FIT3171 Databases
Assignment 2
Group 032

Assumptions

- All phone numbers recorded for managers, branches and reserves must be a local Australian mobile number (10 characters).
- A DDC number that identifies a catalogue can reach up to 50 characters
- A local government agency code, manager ID and class ID are assumed to be a unique 4-digit number.
- Since a borrower cannot borrow multiple books at the same time, we only need the date time, borrower number, book_copy_id as the unique PK of LOAN.
- The attributes loan_borrow_datetime has a date datatype, the branch_code is 3-digit numeric value, and the book_copy_id is a 4-digit sized numeric value. Since 3 attributes make up the natural primary key, while also having differing data types and sizes, it would be recommended to utilise a surrogate key to ensure uniqueness whilst maintaining a manageable sized primary key.
- We assume that borrowers reserve a specific book copy, as described in A2 brief's process that "a given book copy may have several outstanding reserves against it" and when "the book" copy is available can the oldest reserved borrower borrow it, regardless of if other copies are available before it.