

Search Application For Fitness Center Locations In Yogyakarta Region Using Location Based Service (LBS) On Android

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ABSTRACT

Fitness center is a place which provides physical fitness training program. The abundance of fitness centers accompanied by their unavailability of information on costs, facilities, program offered and location's reachability sometimes make it difficult in determining which place is most suitable and accommodating. This study aimed to develop search application for fitness center locations in Yogyakarta by implementing Location Based Service (LBS) on devices based Android and measure its quality. The development applied the waterfall model which implemented the stages of analysis, designing, coding and testing. The application designing stage employed UML for software designing which included use case diagrams, sequence diagrams, and activity diagrams as well as database by using SQLite. Development test carried out was based on software quality testing referred to ISO 25010 standard that covered tests for functional suitability, compatibility, usability and performance efficiency. The result of the study was a search application for fitness center locations accommodated the search results for fitness name, cost offered, location, and class fitness. The application had met ISO 25010 quality standard. It showed the result of functional suitability test value of 100% with the category of "Very Feasible". Compatibility aspect obtained attested the value of 100% explained as "Very Feasible" and usability aspect of 81.18% which belonged to category of "Very Feasible", in addition Cronbach Alpha value was 0.709 described as "Acceptable". Testing on aspect of performance efficiency resulted on an average time of 1.853 seconds which the categorized as "Very Satisfied".

Kata Kunci: Fitness Center, Location Based Service (LBS), Android, ISO 25010