

```
// -----transaction.h-----
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// Created: 05/21/17
// Modified: 05/23/17
// -----
// Describes the ADT Transaction such that any given transaction is processed
// for any given customer can be encapsulated to be stored in a collection for
// records (history). Only the transaction type and associated Media item are
// recorded, the customer is tracked by virtue of the Transaction being in
// that customer's history.
//
// Holds what type of transaction [i.e. Borrow or Return] each customer did
// and what kind of media item is related with that transaction.
// -----
// Functionality includes:
//     - create a new Transaction
//     - copy an exist Transaction
//     - destruct a Transaction
//     - retrieve the transaction type
//     - retrieve a ptr to the assoc. Media item
//     - display Transaction details

#pragma once

#include "media.h"

class Transaction {
public:
    // -----Transaction-----
    // Transaction: creates a Transaction record.
    // preconditions: string is non-empty.
    // postconditions: Transaction created with specified trans type and
    //                  ptr to assoc. Media item.
    // -----
    Transaction(string, Media*);

    // -----Transaction-----
    // Transaction: creates a copy of the Transaction.
    // preconditions: none.
    // postconditions: a copy of the Transaction is created.
    // -----
    Transaction(const Transaction&);

    // -----Transaction-----
    // ~Transaction: destructs the Transaction and frees any assoc. memory.
    // preconditions: none.
    // postconditions: any assoc. memory is freed, object inaccessible.
    // -----
    ~Transaction() {
        // not responsible for deleting Media link
    }

    // -----getType-----
    // getType: obtains the trans type.
    // preconditions: none.
    // postconditions: trans type returned.
    // -----
    char getType() const;

    // -----getItem-----
```

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// getItem: obtains ptr to linked Media item.
// preconditions: none.
// postconditions: ptr to Media item returned, NULL if N/A.
// -----
Media* getItem() const;

// -----display-----
// display: output the Transaction details to console.
// preconditions: none.
// postconditions: Transaction details, including trans type and Media
//                  information are output to console.
// -----
void display() const {
    // output trans type
    // item->display();
}

private:
    char type;        // transaction type (borrow, return or history)
    Media* item;      // ptr to assoc. Media item
};
```