

SHANGHAI JIAO TONG UNIVERSITY

The analysis and simulation of queuing system in two fast food chain

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course ICE-6502

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ABSTRACT

Fast food restaurants are popular among working adults and students who value the conducive environment and its convenient services. As such, fast food chain like McDonald's (MCD) and Kentucky Fried Chicken(KFC) are available in most places including shopping complex, office area and university cafeteria in Malaysia. They introduce promotions value meal time to time, resulting occasional long queues and inconvenient waiting times. Besides, the two chain also have different type of queuing system which the former uses a number queue system and the latter uses a First-in-first out style queuing system. The purpose of this study is to create a queuing simulation and determine which of them have a more efficient system using stochastic and queuing theory.

1. INTRODUCTION

Introduction, background to research, overview of research, aims and objectives, terms of reference, key research questions

- Want to study the queuing system in two fast food chain affect the efficiency
- Mc Donalds is using the ticketing system where the customer order food from two counter and get a ticket while the cook prepare the food. KFC use a first in first out method where the cashier gets the order from the customer, send it to the kitchen and then the customer pays only when they receive the food.

Your final Report should be no longer than 8,000 words. The word limit applies to the main text area only, as this is where your report is introduced and then carried forward. Your final word-count should not include: title page, synopsis, acknowledgements, list of contents, notation (if applicable), references, bibliography or appendix/appendices. Shorter Reports are allowed depending on the nature of the research (for example some mathematical and statistical projects are usually shorter than qualitative projects). Reports longer than 8,000 words will be penalised.

If the Report is to contain a considerable number of tables and figures, it may be best to place them in an appendix and use in the main text only such summary tables or charts as will assist the reader in following your arguments without necessarily having to go into great detail. This may help to ensure a smooth and uninterrupted presentation.

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2. MATERIAL AND METHODS

2.1. Material and Methods

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3. RESULTS

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4. DISCUSSION

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5. CONCLUSION

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6. REFERENCES

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