

INDUSTRIAL TRAINING BRIEFING

Semester 1 Session 2020/2021



OUTLINE





STUDENT RESPONSIBILITY

INDUSTRIAL PROJECT

COURSE EVALUATION

RULES AND DISCIPLINES

IMPORTANT DATES

INDUSTRIAL TRAINING PESSE CARAMAN OF Malaysia



Objective: To improve self-esteem, to develop the necessary competencies (professional, entrepreneur, information technology researcher)



Duration: Two semester

: 20 weeks in industry



Two Courses: TTTT4056 Industrial Training -Sem 1/20202021

: TTTT4076 Industrial Project - Sem 2/20202021



Learning Tracks: Industrial Readiness

: Entrepreneurship

: Integrated Master

STUDENT RESPOSIBILITY DURING INDUSTRIAL TRAINING



- 1. Self-report duty at the company
 - report on the date and time as specified in the offer letter.
 - neatly dressed, well groomed and showing a high interest in starting the training.
 - always take care of the image of UKM
- 2. Documents while reporting
 - offer letter from the company
 - matric card

STUDENT RESPOSIBILITY DURING INDUSTRIAL TRAINING UNIVERSITI KEBANGSAAN MALAYSIA The National University of Malaysia

- 3. Documents For Immediate Action After Self-Reporting
 - self report confirmation form should be delivered to HEJIM FTSM at least one weak after reporting.

4. Attendance

-Students must be present on each working day and comply with all the rules set by the company. Reasons for transportation or distant problem, cannot be accepted.

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- 5. Leave from work
 - i. Any leave application must be made directly to the employer where the student is training and a copy of the leave approval must be sent by the student to the HEJIM FTSM.
 - ii. If emergency, students should notify the company immediately and obtain a leave approval letter from the firm and send a copy to the HEJIM FTSM.
 - iii. Only medical certificate certified by a Government Medical Officer is adopted by UKM.
 - iv. Students on leave without the approval/knowledge of the employer or UKM are considered to have violated the industry training rules and actionable.



- 6. Change Company
 - -Students do not change company without permission from UKM. Any problem regarding on this matter should discuss with Faculty Supervisor first then refer to HEJIM.
 - -Will be considered only for the reason of safety or sexual harassment.
 - New company, new period.

STUDENT RESPOSIBILITY DURING INDUSTRIAL TRAINING UNIVERSITI Kebangsaan Malaysia The National University of Malaysia

- 7. Company Confidentiality
 - i. Students are strictly prohibited from disclosing any information (whether confidential or not) about company to outside parties except with the permission of that company.
 - ii. Students are also strictly prohibited from copying, printing, or photographing any document or equipment that is considered confidential by the company without the permission of the company.
 - iii. UKM considers that students who leak company secrets are violating rules industrial training and action can be taken on such students.

STUDENT RESPOSIBILITY DURING INDUSTRIAL TRAINING UNIVERSITI Kebangsaan Malaysia The National University of Malaysia

- 8. Dismissed From Company
 - Students who break the rules and are expelled from the company are considered violating industrial training rules and may be subject to repeat the training.
- 9. Writing Industrial Training Log Book
 - Students are required to write weekly activities in the log book. The report should be checked by the Industry Supervisor.
- 10. End of Training Confirmation
 - students are required to submit the training completion form to HEJIM after finish the training.



11. Performance Appraisal Form

- will be completed by the industry supervisor at the end of industrial training.

12. Discipline

- It is the responsibility of the student to always show high self-discipline and behavior which really symbolizes a UKM student.

The do's and don'ts during training Kebangsaan Malaysia https://www.snagajob.com/resources/the-dos-and-donts-tolais-spainternishing

Do's

- 1. Do ask tons of questions
- 2. Do be honest
- 3. Do be friendly and try to talk to everyone
- 4. Do be on time
- 5. Do take advantage of all the internship has to offer

Don'ts

- 1. Don't be a know-it-all
- 2. Don't talk about anyone negatively
- 3. Don't have a bad attitude
- 4. Don't expect to be hired
- 5. Don't be afraid to take initiative

Industrial Project



The industrial project is a compulsory course for the study program that needs to be implemented to meet the graduation requirements. Industry projects provide space for students to apply the knowledge, concepts and skills acquired throughout their studies. In addition, students can demonstrate their ability in realizing ideas, creativity and innovation while solving real industry problems. Throughout the implementation of industrial projects, students are guided by supervisors to explore new knowledge and skills. A project report according to the format needs to be sent to the faculty and student achievement will be assessed according to the prescribed assessment methods and formats.

