

Universiti Teknologi MARA

**Applying MVC Architecture to the
Development of Puncak Niaga
Equestrian (PNE) Management System**

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**Thesis submitted in fulfillment of the requirements
for Bachelor of Information Technology (Hons)
Information Systems Engineering
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SUPERVISOR'S APPROVAL

APPLYING MVC ARCHITECTURE TO THE DEVELOPMENT OF PUNCAK NIAGA EQUESTRIAN (PNE) MANAGEMENT SYSTEM

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This report was prepared under the supervision of the project supervisor, Hazlifah Mohd Rusli. It was submitted to the Faculty of Computer and Mathematical Sciences and was accepted in partial fulfilment of the requirements for the degree of Bachelor of Information Technology (Hons.) Information Systems Engineering.

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JANUARY 31, 2016

STUDENT'S DECLARATION

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

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ABSTRACT

Puncak Niaga Equestrian (PNE) is a company that provides horse riding lessons and horse caring services. This project focus on the processes of registration of the students, attendance of the students, and horse management system. PNE needs a centralized computerized system that can keep the data in more systematized way. A Model-View-Controller (MVC) Architecture is used to implement in PNE Management System as it allows easy maintenance and evolution of the system. A methodology that is based on System Development Life Cycle (SDLC) is used to develop the system. However, only three phases from the core processes will be used which are Requirement Gatherings and Analysis, Design, and Implementation. Knowledge Acquisition phase is added as a part of the first phase in order to understand about the focus of this project which is MVC Architecture. There are 13 use cases and 11 class identified. The design classes were identified from domain class diagram and placed within the respective folders following the MVC Architecture. The multilayer sequence diagrams, structure of MVC Architecture, and package diagram also performed completely to develop a web-based system for PNE Management System. In the near future, the system should be available as a web-based system since people nowadays tend to use the web application to register horse riding lesson (online) rather than go to the company to fill up the registration forms.

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