

# Final Report

<Full title of project>

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Submitted in accordance with the requirements for the degree of  
BSc Computer Science (Digital & Technology Solutions)

2022/23

COMP3932 Individual Project

The candidate confirms that the following have been submitted.

Items	Format	Recipient(s) and Date
Final Report	PDF file	Uploaded to Minerva (DD/MM/YY)
PDF file / file archive	Uploaded to Minerva (DD/MM/YY)	<Example> Scanned participant consent forms
<Example> Link to online code repository	URL	Sent to supervisor and assessor (DD/MM/YY)
<Example> User manuals	PDF file	Sent to client and supervisor (DD/MM/YY)

The candidate confirms that the work submitted is their own and the appropriate credit has been given where reference has been made to the work of others.

I understand that failure to attribute material which is obtained from another source may be considered as plagiarism.

(Signature of Student) \_\_\_\_\_

## Summary

<Concise statement of the problem you intended to solve and main achievements (no more than one A4 page)> This project involves the development of a recommendation system to provide recipe recommendations for users, accounting for their tastes and properties of the recipes they engage with.

## **Acknowledgements**

<The page should contain any acknowledgements to those who have assisted with your work. Where you have worked as part of a team, you should, where appropriate, reference to any contribution made by other to the project.>

Note that it is not acceptable to solicit assistance on ‘proof reading’ which is defined as the “the systematic checking and identification of errors in spelling, punctuation, grammar and sentence construction, formatting and layout in the test”; see

[https://www.leeds.ac.uk/secretariat/documents/proof\\_reading\\_policy.pdf](https://www.leeds.ac.uk/secretariat/documents/proof_reading_policy.pdf)

# Contents

# Chapter 1

## Introduction and Background Research

### 1.1 Introduction

<A brief introduction suitable for a non-specialist, *i.e.* without using technical terms or jargon, as far as possible. This may be similar/the same as that in the 'Outline and Plan' document. The remainder of this chapter will normally cover everything to be assessed under the 'Background Research' criterion in the mark scheme.>

Here is an example of how to cite a reference using the numeric system [?].

This project relies heavily on the use of unstructured text in determining its recommendations. Therefore, methods are required to process this unstructured text to extract meaning, allow for insightful recommendations to be made. The field of natural language processing is chiefly concerned with problems relating to processing natural, unstructured text.

### 1.2 Literature review

#### 1.2.1 Natural language processing and text vectorization

- What is natural language processing? The domain of natural language processing aims to make computers interpret statements written in human languages. ?? - What is text vectorization? - Why does it need to be performed?

#### 1.2.2 Recommendation systems

# Chapter 2

## Methods

<Everything that comes under the ‘Methods’ criterion in the mark scheme should be described in one, or possibly more than one, chapter(s).>

### 2.1 A section

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#### 2.1.1 A sub-section

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### 2.2 Another section

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# Chapter 3

## Results

<Results, evaluation (including user evaluation) *etc.* should be described in one or more chapters. See the ‘Results and Discussion’ criterion in the mark scheme for the sorts of material that may be included here.>

### 3.1 A section

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#### 3.1.1 A sub-section

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### 3.2 Another section

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# Chapter 4

## Discussion

<Everything that comes under the ‘Results and Discussion’ criterion in the mark scheme that has not been addressed in an earlier chapter should be included in this final chapter. The following section headings are suggestions only.>

### 4.1 Conclusions

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### 4.2 Ideas for future work

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# Appendix A

## Self-appraisal

<This appendix should contain everything covered by the 'self-appraisal' criterion in the mark scheme. Although there is no length limit for this section, 2—4 pages will normally be sufficient. The format of this section is not prescribed, but you may like to organise your discussion into the following sections and subsections.>

### A.1 Critical self-evaluation

### A.2 Personal reflection and lessons learned

### A.3 Legal, social, ethical and professional issues

<Refer to each of these issues in turn. If one or more is not relevant to your project, you should still explain *why* you think it was not relevant.>

#### A.3.1 Legal issues

#### A.3.2 Social issues

#### A.3.3 Ethical issues

#### A.3.4 Professional issues

# Appendix B

## External Material

<This appendix should provide a brief record of materials used in the solution that are not the student's own work. Such materials might be pieces of codes made available from a research group/company or from the internet, datasets prepared by external users or any preliminary materials/drafts/notes provided by a supervisor. It should be clear what was used as ready-made components and what was developed as part of the project. This appendix should be included even if no external materials were used, in which case a statement to that effect is all that is required.>