DEVELOPMENT OF MOBILE LEARNING APPLICATION ON TEAM SPORTS FOR COLLEGE OF SPORTS, PHYSICAL EDUCATION AND RECREATION-CAVITE STATE UNIVERSITY

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ABSTRACT

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Mobile Learning Application on Team Sports was developed to extend the usual teaching and learning environment of students through the use of mobile application to disseminate information and promote the importance of physical education especially team sports. This study aimed to develop a mobile application that will provide information to students on PHED 4 subject offered by the College of Sports, Physical Education and Recreation (CSPEAR) such as the history and equipment of the sport, skills and rules and the health benefits of sports namely: basketball, baseball, football, and volleyball. The developed mobile application can run on android devices and consists of the following modules: information, search, game and about module.

Mobile- D Methodology was used based on agile practices, acquiring elements from other agile methods characterized by being incremental (multiple releases), cooperative (a strong cooperation between developer and client), straightforward (easy to understand and modify) and adaptive (allowing for frequent changes). Mobile- D methodology is consist of different phases namely: explore, initialize, productionize, and stabilize and system fix. The mobile application was developed through the use of Ionic-Cordova Platform and HTML5 and Notepad++ as the integrated development environment. Adobe Photoshop CS6 was used for the design and JavaScript for the

functions of the system. The system was evaluated by 200 respondents and passed to series of testing which fulfilled its functional requirements and objectives.

The developed system went through unit testing, integration testing and acceptance testing to measure the completion of the system as well as its individual functions and procedure. The objectives of the study were met by the mobile application that was developed and its users were satisfied with its functionality with an overall mean of 4.20 and standard deviation of 0.74.

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