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Auto-Formation Group Chat For Fitness Application With Rule-Based

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SUPERVISOR APPROVAL

AUTO-FORMATION GROUP CHAT FOR FITNESS APPLICATIOIN WITH RULE BASED

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This thesis was prepared under supervision of the project supervisor, Sir Mohamad Asrol Arshad. It was submitted to the Faculty of Computer Science and Mathematical Sciences and was accepted in partial fulfilment of the requirements for the degree of Bachelor of Computer Science (Hons) Data Communication and Networking.

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Project Supervisor

JANUARY 31, 2018

STUDENT DECLARATION

I certify that this thesis and the project to which it refers is the product of my own work and any idea for quotation from the work of other people, published or otherwise are fully acknowledged in the accordance with the standard referring practices of the discipline.

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ABSTRACT

People with an establish behavior were actively seeking ways to maintain and increase their fitness behavior which led many individuals need an advice on exercise from personal trainer. However, they actually do not know where to find the nearest trainer especially at the uncommon areas. Therefore, by the aim of this project is to facilitate and solve the problem by developed FitwithTrainer android application with auto-formation group chat for clients and trainers along with rule-based expert system for classification of trainer in term of trainer's levels and specialties in website system. Moreover, the algorithm used for rule-based expert system is forward chaining method. As this project's aim to develop android mobile application system, there are three important modules such as developed GPS system which used Google Maps API as location based for detection of online users. Next, developed an auto-formation group chatting where to create online group chat for nearby users and last but not least create an instant messaging for private chatting between users. Thus, some phases of SDLC were used and the chosen phases such as requirement analysis, design, development, evaluating and documentation. This project are focuses on the FitwithTrainer android application with auto-formation group chatting as it is use geofencing technique in GPS to detect the nearest users. Then, for the appropriate testing for this project is the effectiveness testing which it has been done in order to test the system effectively for users and the major part are the accuracy of geofencing technique. Based on the testing result, it can be conclude that this project has successfully developed FitwithTrainer website and android mobile application system. For future recommendation works, this project can be extended further by applying the geolocation technique to detect the accurate location of the users in order to find nearest clients and trainers. Lastly, added some features such as include the registration in the android mobile application system as ease users to register instead of register in the website system.

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