viewhelper.hpp Page 1

```
#ifndef _VIEW_HELPER_HPP_
#define _VIEW_HELPER_HPP_
#include "transaction.hpp"
#include "account.hpp"
#include "centerhelper.hpp"
void printBanner() {
 std::cout << std::setfill('-');</pre>
 std::cout << std::setw(80) << centered(R"x(------)x") << "
\n";
 std::cout << std::setw(80) << centered(R"x( ______</pre>
                                                                      ) x " ) << "
\n";
 std::cout << std::setw(80) << centered(R"x( \/
                                                                      ) x") << "
\n";
 std::cout << std::setw(80) << centered(R"x(| \ / | ___ _ _ _ _ _ )x") << "
 std::cout << std::setw(80) << centered(R"x(| | | (_) | | | __/ |_| )x") << "
\n";
 \n";
                                                                __/ )x") << "
 std::cout << std::setw(80) << centered(R"x(</pre>
\n":
                                                               ___/ ) x") << "
 std::cout << std::setw(80) << centered(R"x(</pre>
 std::cout << std::setw(80) << centered(R"x(------)x") << "
\n";
 std::cout << std::setfill(' ');</pre>
 std::cout << "\n\n\n\n\n\n\n\n\n\n";</pre>
std::string prompt() {
 std::string c;
 std::cout << "command> ";
 std::getline(std::cin, c);
 return c:
}
Transaction readTransaction(bool withdraw = false) {
 std::string account;
 long double amount;
 std::string memo;
 std::cout << std::setw(15) << std::left << "Account name" << std::right << ": ";
 std::cin >> account;
 std::cout << std::setw(15) << std::left << "Amount" << std::right << ": ";
 std::cin >> std::get_money(amount);
 std::cout << std::setw(15) << std::left << "Memo" << std::right << ": ";
 if (withdraw && amount > 0) {
   amount = -amount;
 }
 //This is needed to avoid issue after reading in a line after a
 //normal std::cin operation.
 std::cin.ignore(std::numeric_limits<std::streamsize>::max(), '\n');
 std::getline(std::cin, memo);
 trim (memo);
 Transaction t(account, amount, memo);
 return t:
Account readAccount() {
 std::string accountName;
 std::cout << std::setw(20) << std::left << "New account name" << std::right << ": ";
```

viewhelper.hpp Page 2

```
std::cin >> accountName;
 Account a (accountName);
  return a;
void deleteAccount(std::vector<Account>& accounts) {
  std::string accountName;
  std::cout << "Accounts avilable: \n";</pre>
  for (const Account& a : accounts) {
    std::cout << std::setw(30) << a.getName() << ": " << a.getTransactions().size()</pre>
      << " transactions\n";
  std::cout << std::setw(15) << std::left << "Account name" << std::right << ": ";
  std::cin >> accountName;
  //Delete the account from the vector
  for (auto it = std::begin(accounts); it != std::end(accounts); ) {
    if (std::equal(std::begin((*it).getName()), std::end((*it).getName()), std::begin(
accountName))) {
      it = accounts.erase(it);
    else {
      ++it;
    }
  }
}
void printHelp() {
  std::string line(80, '-');
  std::cout << std::setw(80) << centered("Commands") << "\n";</pre>
  std::cout << line << "\n";</pre>
  std::cout << std::setw(20) << "help" << std::setw(50) << "Print Help Message\n";</pre>
  std::cout << std::setw(20) << "new" << std::setw(50) << "Create a new account\n";</pre>
 std::cout << std::setw(20) << "deposit" << std::setw(50) << "Create a new deposit\n"</pre>
  std::cout << std::setw(20) << "widthdraw" << std::setw(50) << "Create a new withdraw"
al\n";
  std::cout << std::setw(20) << "ledger" << std::setw(50) << "Print out account ledger</pre>
\n";
  std::cout << std::setw(20) << "delete" << std::setw(50) << "Delete an account and al
l transactions\n";
 std::cout << std::setw(20) << "quit" << std::setw(50) << "Quit the program and write
 the data file \n";
  std::cout << "\n\n\n";</pre>
void addToAccount(Transaction& t, std::vector<Account>& accounts) {
  std::for_each(std::begin(accounts), std::end(accounts), [&](Account& a) {
      std::string an = t.getAccountName();
      if (std::equal(std::begin(an), std::end(an), std::begin(a.getName()))) {
        a.addTransaction(t);
      }
    });
}
void printAccountLedger(const Account& a) {
  std::string line(80, '-');
  std::ostringstream oss;
  oss << "Ledger for " << a.getName();</pre>
  std::cout << "\n\n";</pre>
  std::cout << std::setw(80) << centered(oss.str()) << "\n";</pre>
  std::cout << line << "\n";</pre>
  for (const Transaction& t : a.getTransactions()) {
    std::time_t time = t.getTransactionDate();
    struct tm* date = std::localtime(&time);
    std::cout << std::setw(20) << std::left << std::put_time(date, "%D %r");</pre>
    std::cout << std::setw(40) << std::right << t.getMemo();</pre>
```

viewhelper.hpp Page 3

```
std::cout << std::setw(20) << std::right << std::put_money(t.getAmount(), true);
    std::cout << "\n";
}

oss.str("");
oss.clear();
oss.imbue(std::locale(""));
oss << "Total: $" << std::put_money(a.balance());
std::string dashes(oss.str().size(), '-');
std::cout << std::setw(80) << dashes << "\n";
std::cout << std::setw(80) << oss.str() << "\n";
}
#endif</pre>
```