

UNIVERSITI TEKNOLOGI MARA

**EXAM INVIGILATION SCHEDULING
SYSTEM FOR UITM MALACCA JASIN
CAMPUS**

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BACHELOR OF COMPUTER SCIENCE (Hons)

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**Exam Invigilation Scheduling System for
UiTM Malacca Jasin Campus**

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**Thesis submitted in fulfillment of the requirements for
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SUPERVISOR'S APPROVAL

EXAM INVIGILATION SCHEDULING SYSTEM FOR UITM MALACCA JASIN CAMPUS

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This report was prepared under the supervision of the project supervisor, Mohamad Hafiz bin Khairuddin. It was submitted to the Faculty of Computer and Mathematical Science and was accepted in partial fulfillment of the requirements for the degree of Bachelor of Computer Science (Hons).

Approved by

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Mohamad Hafiz Bin Khairuddin
Project Supervisor

JULY 30, 2015

STUDENT'S DECLARATION

I certify that this report and the project to which it refers to 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

The final exam invigilation schedule in UiTM Malacca Jasin campus is prepared by UiTM Pulau Pinang Scheduling System, where all the factors and information of lecturers' constraint being sent there by the Examination Unit. There is always a delay in waiting for the invigilation schedule to be announced. If there are any changes of the schedule after the schedule is generated, the schedule will not be updated in the system. The schedule changing process is done manually by form. The Exam Invigilation Scheduling System aims to own a scheduling system in the campus and reduce the time used in creating the invigilation schedule. To solve the invigilation scheduling problem, constraint based technique with rule based approach is used to find the optimal solution. Rule based technique is used in searching method and involve knowledge base as the data constraint store. In developing the project, software prototyping model was used which involves of the preliminary investigation, requirement definition, system design, system development, system testing and system prototype phase. Two interviews have been conducted as data collection method. The findings of the project include the system requirements and rules. There were ten rules involved in creating the invigilation schedule. The project does not assist in changing the invigilator assigned in the invigilation schedule. Thus, it is recommended to provide function that allows the application of schedule changes for future works.

Keyword: Constraint-based, ruled-based, knowledge base, web-based, hard constraint, soft constraint, optimization, timetabling.