**Project <PROJECT\_NAME>**

**Student Name and ID**

(email)

Use a splash page image here [optional]

Use *LaTeX* if you wish, but use the general spacing and font/style you find here (1.5 spacing, 12 point font for text, etc.).

Be sure to submit a PDF (not a .DOC file) as your report. Overall it should be **30 pages or more**, including diagrams and screenshots. A significant portion of the report should be textual. Do not rely on images to write your report for you.

**Remember**, your project this year concerns a book recommender engine for a major online book seller. Your database is intended to support the workings of a bookseller’s catalogue and recommendation system. You are NOT asked to build a recommender engine! Rather, identify the role of the database in the overall application, and tell us how you would support the application at the SQL level.

**What to submit**: This report, as a PDF, *and* the necessary SQL files to allow us to examine your database constructs and test your queries.

**Table of Contents**

Section 1: Section Heading ……………………………………………………………….. 1

Section 2: Section Heading ……………………………………………………………….. 2

Section 3: Section Heading ……………………………………………………………….. 3

Section 4: Section Heading ……………………………………………………………….. 4

Section 5: Section Heading ……………………………………………………………….. 5

Section 6: Section Heading ……………………………………………………………….. 6

Section 7: Section Heading ……………………………………………………………….. 7

**List of Figures**

Figure 1: Figure Caption ……………………………………………………………….. 1

Figure 2: Figure Caption ……………………………………………………………….. 2

Figure 3: Figure Caption ……………………………………………………………….. 3

Figure 4: Figure Caption ……………………………………………………………….. 4

Figure 5: Figure Caption ……………………………………………………………….. 5

Figure 6: Figure Caption ……………………………………………………………….. 6

**1. Introduction**

Introduce your vision of the project here. Describe the domain of the project, and the intended application. Characterize the nature and scale of the data you are working with. What role does your database design play within the larger system (as the database will not do everything, please say what you think it *should* do).

**2. Database Plan: A Schematic View**

In this section offer a high-level view of the database and its design. State what you think the principal entities are, as well as their main attributes and the key relations that connect them. Provide an E-R diagram to show your plan. Motivate your design – why this way and not another.

**3. Database Structure: A Normalized View**

Describe the main tables in your database and the role played by each. Show that your database is in 1NF, 2NF and 3NF normal form. Is your database also in BCNF normal form? If so, explain how and why.

**4. Database Views**

What views do you provide onto your database? Justify each and define them here. Explain what each view is supposed to provide, and to whom it provides it. Is it wise or necessary to represent a certain relation as an SQL view?

**5. Procedural Elements**

Does your design employ procedural extras such as database triggers (in PL/SQL or the MySQL equivalent format)? If so, describe and motivate each. If your design does not contain procedural extras, explain why, and say how you were able to do without these additions.

**6. Example Queries: Your Database In Action**

Your database will provide a structure for the data in the application, and means of accessing and viewing that data. In this section show us the database in action, by providing sample queries and their outputs (please do not provide large data sets as outputs; edit and summarize as appropriate). Provide specific queries to test on your database, and tell us what those queries provide to the application. Use your existing books database as the basis for your queries and their results. If your query makes reference to additional tables (e.g., a customers table) then provide example rows of this table in section 3.

You may use screenshots here but do not overfill your report with screenshots. Ensure that there is a cohesive argument expressed in the text of the report and that it is not simply a bag of diagrams and queries and screenshots. When you include images, make sure they are readable and actually add to the discussion.

**7. Conclusions**

Provide any concluding thoughts here. How might you build on this work for the future? How might your database support future developments?

**Acknowledgements**

Name check any person who helped you with this work. Acknowledge that the work is entirely your own, and that every sentence in this report was written by you and you alone. If you wish to quote another person or piece of work, place the quoted work in quotation marks and cite the author inline. Plagiarism is a very serious infraction that must be dealt with severely. Avoid any ambiguity on this point by citing things carefully!

**References**

List any bibliographical citations here [for people and work that you quote/cite in the main text of your report]