UX V1.1

Apr 2016
By Prof Bill and VP UX Jennifer D

/* Please note: This is Version 1.1 */

This document describes the user experience (UX) for the CSC 395 Odyssey Pickup Manager ® for Sharing Connections. As the system is web-based, the description will rely, primarily, on screen mockups and doodles of web pages along with notes explaining what you are seeing.

The sections of this document are:
1. Introduction
2. Login Screens
3. Home/Pickup screens
4. Schedule screens
5. Report screens
6. Admin screens
7. Further UX notes and explanations

A. Appendix A: Screen Index

Comments? Questions? **Feedback is most welcome.**
Please post on the #ux channel in Slack or email Prof Bill: wtkrieger@noctrl.edu.
Thanks!

1. Introduction

Note: The current Sharing Connections process for handling donations and pickups is posted on our #ux channel in Slack.

We envision these user types:
- ➢ **Receptionist** - This is an entry-level user that only adds new, unscheduled pickups. This user only has access to this function in the system.
- ➢ **Scheduler (Cindy)** - This an advanced user who processes unscheduled pickups, calling donors, and then either rejecting the pickup or scheduling it.
- ➢ **Truck guy (Dennis)** - This user needs a report of pickup locations. He also needs to be able to reject or cancel a pickup.
- ➢ **Database person (Maria)** - This user extracts donor information about once a month. The information is fed, as a CSV file, into Sharing Connections' official donor database.
- ➢ **Admin (Ryan)** - This user can add or remove users to the system. He/she is also called on in cases of forgotten passwords.

There are 5 major screen areas:
1. Login - first screen, and screens dealing with forgotten passwords
2. Home - second screen lists unscheduled pickups bullpen, new and edit pickups
3. Schedule - a list of pickup days for the truck, a way to add new pickup days
4. Admin - screens to add and remove users, reset passwords
5. Report - export donor data to CSV, printable truck guy report, and more

Screens and their explanations are organized by these major areas in the following sections.
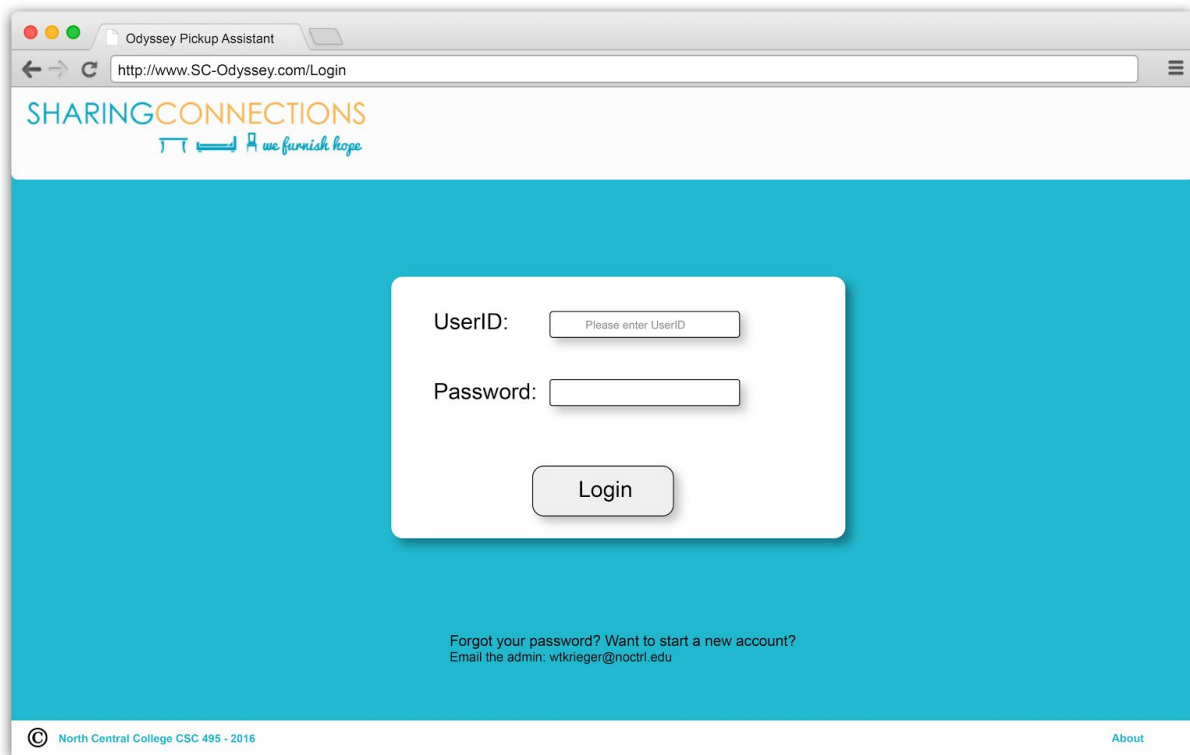
2. Login Screens