TYPE OF INDUSTRIAL PROJECT



- ☐ System/Apps/Webs Development
- ☐ System/Webs Enhancement
- ☐ Product/Software Assessment
- ☐ System Study
- ☐ Network Development
- ☐ Product /Software Deployment
- ☐ Software Maintenance
- ☐ System Documentation

Definition of Project Categories



System Development

System development involves the process of defining, designing, testing and implementing a new software application or program. It could include the internal development of customized systems, the creation of database systems, or the acquisition of third party developed software.

System Enhancement

System enhancement involves any product change or upgrade that increases software or hardware capabilities beyond original client specifications. Enhancements allow software and hardware product performance scalability. In general, product enhancements include: additional functionality, error/bug repair, increased processing speed, or better cross-platform compatibility.

Definition of Project Categories UNIVERSITI Kebangsaan Malaysia The National University of Malaysia

Product/Software Assessment

During a product/software assessment, the fit between the product/software and the users' needs of that product/software are determined. This fit concerns both explicit and implicit needs about the product/software. This is often referred to as 'product/software quality'. By on the one hand examining the needed level of product quality, and on the other hand examining whether a product meets that level of quality, fitness for use is evaluated. This can be done during several phases of development and use, which results in increased control during the transformation from investment decision to actual implementation.

Definition of Project Categories MALAYSIA The National University of Malaysia

System Study

A detailed study to determine whether, to what extent, and how automatic data-processing equipment should be used; it usually includes an analysis of the existing system and the design of the new system, including the development of system specifications which provide a basis for the selection of equipment.

During this process, data are collected on the available files, decision points and transactions handled by the present system. Interviews, on-site observation and questionnaire are the tools used for detailed system study. Using the following steps it becomes easy to draw the exact boundary of the new system under consideration:

- -Keeping in view the problems and new requirements
- -Workout the pros and cons including new areas of the system

All the data and the findings must be documented in the form of detailed data flow diagrams (DFDs), data dictionary, logical data structures and miniature specifications. It includes planning for the new system, analysis of requirement, system constraints, functions and proposed system architecture, prototype of the proposed system and its analysis.

Mengilham Harapan, Mencipta Masa Depan

Definition of Project Categories University Kebangsaan Malaysia The National University of Malaysia

Network Development

Network development focuses on the building, scaling and automation of networks to process data more efficiently. Core activities include enabling reliable/secure communications over unreliable/insecure channels, identifications of paths and objects through a network, managing network sharing resources among competing entities, and development of network applications.

Product/Software Deployment

Software deployment is the process of getting the product ready for market. Software deployment brings many key advantages to enterprises. Tasks like installing, uninstalling and updating software applications on each computer are time consuming. Software deployment services reduce the time and make the process error free. The software can be easily controlled and managed through deployment.

Definition of Project Categories MALAYSIA The National University of Malaysia

Software Maintenance

Software maintenance in software engineering is the modification of a software product after delivery to correct faults, to improve performance or other attributes. A common perception of maintenance is that it merely involves fixing defects.

Systems Documentation

System documentation is a vital and important part of successful software development and software engineering. Generally speaking, it is comprised of detailed language, illustrations and photos that help different people understand the software, and it is essential reference material.

System documentation includes things like source code, testing documentation and API documentation (programmers' documentation or instructions). It describes the requirements and capabilities of the software can and can't

SAMPLE OF INDUSTRIAL PROJECT

SYSTEM DEVELOPMENT



www.ukm.my

AUTOMATIC NUMBER PLATE RECOGNITION

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ABSTRACT

Automatic Number Plate Recognition eases human to detect and record vehicle number plates effectively. It is difficult to identify vehicle plate number on video since user need to monitor and record manually whenever a crime done by road users. Security also needs to manually note down each unregistered vehicle plate number for entering private area. Automatic Number Plate Recognition project is developed to provide an alternative to current primitive vehicle number plate collecting method by human. This project is able to increase the effeciency of traffic monitoring and management by cutting down the processing time. This project is developed based on Java Spring Boot Framework Web application. The records are stored by using Microsoft SQL Server database. This project uses camera and local area network for data trasmitting between system components.

