

Android-Based Timetable Manager for University Students Using Rule-Based Algorithm

Abstract

Currently, there are several drawbacks in the existing university timetable system, including students do not know the class hour of subjects that they are going to register during the registration period. This situation has resulting in clashing in the class hour of the registered subjects. In addition, some students are not aware of this situation until it is too late from them to drop and register other subjects. This particularly happened to those who has more than two registered subjects clash and resulting in overlook at the rest of clashed subjects. Besides, students find it is inconvenient to view the timetable through the current timetable system. Thus, the development of an Android based mobile application that able to notify students if the class hour of the subjects they registered are overlapping is presented in this paper. The application also able to manage the student timetable by reporting details such as venue, day and the time of clashed subjects. Then, the application will suggest student to select elective subjects or subjects that students wish to retake to prevent clashing in class hour. The software development of the application is based on the Agile model and using rule-based algorithm. The application is developed in Android Studio by using Java as the programming language and all data is stored in Firebase Realtime Database. In conclusion, this paper presents results of the application that has successfully designed and developed. © 2023 American Institute of Physics Inc.. All rights reserved.