Login is simple… one screen:
> Login.1 - the first screen all users see, used to login

Login.1 - the first screen

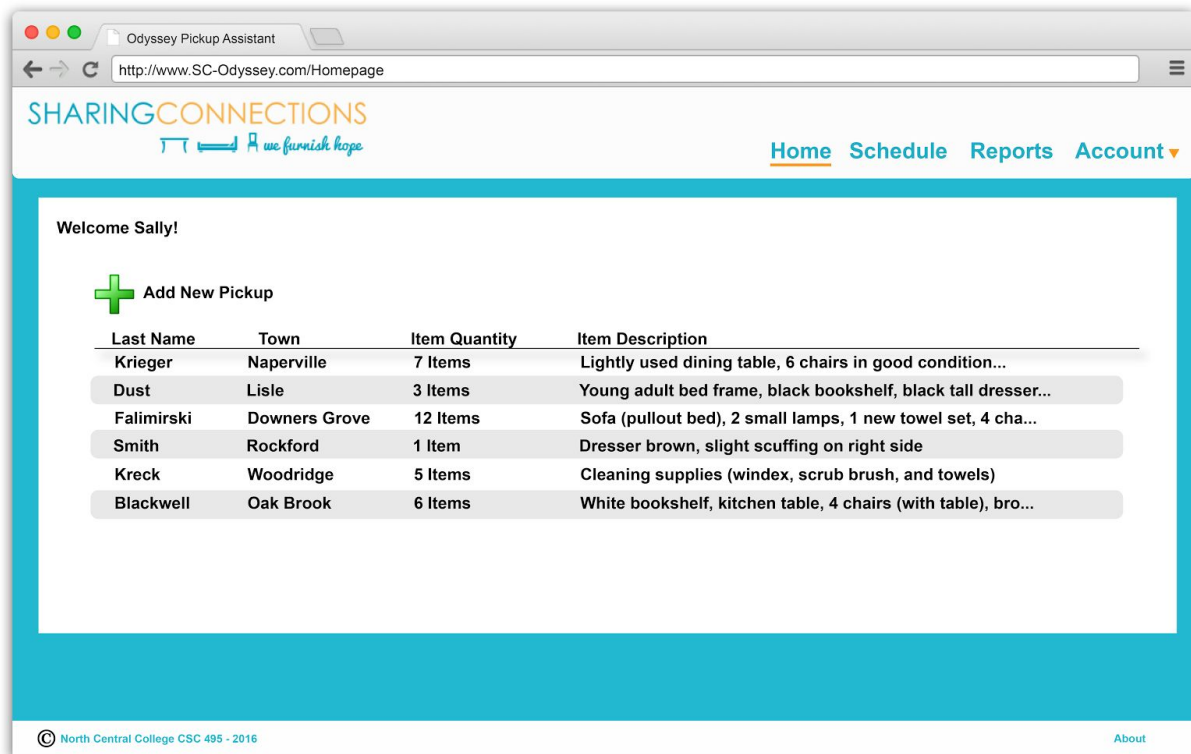This is the first screen that all users see.

Notes:
- On unsuccessful login, an error message is displayed at the top of this screen. (a "flash message" in our tutorial)
- On successful login, user is sent to Home page
- Header: use standard header with no Nav links
- Footer: use standard footer with About link
- New users can only be added by the Admin; you email him/her
- Issue: if multiple admin users exist, whose email is posted?

3. Home/Pickup Screens

The Home screens deal with pickups. "Home" is the unschedule pickup bullpen.

Home.1 - unscheduled pickup bullpen

This is the first screen users see after logging in. Most user time will be spent here, creating and editing unscheduled pickups. This is Home.

