

storage structure of BOOK and READER		variables
BOOK	READER	
<div>-bID: int</div> <div>-title: string</div> <div>-author: string</div> <div>-price: double</div> <div>-year: int</div> <div>-publisher: string</div>	<div>-sID: string</div> <div>-title: string</div> <div>-author: string</div> <div>-price: double</div> <div>-year: int</div> <div>-publisher: string</div>	<div>vector<Book> books;</div> <div>vector<Reader> readers;</div> <div>map<int, int> borrow_status;</div> <div>const string book_filepath = "book.txt";</div> <div>const string reader_filepath = "reader.txt";</div> <div>const string borrow_filepath = "borrow.txt";</div>
<div>+ Book</div> <div>(int input_bID,</div> <div>string input_title,</div> <div>string input_author,</div> <div>double input_price,</div> <div>int input_year,</div> <div>string input_publisher)</div> <div>+get_bID(): int</div> <div>+get_title(): string</div> <div>+get_author(): string</div> <div>+get_price(): double</div> <div>+get_year(): int</div> <div>+get_publisher(): string</div>	<div>+ Reader</div> <div>(int input_sID,</div> <div>string input_name,</div> <div>string input_gender,</div> <div>double input_email,</div> <div>int input_college)</div> <div>+get_sID(): int</div> <div>+get_name(): string</div> <div>+get_gender(): string</div> <div>+get_email(): string</div> <div>+get_college(): string</div>	
Other Functions		

Main Functions	Secondary Functions
<pre> BookEntry(): void BookMessage(): void DeleteBook(): void ReaderEntry(): void ReaderEntry(int input_sID); ReaderMessage(): void BorrowBook(): void ReturnBook(): void BorrowMessage(): void CountBook(): void </pre>	<pre> consist_of_num(string str): inline bool is_email(string str): inline bool is_price(string str): inline bool is_sID_existent(int ID): bool update_file(): void delete_ID(vector<Book> &books_info, int ID): void print_GUI(): void print_success(): void print_error(string error_message, bool terminate_message = false): void start_operation(int ID): void is_file_empty(string FilePath): bool books_in_library(): int initialize_variables(): void save_BorrowInfo(): void start_BookSystem(): void </pre>