



Curtin University

# Data Management

ISYS5002, School of Marketing and Management

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I acknowledge the traditional custodians of the land on which I work and live, and recognise their continuing connection to land, water and community. I pay respect to elders past, present and emerging.



# Flat Files

- Contain Data
- No internal hierarchy
- Human readable (usually)
- CSV – comma-separated value
- Use for data interchange
- Large files can be problem
- Relation not explicit



# Database

- Need data persistence
- Manage Relationships
- Reduce Redundancy
- Relational Database
- Query Language



# SQLite

- Python Library
- Relational Database
- Uses SQL
- CRUD



# SQLAlchemy

- Object Relations Mapper
- Map a Python model to database
- Use object model in Python
- Connect to many databases
- Abstract underlying data



# Object Serialisation

- Object Peristence
- Pickle library
- Object converted into bitstream
- Pickling -> saves to file
- Unpicklinr <- reads form file
- Maintain state across sessions