Notes:
- Pickups are listed in the order (first in, first out) they were added to the system.
- Clicking on a pickup goes to the web page for that pickup where all the information about the pickup is listed. From there the pickup info can edited, and it can be scheduled (assigned a pickup day)
- The plus sign (+) is green and bold. "+ New Pickup" goes to a form to fill-in the data for a new pickup. When you're done, hit OK and then return Home. Your new pickup will be listed at the end.
- Welcome <User ID>... Sally, in this case.

Home.2 - new pickup form

This screen is an empty form used to create a new pickup.

Notes:
- Not sure how we want to handle the drop down values for the items currently.
- While the donor details show that they require phone and email, we can code it to check for only one. (For instance if we get an email donnor that doesn't give a phone number but we have an email)
- Only need zip and city, we already know they are in this state and country (in comparison to their current online form)
- Dwelling Types: { Current Resident, Selling/Moving, Storage Facility, Other }

Home.3 - view/edit/schedule pickup

This screen shows a form of all pickup data. This data can be edited. The pickup schedule day is included.
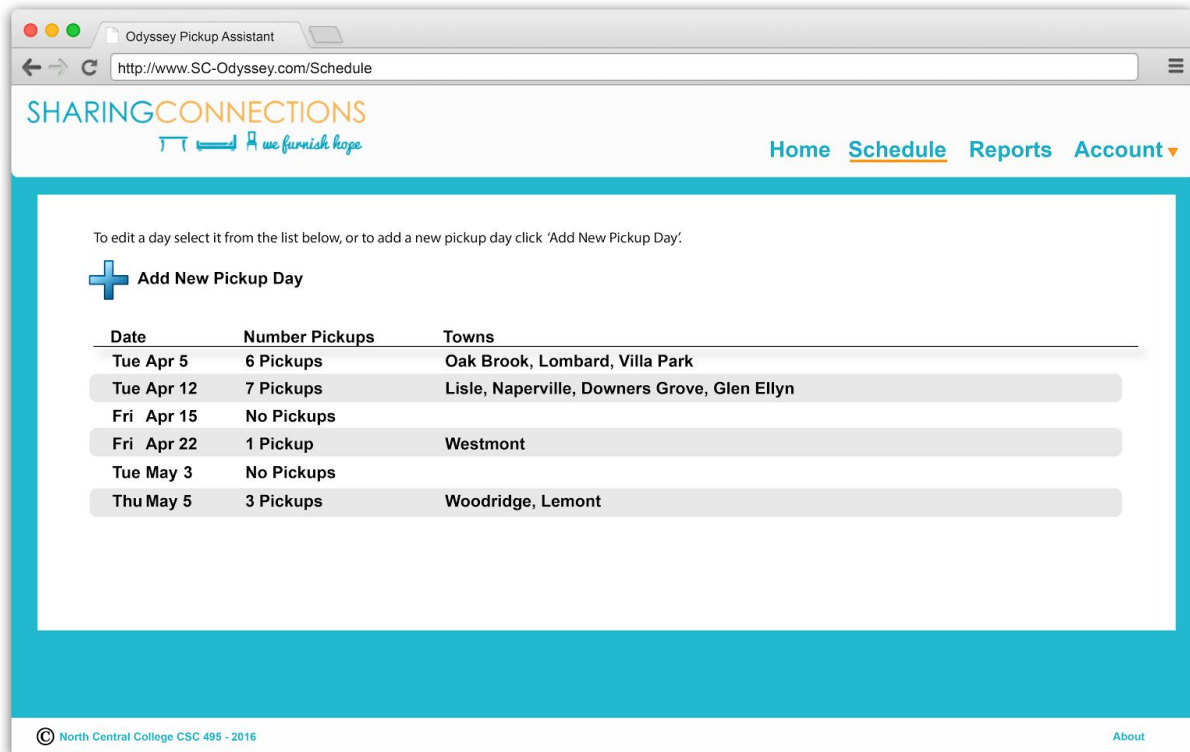

Notes
- Not sure if I like where the reschedule button is currently
- After selecting any action button (Schedule, Reject, Update or Back/Cancel), we return to Home.1. (Bill: I'm not totally sure about this. We'll see.)

4. Schedule Screens

The Schedule screens manage the pickup days for the truck.

Schedule.1 - list pickup days

The third screen is a list of pickup days, the schedule.

