



Quick overview:

This prototype is actually based on the current text + hand scanner system now in the local library, updated to a GUI-style system

Input devices are:

keyboard + mouse

scanner pen that scans bar code numbers on books

Prototype style: Functional pull down menus

Circulate: general circulation functions

Patron update: to update information about a patron's expiry date, personal information, etc

Item update: to update information about particular holdings eg, lost + damaged books, the actual information in the holding's database record, etc

Utilities: a place to put miscellaneous functions

Quit: a single quit option

Note: I think this system is really bad, but lets see...

Circulate	Patron Update	Item Update	Utilities	Quit
Patron Status				
Fines				
Checkin				
Checkout				
Patron Search				
Reserve				

Status: No patron

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The circulate pull down menu brings up appropriate screens:

Patron status: personal information, fines, library card number, etc.

Fines: to deal specifically with a person's fines

Checkin: to check in books

Check out: to check out books

Patron search: to find a customer

Reserve: to reserve a book

Task 1

Joan, a regular and experienced library employee, is working behind the counter.

Mary, a regular library customer brings three books to the counter and asks that they be checked out.

These are: <3 books should be listed here>.

Mary does not have her library card.

Joan finds Mary library number, checks out the books for her, and reminds Mary that she has some late fines to pay.

Mary says she will pay for them next time.

Joan gives Mary the books, and Mary leaves.

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Here is the first (simple) task from last week...

Circulate	Patron Update	Item Update	Utilities	Quit
Patron Status				
Fines				
Checkin				
Checkout				
Patron Search				
Reserve				

Status: No patron

Subtask 1: Find Mary's library card number
a) Select Patron Search with the mouse...

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Assuming that the Mary brings the three books to the correct place,
and that Joan is ready:
Subtask 1. Joan finds Mary's librarycard number
a) must navigate to the search screen by selecting the patron search option

Circulate Patron Update Item Update Utilities Quit

Patron Search

Name:

Results

Status: No patron

b) enter her name

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B) enters patron's name and presses return or the search button

Circulate Patron Update Item Update Utilities Quit

Patron Search

Name:

Results: 73 matches

<i>Smith, Mandy</i>	<i>1 Apple Pl</i>	<i>Calgary</i>
<i>Smith, Marni</i>	<i>372 2nd Ave</i>	<i>Edmonton</i>
<i>Smith, Marie</i>	<i>264 5th St</i>	<i>Red Dee</i>
<i>Smith, Moira</i>	<i>35 Orchid rd</i>	<i>Red Dee</i>
<i>Smyth, Larry</i>	<i>217 9th St</i>	<i>Canmore</i>
<i>Smyth, Martha</i>	<i>217 9th St</i>	<i>Edgewat</i>

Status: Patron is Smith, Marie

*c) no exact match, so the system shows the closest matches of using all patrons on this province-wide library system. (72 matches found)
She asks the customer where she lives, and how she spells her name and selects Smith, Marie with the mouse on hearing the answer*

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c) the name was not spelled correctly, so the system returned the closes matches. The librarian can ask for further information (eg the address), and select the correct one.

Note that there are a HUGE number of possible matches, as this system returns name from the entire Alberta database. This is bad, since almost all library patrons will be just from the surrounding area I.e., of 10,000 people.

True story: the Canmore library had an old system that let people search by names, and it returned the matches in the town of Canmore. They updated it with a new GUI system, which returned names from all of Alberta. Because of the huge number of matches and the difficulty of finding people's names (we should mention that frequent visitors expected librarians to remember their complete names, but they often only remembered a part of it but were embarrassed to ask for the rest) the library instituted a policy were customers were heavily encouraged to bring in their library cards. Thus a small computer glitch meant that librarians had more work, were sometimes embarrassed because it was clear they could not remember part of a person's name (e.g., a first name) and *all* library customers now had to carry a card with them.

Circulate	Patron Update	Item Update	Utilities	Quit
Patron Status				
Fines				
Checkin				
Checkout				
Patron Search				
Reserve				

Status: Patron is Smith, Marie

Subtask 2: Checking out the books
a) Marie is now the active patron, and the Checkout option is selected

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The name appears on the status bar (note that the system is moded!)

