Development of an Android Application to Support English Learning

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***Abstract*—This undergraduate project develops an Android application to support English learning for lower secondary school students. The report introduces Java and Android development, analyzes the intended users and functions, and models the application with use-case, activity, sequence, and class diagrams. Its illustrated implementation includes account registration and login, quizzes, vocabulary and grammar exercises, and a dictionary. The results chapter presents application screens, including the login, registration, quiz, and score-saving interfaces. These screens document the implemented functions; the report does not provide a controlled study of learning outcomes or a quantified usability evaluation. The author describes the application as a limited foundation that could be extended with further functions. This summary therefore reports the software design and visible implementation while leaving learning effectiveness and broader deployment unassessed.**

***Index Terms*—Android, English learning, application, Java, user interface, functionalities**

I. Introduction

The source report addresses the practical task of building an Android application that helps lower secondary school students practise English. It first reviews Java and Android concepts, then specifies the application's purpose, users, and functional requirements. The report focuses on a small set of learning activities and account functions rather than on measuring educational impact. Its design material includes several UML diagrams that describe user interactions, activity flows, and classes. The English summary follows the sequence of the original report: conceptual background, requirements and design, then illustrated implementation. The student and supervisor are identified in the source manuscript and the repository record [1]. Published articles on the methods and subject of this project provide context for this English summary [2], [3], [4], [6], [7]. Published books on the methods and subject of this project provide context for this English summary [5]. Published articles on the methods and subject of this project provide context for this English summary [8], [9]. Published books on the methods and subject of this project provide context for this English summary [10].

II. Methods

The student analyzed the requested learning and account functions, modeled them with use-case, activity, sequence, and class diagrams, and built the application on Android with Java. The design covers registration, login, vocabulary and grammar practice, quizzes, a dictionary, and score storage. The report also discusses development tools used for Android programming and UML modeling. Screens and diagrams provide the main evidence for what was designed and implemented. The source does not document a comparative teaching experiment, a participant sample, or a measured improvement in English proficiency; those types of evaluation are outside the reported work [1].

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III. Results

The results chapter illustrates the application with screens for registration, login, quiz selection, quiz questions, and saved scores. These figures show the structure of the user interface and the flow of several implemented functions. The report also describes vocabulary, grammar, and dictionary features within the wider application design. This evidence supports a description of a working project interface and its intended operations. It does not establish that students learned more effectively, that the application was usable for a wider population, or that every function passed a formal test suite. No numerical educational or performance result is reported in this summary [1].

IV. Discussion

The report's contribution is a small Android application and a documented path from requirements through UML design to the illustrated user interface. Its examples make the functions inspectable, but the scope remains limited to the functions described in the project. The author's conclusion also acknowledges that the application addresses only part of the broader English-learning problem and proposes adding functions later. Interface screenshots should be read as implementation evidence, not as an independent usability study. Similarly, the chapter title referring to test results does not by itself supply a test protocol or measured learning outcome. Further evaluation would need separately reported participants, criteria, and results [1].

V. Conclusion

The source manuscript documents an Android English-learning application, its functional analysis, UML models, and illustrated screens. It includes registration, login, quiz, score,

vocabulary, grammar, and dictionary elements in the reported design or implementation. The author regards the project as an initial application with room for additional functions. This summary treats the screenshots and descriptions as evidence of the presented software, while making no claim about improved English achievement or broad usability. The source does not support a quantitative conclusion about learning effectiveness. Any subsequent development or evaluation should be documented as a separate extension of the original undergraduate work [1].

References

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