Notes:
- List is sorted by date, earliest first.
- Click on "+ New Day" goes to Schedule.2 to pick a new day
- Click on a day goes to a Schedule.3 which lists the pickups for that day
- Note: Combine Month + Day into one column, Date. Apr + 11 => Apr 11

Note the (happy) **similarities** between the Home/Bullpen page and this Schedule page: Sorted text list; Same "New" mechanism, green plus sign, top of list; Color changes on mouse hover over a line; Click on the line to view and edit.

Schedule.2 - new pickup day

This screen is a calendar used to create a new day for the schedule.
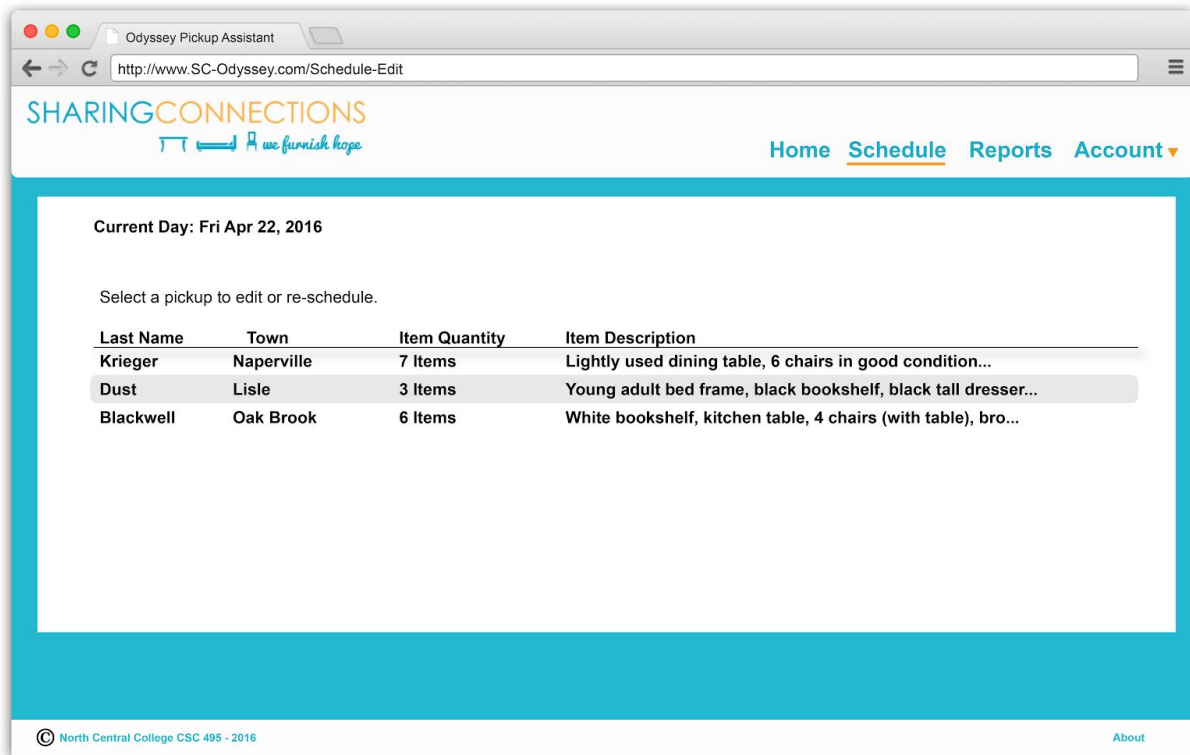
- Selected day will populate the inputs on the right.
- Green indicates that it is already a pickup day, the selected day is in blue
- We have calendar gem research available. We'll see how the Schedule coders do with this.
- Issue: Month and Day spinners are empty when you first arrive?

Schedule.3 - list pickups on day

This screen lists the pickups scheduled for that day. Pickups can be selected and then edited/rescheduled.

5. Report Screens

Reports are generated in this section.

