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School of Computer Science

Faculty of Engineering

**COMP9120 ASSIGNMENT COVERSHEET - GROUP ASSESSMENT**

**Assignment name:**

Sydney Music

**DECLARATION**

We the undersigned declare that we have read and understood the [*University of Sydney Academic Dishonesty and Plagiarism in Coursework Policy*](https://www.sydney.edu.au/policies/default.aspx?mode=glossary&word=Academic+honesty), an, and except where specifically acknowledged, the work contained in this assignment/project is our own work, and has not been copied from other sources or been previously submitted for award or assessment. We understand that failure to comply with the *Academic Dishonesty and Plagiarism in Coursework Policy* can lead to severe penalties as outlined under Chapter 8 of the *University of Sydney By-Law1999* (as amended). These penalties may be imposed in cases where any significant portion of my submitted work has been copied without proper acknowledgement from other sources, including published works, the internet, existing programs, the work of other students, or work previously submitted for other awards or assessments. We realise that we may be asked to identify those portions of the work contributed by each of us and required to demonstrate our individual knowledge of the relevant material by answering oral questions or by undertaking supplementary work, either written or in the laboratory, in order to arrive at the final assessment mark.

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| **Assignment team members** | | | | | | |
| **Student name** | **Student ID** | **Participated** | **Agree to share** | | **Signature** | |
| Xuan Tao | 550544766 | Yes | Yes | | Xuan Tao 2025-09-13 18:39:04.675000 | |
| Zhou Li | 550189305 | Yes | Yes | | Zhou Li | |
| Ruiqi Jiang | 550246619 | Yes | Yes | | Ruiqi Jiang | |
| **COMP9120 Assignment Participation Summary of Group**  [Enter Group number] | | | | | |
| *\*Note that the total of members’ participation percentage must be 100%* | | | | | |
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| Member 1 Participation Percentage:  33% | | | | | |
| Name:  Xuan Tao | | | | Student ID:  550544766 | |
| Summary of Contribution: | | | | | |
| I was mainly responsible for the conceptual data modeling. I designed and drew the complete Entity–Relationship (ER) diagram for the Sydney Music application, ensuring it followed the classroom notation. This included identifying all entities (e.g., Artist, Track, Album), relationships (e.g., Contributed, Belongs, Writes), attributes, participation, and cardinalities. I also incorporated constraints (e.g., rating range [1–5], unique playlist names per customer) and documented them in the diagram. My contribution provided the foundation for later steps, such as mapping to the relational schema and SQL implementation. | | | | | |
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| Member 2 Participation Percentage:  34% | | | | | |
| Name:  Zhou Li | | | | Student ID:  550189305 | |
| Summary of Contribution: | | | | | |
| I was primarily responsible for transforming the ER diagram into the relational schema and implementing it in SQL. I carefully mapped all entities and relationships into tables, defined appropriate primary keys, foreign keys, and constraints, and ensured referential integrity. I wrote the complete SQL schema creation script, including CREATE TABLE statements with constraints (e.g., NOT NULL, UNIQUE, CHECK, FOREIGN KEY). Additionally, I prepared initial sample data using INSERT statements to verify correctness. My work established the database structure and ensured it was consistent with the conceptual model, enabling further testing and query development. | | | | | |
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| Member 3 Participation Percentage:  33% | | | | | |
| Name:  Ruiqi Jiang | | | | Student ID:  550246619 | |
| Summary of Contribution: | | | | | |
| I was mainly responsible for the relational data modeling. Based on the ER diagram, I mapped all entities, relationships, and attributes into relational schemas and presented them in a complete Relational Model (RM) diagram. This included defining primary keys, foreign keys, and constraints, as well as clearly showing the relationships between tables. I ensured the RM diagram was consistent with the ER model and properly documented, which provided a clear guideline for SQL schema implementation and later testing. My contribution bridged the conceptual design with the logical database structure. | | | | | |