# Description of the methods

1. class Login

static LibrarianUser login\_librarian(QString login, QString password);

static PatronUser login\_patron(QString login, QString password);

return (user\_id, name, address, phone, faculty, user\_login, user\_password, check\_outs) if user with such login and password exist, otherwise NULL

1. Modify articles

bool modify\_va(int document\_id);

bool modify\_article(int document\_id);

bool modify\_book(int document\_id);

Returning true if article with that document\_id exist and modify operation is done, otherwise false

1. Delete articles

bool delete\_book(int document\_id);

bool delete\_article(int document\_id);

bool delete\_va(int document\_id);

Returns true if article is found and deleted

1. Inserting new articles

bool add\_book(QString title, QString authors, QString keywords, int price, int room, int level, int copies, bool reference);

bool add\_article(QString title, QString authors, QString keywords, int price, int room, int level, int copies, bool reference);

bool add\_va(QString title, QString authors, QString keywords, int price, int room, int level, int copies, bool reference);

Return false if same article already exist, otherwise insert that article in db and return true

1. Delete users

bool delete\_patron(int user\_id);

bool delete\_librarian(int user\_id);

Return false in user with that id is not found, otherwise delete that user from db and return true

1. Get information about users based on their user\_id

LibrarianUser get\_librarian(int user\_id);

PatronUser get\_patron(int user\_id);

Get all data about Library user with *user\_id* if such user exist, otherwise return NULL

1. Modify data about users

bool modify\_patron(int user\_id, QString name, QString address, QString phone, int patron\_type, QString login, QString password)

bool modify\_librarian(int user\_id, QString name, QString address, QString phone, QString login, QString password)

It will return false if user don't exist in the data base, otherwise retruns true and replaces old data with this given as input parameters

1. Adding new users

void add\_librarian(QString name, QString address, QString phone, QString login, QString password)

void add\_patron(QString name, QString address, QString phone, int patron\_type, QString login, QString password)

Insert input parameters into db

1. Get the list of users which satisfy given conditions

QVector<LibrarianUser> search\_librarians(int user\_id, QString name, QString address, QString phone, bool or\_and)

QVector<PatronUser> search\_patrons(int user\_id, QString name, QString address, QString phone, int patron\_type, bool or\_and)

Get users with: this.user\_id = user\_id and/or

this.name = name and/or

this.adress = addres and/or

this.phone = phone

1. Returning articles

std::pair<int, int> return\_va(int check\_out\_id)

std::pair<int, int> return\_article(int check\_out\_id)

std::pair<int, int> return\_book(int check\_out\_id)