Report.1 - list reports

This screen lists the available reports.
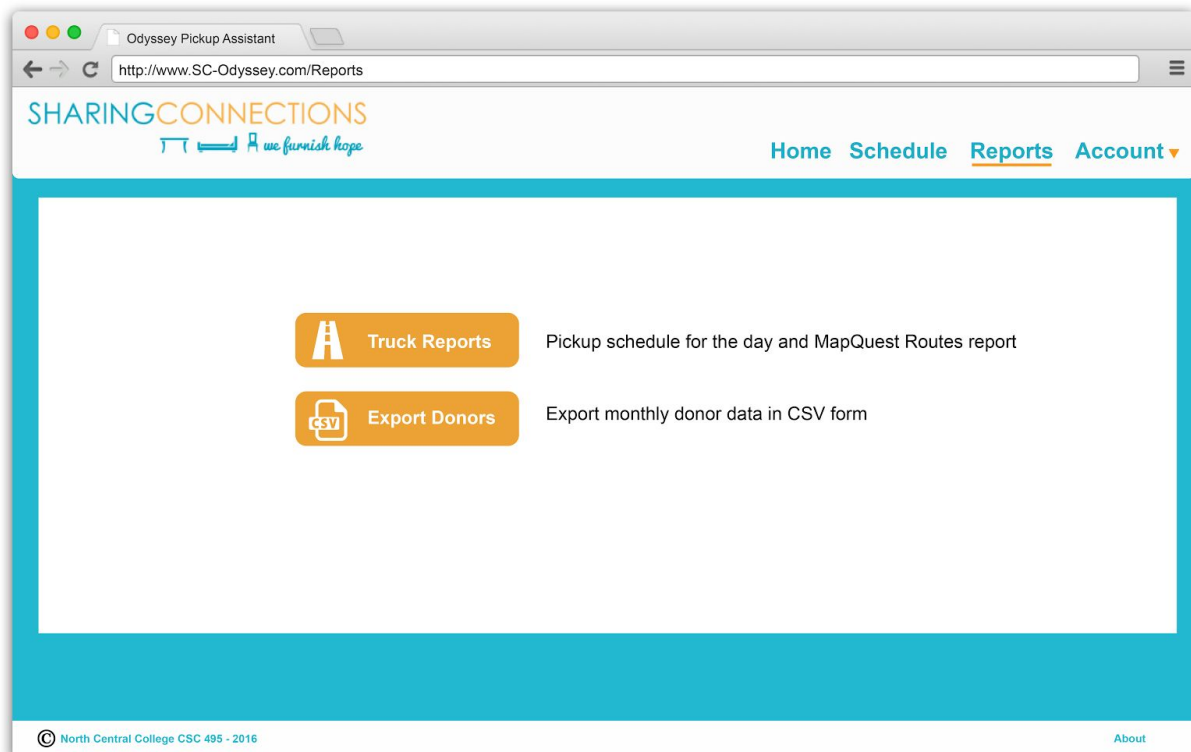
Notes:
- No notes. That's nice.

Report.2 - truck report

This screen creates two truck reports for a day's pickups. The first is a nicely-formatted PDF of all pickup locations for the day. The second is a CSV file appropriate for input to MapQuest Routes. This allows the Truck Guy to use MapQuest to generate turn-by-turn directions to pickup locations (as they do now), without having to re-type addresses.

Notes:
- Spinner has list of pickup days.
- Bill: I need to format this report and get approval from the truck guys at Sharing Connections.
- The output is a PDF file if we can swing it. OTW, we'll have nice CSS-formatted HTML. We'll see. We have PDF gem research available.
- See Appendix B for a Truck Report example
- See Appendix C for a MapQuest Routes CSV File example

IMPORTANT: I just talked to Tom the Truck Guy. They use Mapquest Route Planner for creating and printing the pickup-to-pickup maps and directions. No way they are giving this up. They'd rather boil us in oil. The good news… go to the Mapquest site:

http://classic.mapquest.com/routeplanner. Click on "Import Spreadsheet". They accept a CSV of all the addresses to map out. Currently, truck guys have to enter these by hand. We can easily output a CSV of the pickups for a day. Here's the sample file format from Mapquest:

Street, City, State, Zip, Country, Notes
555 17th Street, Denver, CO, 80202, US, Deliver dozen yellow roses
300 Granite Run Drive, Lancaster, PA, 17601, US, Tulip arrangement
55 St. Clair Avenue West, Toronto, ON, M4V 2Y7, CA, Deliver dozen daffodil

Report.3 - export donors CSV

This screen creates the monthly donors CSV report

Notes:
- We don't need anything fancier than this, like custom dates or whateve. SC does a monthly dump now. This is an infrequent, once-a-month, operation. So, for this one, Simpler = Better.
- I have the exact columns and format from Sharing Connections.
- Note: The button should be Export, not OK. We are using appropriate verbs, rather than Submit or OK.
- Note: When we are generating these CSV files, I'll take a couple over to Maria of Sharing Connections and have her look at them or try them (not sure if this is possible).
- See Appendix D for an example Donors CSV File example.

