

**WEB SYSTEMS ENGINEERING FOR PRIORITIZATION OF RESEARCH AREA  
IN FSKM**

**PREPARED BY :**

**ANITAWATI BINTI MOHD LOKMAN**

**DECEMBER 2012**

## **Table of Contents**

1.	Letter of Report Submission .....	iii
2.	Letter of Offer (Research Grant) .....	iv
3.	Acknowledgements .....	v
4.	Enhanced Research Title and Objectives .....	vi
5.	Report .....	1
5.1	Proposed Executive Summary .....	1
5.2	Enhanced Executive Summary .....	2
5.3	Introduction .....	3
5.4	Brief Literature Review .....	5
5.6	Results and Discussion .....	12
5.9	Conclusion and Recommendation .....	24
5.10	References/Bibliography .....	26
6	Research Outcomes .....	28

## List of Tables

Table 1: The Star Rating Description.....	9
---	---

## List of Figures

Figure 1: The Agile Method.....	8
Figure 2: Process Flow for Rating Module. ....	10
Figure 3: Process Flow for ReportModule.....	10
Figure 4: Process Flow for SecurityModule.....	11
Figure 5: Process Flow for Student Module.....	11
Figure 6: Lecturer Use Case.....	12
Figure 7: Admin Use Case. ....	13
Figure 8: Application Architecture.....	14
Figure 9: FYP ERD.....	15
Figure 10: Research Area Rating ERD. ....	15
Figure 11: Login Screen.....	16
Figure 12: Dashboard (Academician Role).....	17
Figure 13: Dashboard (Admin Role).....	18
Figure 14: Create Student Project. ....	19
Figure 15: Show Student Project.....	19
Figure 16: Rating (Step 1).....	20
Figure 17: Rating (Step 2).....	21
Figure 18: Report Format Select. ....	22
Figure 19: The Report. ....	23

Rujukan Kami : 600-RMI/ST/DANA 5/3/Dst (331/2009)  
Tarikh : 20 Januari 2010

Prof. Madya Dr Adnan bin Ahmad  
Ketua Projek

Pn Anitawati binti Mohd Lokman  
Ahli Projek

Pn Emma Nuraihan Meor Ibrahim  
Ahli Projek

Fakulti Sains Komputer dan Matematik  
**UiTM SHAH ALAM**

Tuan/Puan

**KELULUSAN PERMOHONAN DANA KECEMERLANGAN FASA 03/2009**  
**TAJUK PROJEK : REQUIREMENT ANALYSIS USING KJ METHOD: PRIORITIZING RESEARCH AREA IN FSKM**

Dengan segala hormatnya perkara di atas adalah dirujuk.

Dengan sukacitanya, Institut Pengurusan Penyelidikan (RMI) mengucapkan tahniah kepada tuan/puan kerana telah berjaya ditawarkan Geran Dana Kecemerlangan bagi projek penyelidikan tersebut tertakluk kepada syarat-syarat dalam lampiran.

Tempoh projek penyelidikan ini ialah satu (1) tahun, iaitu bermula **01 Januari 2010** hingga **31 Disember 2010**. Peruntukan yang diluluskan ialah sebanyak **RM15,000.00** sahaja bagi Kategori A. Tuan/puan diminta mengemukakan kertas cadangan penyelidikan beserta bajet yang baru seperti yang dicadangkan dan bersesuaian dengan jumlah kelulusan yang telah diluluskan.

Sekian, harap maklum dan terima kasih.

**"SELAMAT MENJALANKAN PENYELIDIKAN DENGAN JAYANYA"**

Yang benar



**MUSTAFAR KAMAL HAMZAH**  
Ketua INFOREC  
Merangkap Ketua Penyelidikan (Sains dan Teknologi)

- s.k. 1. Dekan, Fakulti Sains Komputer dan Matematik, **UiTM SHAH ALAM**  
2. Puan Rosnani Abdul Razak, Penolong Bendahari  
Unit Kewangan Zon 17 (Penyelidikan)

2009/25

## **5. Report**

### **5.1 Proposed Executive Summary**

Faculty of Computer Science and Mathematics run various forms of research and projects namely the degree level Final Year Project , theses and Dissertation for the Masters and Ph. D programs, Independent Studies, class projects, lecturers' project, research and consultancy, and Industrial Training. There are many duplications, uncoordinated works, intersections, and no lesson learnt happening. There seem no serious effort to integrate these works to form bigger projects needed by students and lecturers for case exercises and studies. These cases can become very useful. At the same time, there are plenty of rooms to improve the faculty operations. There were some projects that did dwell on creating computerised processes but they were not properly packaged nor designed. One main factor is due to limited time allocated for each project. They are normally given one semester to be completed. Secondly, all projects are treated individually. One objective of this project is to align the research and works for building automated office systems for the faculty by coming up with research frameworks as a guide for lecturers and students. It is envisioned that each project must be adequately designed, developed, tested, documented and deployed. The questions arise are how should projects be prioritised, sequenced and approached as a group.