuration issues in the Gradle files or problems with the FirebaseMessagingService, AI tools helped the team identify the causes and provided examples to resolve them.

**Citation:** In the documentation, the team acknowledged AI's assistance with Firebase setup and noted specific implementation steps that were clarified or recommended by AI tools. This acknowledgment ensured transparency in the integration of Firebase push notifications.

## Debugging Kotlin Code Errors:

* **Usage**: AI tools were instrumental in resolving Kotlin-specific code errors, such as unresolved references or incompatible types. By explaining the nature of these errors, AI tools enabled the team to modify code and apply best practices. For instance, AI clarified certain syntax and dependency errors, which were critical to the project’s successful compilation and runtime functionality.
* **Citation**: The documentation acknowledged AI’s role in debugging Kotlin code, specifically citing instances where AI tools provided solutions or code examples that addressed syntax or dependency issues. This citation ensured that the team’s debugging process was documented with proper attribution.

# Conclusion

Documenting AI assistance throughout the project allowed the team to maintain transparency in their development process. AI tools played a key role in enhancing the team’s understanding of complex debugging and configuration tasks, empowering them to overcome technical challenges. The project documentation credited AI’s support in Firebase setup, Git commands, and Kotlin debugging, highlighting these contributions while also showcasing the team’s independent problem-solving efforts.