6. Admin Screens

The Admin screens deal with the special duties accorded an Admin user. These include adding new users, editing users, and removing users.

Admin.1 screen - list users

The Admin link in the top Nav leads here. This is the first screen for Admin ops.
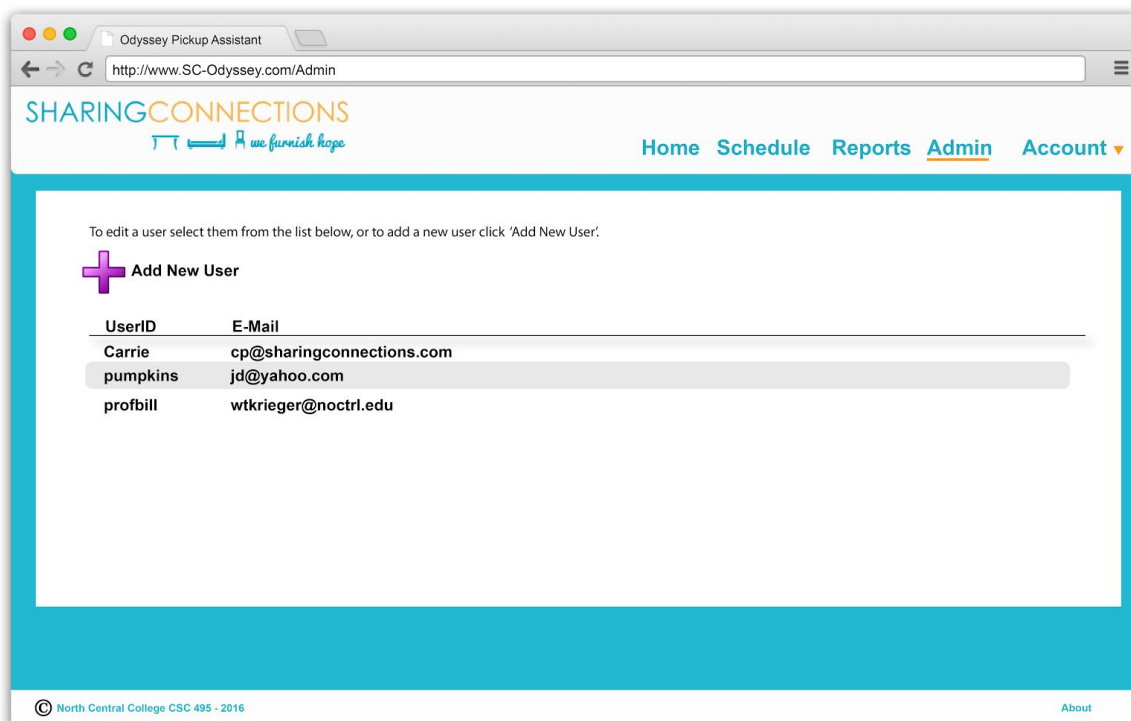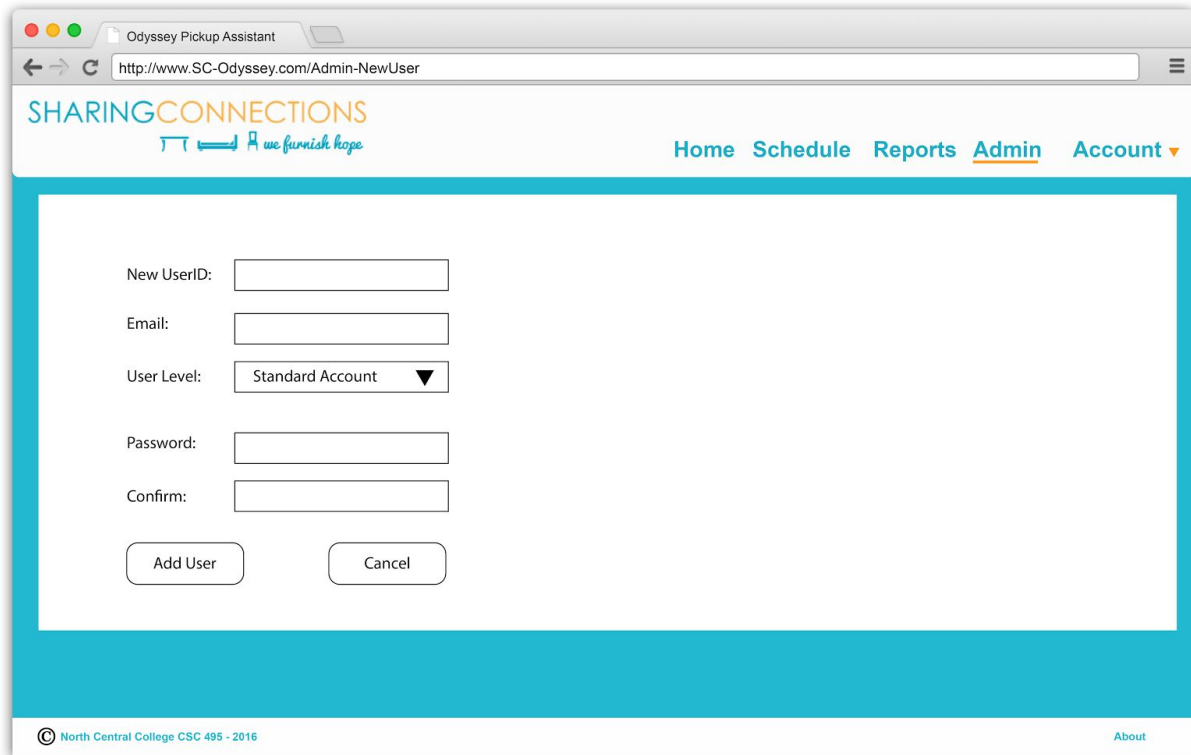
Notes:
- Similar format to pickups and days list: hover color change, select to enter.
- Ordered list. Alphabetical by user ID.

