UNIVERSITI TEKNOLOGI MARA

TECHNICAL REPORT

ASSIGNMENT PROBLEM ON EXAMINERS ALLOCATION FOR FINAL YEAR PROJECTS STUDENT BY USING HUNGARIAN METHOD APPROACH

NORFATIHAH EMIRAH BINTI ABU BAKAR – 2021102171
AINUR FARHANIE BINTI ALI – 2021100649
MIRZA AKMAL HAKIM BIN MOHD RIZAL - 2020492686
(P41M23)

Report submitted in partial fulfillment of the requirement
for the degree of
Bachelor of Science (Hons.) (Mathematics)
Bachelor of Science (Hons.) (Management)
College of Computing, Informatics and Mathematics

AUGUST 2023

ACKNOWLEDGEMENTS

IN THE NAME OF ALLAH, THE MOST GRACIOUS, THE MOST MERCIFUL

Firstly, Alhamdulillah to Allah the Almighty for giving us His blessings that have helped us in completing this study. Without His help, we would have been lost. We would like to express our heartfelt gratitude to all those who have contributed to the successful completion of this final year project. Without their support, encouragement, and guidance, this study would not have been possible. We would like to acknowledge the great supervision by our research supervisor, Dr. Rossidah Wan Abdul Aziz for her expert guidance, invaluable advice, patience, and encouragement throughout these two semesters. Their constant support, insightful feedback, and patience have been instrumental in shaping this project and enhancing its quality. Also, without the amazing assistance of Puan Nur Lina Abdullah and Puan Noraimi Azlin Mohd Nordin, our lecturers who gave us essential guidance and advice throughout our MSP660 consultations from week one until week fourteen, our study would not have been successfully completed. We are also grateful for the advice and support from our teammates. It is a blessing to have a good team that always has our back when we are out of ideas. Special thanks to all our colleagues and friends, especially our classmates for all their assistance given and their encouragement that had motivated us in completing this assignment. Their motivation, encouragement, and discussions have been invaluable in overcoming challenges and refining my ideas. We owe our greatest debt and most heartfelt thanks to our beloved families, especially our parents for their unconditional support. Without their prayers, we would not be able to be where we are now.

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ABSTRACT

The final year project is an integral part of the academic curriculum at University Technology MARA (UiTM) and serves as a culminating experience for students pursuing each undergraduate degree. This acts as a capstone opportunity for those seeking undergraduate degrees. It was difficult to allocate examiners based on their areas of expertise; therefore, systematic scheduling was needed to optimize examiners' allocation for the evaluation of final year projects. This study gives the allocation of examiners for final year projects (FYP) in the College of Computing, Informatics and Mathematics at UiTM Seremban. The purpose of this study is to analyze examiners data based on the area of expertise using qualitative analysis and to optimize the allocation of examiners based on their areas of expertise and students' project topics using the Hungarian algorithm. The Hungarian Method was used to find the optimal solution using data from the lecturer's expertise. The results that were obtained from surveying and interviewing lecturers were used to find and rate examiners' expertise and the Hungarian method was formulated. The results were presented in the form of charts that show the expertise of lecturers in five categories which are pure mathematics, mathematics management, applied mathematics, financial mathematics, and fuzzy mathematics. The results were compared to manual results from the previous semester as it showed the accuracy of the mathematical model used. This study was helpful in allocating the right examiners based on their field expertise. Additionally, this study could serve as a guideline for other researchers to study the problem of examiner allocation.