

UNIVERSITI TEKNOLOGI MARA (PERAK)

DATA STRUCTURES MADE EASY (DSME)

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ABSTRACT

Computer science students are increasing by the years. Teaching and learning data structures are also becoming more and more difficult as few lecturers have to handle many students. The abstract concepts of data structures make it even more difficult for students to grasp the subject. These conditions lead to major problem which is students having less understanding of data structures. A mobile application with android platform was developed to help the students in revising data structures subjects. Computer science students of UiTM Perak is selected as this project's case study. The application provides short notes, example source codes and quick solutions for data structure problems. A simple software development technique is chosen in order to develop the application. By using this application, students can reduce the time consumed to consult lecturer just to check a few answers. Besides that, they can use it to revise or learn on the go as long as they have their smart phones. For this application, a survey has been conducted before the development, and a user perception test has been done after the development. The outcomes of the survey were used to narrow down and focus the scope of the project onto graph problems. The outcome of the perception test, most respondents are interested in DSME application. In the future, this application needs to have broader topics and also improve the features and interface design.

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