APPS DEVELOPMENT



SUBARU FORESTER 2019 AR EXPERIENCE

Nor Nadia Abdullah Marzuki¹, Dr. Andrew Yew² and Dr. Khairul Akram Zainol Ariffin³

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ABSTRACT: The Subaru Forester 2019 AR Experience is an Augmented Record experience that aims to improve the buying and selling experience for the salesperson and customer. The cut and procedure is inefficient and tiresome. The objective was to create an application that will bypass the hassle catalogus and pamphlets with a more efficient and engaging tool. For the purpose of achieving a seamless experience with the application, normal user behaviours were taken into consideration. It is to transform the user experience at a user-friency environment during the selling and buying of the product. Besides, discussions with the client were directly acquire the requirements of the application. As a result, the application meets the expectation and region of the client with enhancements and updates to be made in the near future.

Keywords: Augmented Reality, Interactive Marketing, Molecular Marketing, er Experience, Extended Reality

SYSTEM STUDY WINIVERSITI Kebangsaan Malaysia The National University of Malaysia

HERO SYSTEM STUDY

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ABSTRACT: All students are required to undergo industrial training for a minimum of 20 weeks which is part of the Bachelor of Computer Science degree course. During the 20 weeks of industrial training, students are supervised by company supervisors as well as supervisors from the university. As an intern at Telekom Malaysia (TM), I was assigned to the assurance team under the Customer Experience (CX) department. I was given the opportunity to learn and make use of the systems used by the assurance team in handling their daily tasks. The project that I have conducted during the internship period was system study of the HERO system. HERO is a web-based system which receives and handles report cases regarding problems and/or complaints faced by TM customers throughout the whole country which is logged by "heroes" through the HERO mobile app. The objective of this project is to propose improvements that could be made to the current HERO system to enhance its usability and functionality. The tools used for this system study were interviews, observation and first-hand experience of using the system. The findings obtained were then presented to the stakeholders and feedbacks were given.

Keywords: HERO, system study, industrial training



Technical Report Guidelines

PROJECT TITLE (Uppercase, Bold, size 14, center)

FULL First Author (Student) 1, FULL Second Author (Company Supervisor/(s)) 2 and FULL Third Author 3 (UKM Supervisor) (Title case, Bold, size 12, center)

¹Programme, Faculty and address of first author, ²Dept and address of second author, ³ Address of third author ¹email, ²email, ³email

ABSTRACT* (Bold, uppercase, size 12, justified): Please write here the abstract which should not exceed 200 words, where you can give description of your project. Abstract should have introduction, problem, objective, method and results. (Sentence case, size 10, single spacing, justified).

*Please try to avoid using Symbols, Special Characters, or Math formula in Paper Title or Abstract

Keywords: Keywords are important words/ concepts used in your industrial project (Sentence case, size 10, single spacing, justified).

1. INTRODUCTION (PROJECT OVERVIEW)

- Brief industry background (For Industry Readiness Track)
- Introduction of the project (Project Definition/Name of the project)
- Overview the topic of the project.
- Objective(s) of the project
- Scope of the project

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2. RELATED WORKS

- Literature review regarding on the topic of the project (five articles from journal/proceeding if any).
 - Analysis of the existing technology/system/network/software/IT product/hardware/apps/webs.
 - Analysis of similar project (industry/literature).

3. METHODOLOGY

Case 1-System/Apps/Webs Development

- 3.1 Requirement analysis
 - Detailed user needs and expectation
- 3.2 System Design
 - Define using charts and table regarding the components, modules, interfaces, and data for a system to satisfy specified requirements
- 3.3 System Implementation
 - System evaluation and users' acceptance testing
 - o System installation and made operational in the production environment

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Case 2- System Enhancement

3.1 Requirement analysis

- o Detailed user needs and expectation
- 3.2 System Design
 - Define using charts and table regarding the components, modules, interfaces, and data for a system to satisfy specified requirements
- 3.3 System Implementation
 - System evaluation and users' acceptance testing
 - o System installation and made operational in the production environment

Case 3 - System Study

- 3.1 System Analysis
 - Interviews, on-site observation and questionnaire are the tools used for detailed system study.
 - All the data and the findings must be documented in the form of detailed data flow diagrams (DFDs), data dictionary, logical data structures and miniature specifications.
- 3.2 System Design
 - Based on the user requirements and the detailed analysis of a new system, the new system must be designed.
 - There are several tools and techniques used for describing the system design of the system. These tools and techniques are: Flowchart, Data flow diagram (DFD), Data dictionary, Decision table and Decision tree.

