UNIVERSITI TEKNOLOGI MARA

TECHNICAL REPORT

PARKING SPACE OPTIMIZATION USING BINGLE'S PARALLELOGRAM CONCEPT

(P23S19)

NUR SUHAILAH BINTI MOHD NAZAR (2017377149)
FATIN NORATIKAH BINTI MISRAN (2017757305)
NAZATUL LIYANA BINTI BAJURI (2017581453)

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ABSTRACT

Parking had always become the major problem to the society, particularly in urban area or city. Economic growth influences the increase in the number of car, which is the possible cause for the congested car parking. Therefore, this project was done to overcome the problem by identifying the factors which lead to limited parking space. In this project, the parallelogram concept was used to optimize the number of parking space. Parking area of McDonald's & Mc Cafe Seremban Gateway parking space was chosen for this project. The width, the length and the angle of the parking space was considered to ensure the measurement for the each parking is appropriate. The suitable measurement was important in order to optimize the number of parking space in a limited space. In this project, the angle of the parking is vary depending on the width and the length of parking space. However, the number of parking space obtained from standard angle 45°, 60° and 90° was also considered. As a conclusion, the parallelogram concept might optimize the number of parking space. On the other hand, the width, W, the length, L, and the angle of parking space were significant factors to influence the increase in number of parking space. The result can be obtain through the Bingle's parallelogram model by substituting the related data and angle.