INDUSTRIAL TRAINING REPORT

AT

PETRONAS

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ABSTRACT

There are many approached to model an elevator routing system. In this study, some literature is shortly described, wherein different traffic categories and elevator policy types are presented. In the simulation approach, zoning is often used to model the elevator routing system. Zoning means that the floors are split into a number of zones, each consisting of a group of floors. Different zones are served by different elevators. Dynamic zoning can reduce passenger waiting times in high-rise buildings. Therefore, three types of elevator policies are chosen. In the presented model, the elevators of three policies are considered that are carrying passengers from the ground floor to higher floors in PETRONAS Twin Towers, Vista Tower, and G Tower. Four different elevators traffic (up-peak, normal, inter-floor, and down-peak), with three different elevator policies (zoning odd/even, zoning low/high, and no zoning) are compared on their performance (waiting times). Analysing the results tends to the conclusion that using zoning policies in such high-rise buildings is preferable above a policy without zoning. Furthermore, the conclusion that can be made from the results obtained is instead of the other traffic categories, the normal traffic perform the best.

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