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Case 4- Product/Software/hardware assessment

- 3.1 Analysis of assessment requirements
 - Describing the objective of the assessment
- 3.2 Specification of the assessment
 - o Defining the scope and the measurement
- 3.3 Design and plan the assessment
 - o Documenting the procedure to be used by the evaluator
- 3.4 Perform the assessment
 - Obtaining result from the performing action to measure and verify the quality.

Case 5 - Network Development

- 3.1 Planning
 - o Practicability analysis
 - o Requirement gathering
- 3.2 Data Analysis
 - User-requirement analysis
- 3.3 Design
 - Simulation
- 3.4 Implementation
 - Test Plan
 - Documentation
 - Error Test



Case 6 - Product/Software Deployment

- 3.1 Planning the Deployment Project
 - o Illustrates the phases involved during the software deployment project
 - Commonly, IT/software deployment involves delivering of the products, installation, testing and monitoring the IT/software products.
- 3.2 Development of Deployment Activities and Roles
 - Detail out the deployment activities; include installation, testing and monitoring.
 - Specify the deployment schedule.
- 3.3 Evaluating the Deployment Project
 - Report the problems or issues arise.
 - You may use evaluation metrics.
 - Assess the efficiency and effectiveness of the deployment project.

Case 7 - Maintenance Systems and Documentation

- 3.1 Project documentation planning
 - Describe the functional of system
 - Detail the requirements and design of the document.
- 3.2 Project Document testing.
 - Identify the test plan
 - Produce the test documentation
- 3.3 End User Documentation
 - Develop system documentation.
 - Example: Installation guides and user manual

4. RESULTS AND DISCUSSION

- Project achievement
- · Results of testing and evaluation
- Comments from stakeholder regarding project achievement
- Knowledge and skills contribution
- Benefits to company
- · Suggestion to enhance the project

5. CONCLUSION

- Project summary
- Results or findings highlight
- Concluding remarks

ACKNOWLEDGEMENT

Declaration of appreciation to thank all those who have contributed to the project including project supervisor.

REFERENCES

Example

Abe, S. 2004. Fuzzy LP-SVMs for multiclass problems. ESANN'2004 proceedings - European Symposium on Artificial Neural Networks, (April), 429–434.

Cai, Y. D., Feng, K. Y., Lu, W. C. & Chou, K. C. 2006. Using Logit Boost classifier to predict protein structural classes. *Journal of Theoretical Biology*, 238, 172–176.

APPENDIX

NIVERSITI EBANGSAAN ALAYSIA

National University Ialaysia



Verification of Industry Supervisor

AYSIA	
itional Univer aysia	sity

Industry Supervisor Signature	Organization/Company Stamp
Date:	
Level of Project Achievement	
Complete	
In Progress	
Only Proposal	

Number of pages : 20 – 30 pgs

COURSE EVALUATION

COURSE EVALUATION KEBANGSAAN MALAYSIA The National University of Malaysia

TRACK	CONTENTS	EVALUATOR	MARKS (%)	STATUS
INDUSTRIAL READINESS & INTEGRATED MASTER	Industrial Training(TTTT4056) 1. Logbook 2. Performance Evaluation	Industrial Supervisor	40 60	PASS/FAIL
	TOTAL		100	
	Industrial Project (TTTT4076) 1. Progress Assessment 2. Technical Report 3. Poster Presentation (KLIK) TOTAL	Faculty Supervisor	20 50 30	GRADE A-E
ENTERPRENEUR- SHIP	Industrial Training (TTTT4056)	Industrial		
	 Logbook Performance Evaluation 	Supervisor	40 60	PASS/FAIL
	TOTAL		100	
	CMIE3016	Lecturer	100	GRADE A-E

*If a student FAIL in TTT4056 Course, it means that he/she fails for TTT4076 Course

TTTT4056



LOG BOOK (40%)

- -Ability to write weekly activities in log book.
- -Ability to maintain clear, concise and relevant entries in log book.
- -Ability to well written, readable and free from grammar/spelling mistakes.
- -Ability to provide concise and complete conclusion followed from the weekly report

STUDENT'S PERFORMANCE (60%)

- -ATTITUDE
- -COMMUNICATION SKILLS
- -ICT SKILLS
- -KNOWLEDGE
- CRITICAL THINKING AND PROBLEM SOLVING



Periodic Progress (20%)

Via email or appropriate social media. Frequency of communication between supervisor and student at least 5 times during industrial training.