So the librarian has to navigate to the checkout screen by selecting the checkout option

Circulate Patron Update Item Update Utilities Quit

CHECKOUT

Title	Author	Number	Due
Godel, Escher and Bach	Hofstadter	3456321-117	7-7-98
Human-Computer Inter	Baecker, Gr	3654351-998	7-7-98

Status: Patron is Smith, Marie

b) she scans in the books one at a time,
but the third book's bar code doesn't seem to want to scan

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As the books are scanned in, they appear in a list.

This kind of error (probably due to a dirty bar chart) is reasonably common

Circulate Patron Update Item Update Utilities Quit

Updates
Manual scan

CHECKOUT

Title	Author	Number	Due
Godel, Escher and B Human-Computer Ir			

Type the bar code number:
3425932-990

Status: Patron is S Okay

c) she goes to manual scan, and types the number into a dialog box

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Note the extra sequence of steps: a new menu selection, and this awkward number must be typed.

Circulate Patron Update Item Update Utilities Quit

CHECKOUT

Title	Author	Number	Due
Godel, Escher and Bach	Hofstadter	3456321-117	7-7-98
Human-Computer Inter	Baecker, Gr	3654351-998	7-7-98
Life on the Screen	Turkle	3425932-990	7-7-98

Status: Patron is Smith, Marie

d) And verifies that it is the correct book,
Note: what would she have to do if she had mis-typed it?]

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If what she typed was wrong, she now has to repeat the previous process.

Note that bar codes may be dirty, with numbers sometimes hard to read (e.g., ripped).

Why is there no way to (say) enter the title/author?

Circulate	Patron Update	Item Update	Utilities	Quit
Patron Status				
Fines				
Checkin		Author	Number	Due
Checkout	d Bach	Hofstadter	3456321-117	7-7-98
Patron Search	Inter	Baecker, Gr	3654351-998	7-7-98
Reserve	en	Turkle	3425932-990	7-7-98

Status: Patron is Smith, Marie

Subtask 3: Check fines
a) *Select Fines...*

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The librarian now has to navigate to a different screen to check for fines.

You may want to say that this is a bit heavy-weight and the Librarian may not be motivated to do this. Is there a better way to indicate that fines are due?

Circulate	Patron Update	Item Update	Utilities	Quit
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Fines

Title:	Due	Returned	Amount
The Tao of Poo	8/3/98	20/3/98	1.20
All That Jazz	6/4/98	17/4/98	1.35
Chopin, Tape 1	4/5/98	1/5/98	1.50
Chopin, Tape 2	4/5/98	1/5/98	1.50
Chopin, Tape 3	4/5/98	1/5/98	1.50
Chopin, Tape 4	4/5/98	1/5/98	1.50

ENTER AMOUNT PAID: 0.00

Status: Patron is Smith, Marie

b) She sees fines, adds them up in her head, and reminds the patron about the outstanding amount of \$8.55. The patron says she will pay later, so she types in 0.00, presses return, which then returns back to the home screen. She gives her the books

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Everything is itemized on the fine page.

Why does she have to calculate the fines in her head?

Why does the system insist on her typing in the amount of the fine, even when it is 0?

Note that at the end, the system returns to the home screen. What if that patron wanted further information or decided to do something else? The librarian would have to repeat this process...

Major concern from the walk-through

Librarian had to navigate to too many screens to do this simple task

- the flow from start to end was poor,
- librarian as had to navigate and work with three screens to do a very routine checkout task

Some sub-dialogs awkward

- Why do searches so all of Alberta instead of the local area?
- Why can't she type the bar code directly on the screen, and see the results immediately?
- Why does she have to go to a separate screen to see the fines, why does she have to sum the fines up herself, and why does she have to enter 0 to get out of that screen?

Heavy functional emphasis indicates high level of practice and training required

Note: This looks like a cosmetic GUI over an old text-based system

- adding menus, etc doesn't seem to help

Suggests major redesign

- can functions be integrated on a single screen?
- can the design be simplified?

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