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# Food Ordering System for the GMIT Catering Company

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**Final Year Project**

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# About this project

**Abstract** We set out to create a food ordering system for the GMIT Catering Company (known henceforth as the company). The basic structure is a mobile application (henceforth known as mobile app) for Android and iOS that the user interacts with, and a server (henceforth known as web app) that the staff can log into in order to view transactions, user details and to update the mobile app.

The reason such a system is needed is that queues during peak times tend to be enormous and currently it's hard to service all the customers.

Another reason is to encourage customers to get into a habit of repeat ordering, if it is an easy process then it should increase purchases.

Lastly, the company wants to increase presence and promotion in the college, in order to achieve this end we have implemented push notifications where staff can send a notification to all users. On top of this the mobile application itself serves as a promotional device, containing details of various aspects of the company.

The components contained within the mobile app include pages for login, registration, about the company and user details. There is also a way to top up and order sandwiches. A huge emphasis is put on design for this project, using the company's colour theme and creating a nice icon. This mobile app was created using the Ionic Framework which is programmed primarily using the AngularJS framework.

The components contained within the web app include many pages such as the login system, orders, stock, user details, vouchers (for adding credit to your account), settings (collection and opening times) and accounts (staff) pages. This web app was created in PHP using Zend Framework 2. Most of the information on the web app is reflected on the mobile app.

The two applications talk to each other via JSON over HTTP Get and Post requests.

We set out to create a well thought out, carefully designed, robust food ordering system using modern technologies.

**Authors** Ronan Connolly & Vladislav Marisevs are the authors of this project.

We thought out, designed and carefully laid out this project into many smaller components. Ronan was in charge of creating all aspects of the user facing mobile app. Vladislav was in charge of creating all aspects of the staff facing web app. We spent most of our shared time coming up with the overall architecture we would implement, and an interface to be used between mobile and web app for transfer of data. We used an agile structure where we had certain components we needed complete by specific dates. We had various meetings each month with our supervisor and several members of the company.

**Acknowledgements** We would like to acknowledge and thank our supervisor Dr John Healy for all the time and effort he has put into helping us throughout this project, he gave us a good structure and set milestones for us in order to keep on top of things.

We'd also like to thank the GMIT Catering Company staff for the time spent meeting with us in order to continuously improve and adapt the project.

# Chapter 1

## Introduction

# 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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# Chapter 3

## Methodology

About one to two Page 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.

# 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.