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# Inventory Management System

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B.Sc.(Hons) in Software Development

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**Final Year Project**

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# About this project

**Abstract** This paper aims to provide a technical understanding about computerized inventory management systems; the various implementations of, and the technologies used within these systems. Modern businesses can utilize the latest technologies for their warehouses to help:

- analyze trends or patterns through inventory flow
- reduce instances where stock is too low or high, and reduce instances where there is no stock
- increase in accuracy and fulfillment of orders with relation to picking, packing, and shipping a customers order
- provide a deeper understanding of customer demand for your products

The significance of this study will redound to the benefit of consumers that utilize such systems, especially since businesses are faced with the problem of getting products and services to their costumers quickly and responsively. The demand for better customer experiences, justifies the purpose to evaluate the current technologies already available. Thus, businesses that integrate these technologies and solutions can create stronger customer experiences, through the tight integration of their web platforms and enterprise resource planning systems. For the researcher(s), this study will help advance our knowledge and evaluate the approach with which to take when determining which technologies are best integrated with one another when developing inventory management systems. Thus, a new implementation or integration for these systems may be established.

## Authors

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# Chapter 1

## Introduction

The introduction should be about three to five pages long. Make sure you use references [1]

# Chapter 2

## Context

- Provide a context for your project.
- Set out the objectives of the project
- Briefly list each chapter / section and provide a 1-2 line description of what each section contains.
- List the resource URL (GitHub address) for the project and provide a brief list of the main elements at the URL.

### 2.1 Filler

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## 2.2 Filler

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# Chapter 3

## Methodology

About one to two pages. Describe the way you went about your project:

- Agile / incremental and iterative approach to development. Planning, meetings.
- What about validation and testing? Junit or some other framework.
- If team based, did you use GitHub during the development process.
- Selection criteria for algorithms, languages, platforms and technologies.

Check out the nice graphs in Figure 3.2, and the nice diagram in Figure ??.

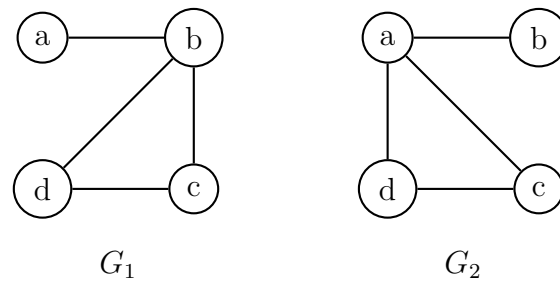


Figure 3.1: Nice pictures





Figure 3.2: Nice pictures

# Chapter 4

## Technology Review

About seven to ten pages.

- Describe each of the technologies you used at a conceptual level. Standards, Database Model (e.g. MongoDB, CouchDB), XML, WSDL, JSON, JAXP.
- Use references (IEEE format, e.g. [1]), Books, Papers, URLs (timestamp) – sources should be authoritative.

### 4.1 XML

Here's some nicely formatted XML:

```
<this>
  <looks lookswat="good">
    Good
  </looks>
</this>
```

# Chapter 5

## System Design

As many pages as needed.

- Architecture, UML etc. An overview of the different components of the system. Diagrams etc... Screen shots etc.

Column 1	Column 2
Rows 2.1	Row 2.2

Table 5.1: A table.

# Chapter 6

## System Evaluation

As many pages as needed.

- Prove that your software is robust. How? Testing etc.
- Use performance benchmarks (space and time) if algorithmic.
- Measure the outcomes / outputs of your system / software against the objectives from the Introduction.
- Highlight any limitations or opportunities in your approach or technologies used.

# Chapter 7

## Conclusion

About three pages.

- Briefly summarise your context and ob-jectives (a few lines).
- Highlight your findings from the evalua-tion section / chapter and any opportuni-ties identified.

# Bibliography

- [1] A. Einstein, “Zur Elektrodynamik bewegter Körper. (German) [On the electrodynamics of moving bodies],” *Annalen der Physik*, vol. 322, no. 10, pp. 891–921, 1905.