- 1. Discussion of proposed solution
- 2. Discussion of solution procedure

Technical Report (50%)

- 1. Appropriate solution method
- 2. Integration of existing and current knowledge
- 3. Appropriate project design
- 4. Complete project results
- 5. Clear project summary

Presentation (30%)

- 1. Convincing presentation
- 2. Attractive presentation material
- 3. Neat appearance

KARNIVAL LATIHAN INDUSTRI & KERJAYA (KLIK)



WHAT IS KLIK – Karnival Latihan Industri dan Kerjaya OBJECTIVE

- Empowering students through the presentation of projects implemented throughout the industrial training.
- Celebrate the success of students completing industrial training as a final course at UKM.

ACTIVITIES

- *Reflection session
- Poster Presentation
- ❖ Walk-in Interview

WHEN? Semester 2





DEVELOPMENT OF TIME DASH MOBILE GAME (2D GAME) (GAMIFICATION IN WORKING PLACE)



INTRODUCTION

- Developed a mobile game from scratch using Unity Game Engine tool.
- An example of application of the gamification concept in workplace environment.
- To provide gamification medium to TM staffs to learn about time management.

TIME DASH







CONCLUSION

SKILLS GAINED

- Programming skills especially in C# (MonoDevelop) has improved.
- Learn more in depth process of game development which covers animation, programming, designing, sounds, game objects and more.
- By playing this game(gamification concept) TM staffs learn more about time management.
- For instance, they will use less of social media during their working time and only use them outside their working time.

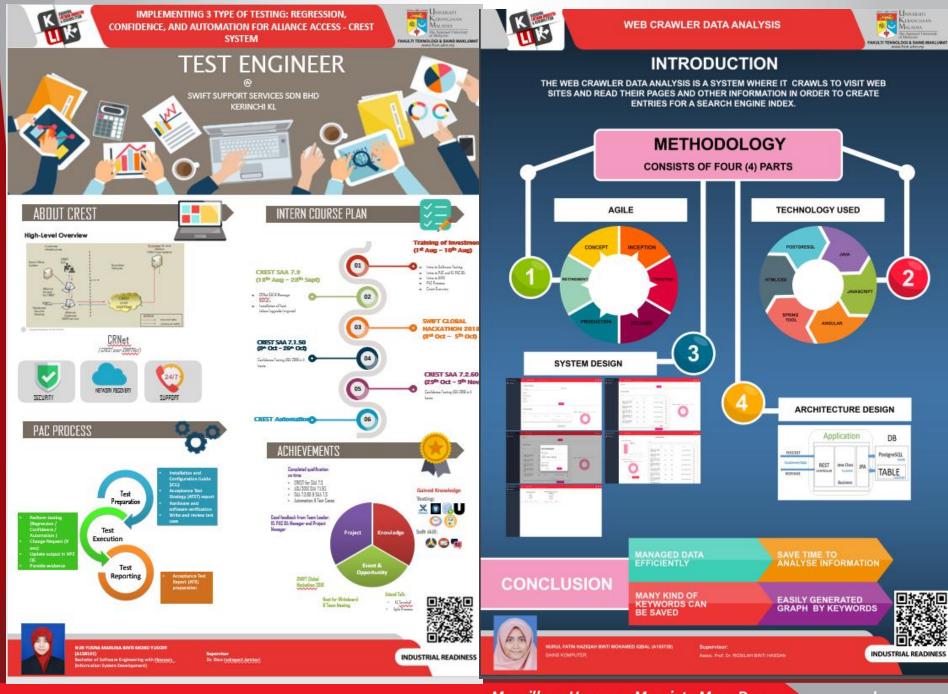




Salahuddin bin Areesur Rahman (A156357) Software Engineering (Malthreed's System Development

Dr. Ten Sick Yes

INDUSTRIAL READINESS



IMPORTANT DATE



Start of Application Placement

23 March 2020 to 15 August 2020

Start of Industrial Training

1 September 2020

End of Industrial Training

14 or 15 January 2021 (20 weeks)

Technical Report and Poster Preparation

18 Jan - 21 March 2021

Technical Report Submission

22 March - 31 March 2021

KLIK

6 APRIL 2021
(*Subject to amendment)

Submission of Technical Report Correction

12 to 18 APRII 2021