Admin.2 screen - add new user

The Admin screen to add a new user to the system.

Notes:
- User level = {Standard, Admin, Entry}
- On success, returns to the Admin.1 screen. On failure, ditto.
- Note: Lots of error checking here, ala our tutorial.
- It would be nice to get help on this user type. A "?" next to the User Level field? This is a future feature.

Admin.3 screen - edit user

The Admin screen to remove an existing user from the system.

Notes:
- User that we are editing is the one selected from Admin.1
- Remove: This cannot be undone. "Are you sure?" popup
- On success, returns to the Admin.1 screen. On failure, same deal: Admin.1
- We need rules about changing the type of an Admin. Perhaps, only an Admin can only his/her type.

README - For a discussion of security on all Admin screens/ops, please see the security section in the Further Notes at the end.

7. Further UX notes and explanations

This section ties things together with notes and explanations that might not be apparent from just the screen descriptions.

The Account Nav

The Account Nav at the top right has two drop-down actions: Settings and Logout. This is like our tutorial.
- Settings - This leads you to User.1 screen, which we are currently missing. This screen should let the user change his/her password: Current Password, New Password, Confirm.
- Logout - log the user out and end the session. The user is returned to Login.1.

User Types

Each user is one of three types:
- Standard - a regular user with access to all non-Admin parts of the system
- Entry - a restricted user who can only access "new pickups" screens
- Admin - a regular user who also has access to Admin screens to manage user accounts

Bootstrap impact

Our use of Bootstrap framework for HTML and CSS should make our web pages responsive, and therefore, usable on mobile devices. It is popular now to have a "Mobile First" approach. We would describe ours as a "Mobile Aware" approach. We should be OK on smaller devices, but the system will not be tuned for performance on them.

About page

This doesn't fit in a "major area", but we'll need an About page that lists all the contributors to the project. Can we do something cool here?

Security for Admins and more

A regular user can't do much damage, but an Admin user has great power. With great power… here are some security precautions for Admin users:

- Timeout the Admin screen after 5 minutes of inactivity. (how do we do this?)
- Re-ask for the Admin password on every attempt to add a new user or edit a user. This is a pain, but it's an infrequent operation, so it's not too bad. This reduces the chance of somebody walking past an unattended Admin screen and surreptitiously adding or editing a user.
- If you lose your last Admin, then you lose the ability to add users or change user passwords or whatever. In other words, you're stuck and that's bad. So, in practice, have at least **two** Admin users.
- Backup Admin: We create a backup Admin user whose ID/password is locked away by the Sharing Connections CEO. If everything goes wrong, then she can login as this never-used Admin and take charge.
- Worst worst case failsafe: If everything goes wrong, then make a software change (like adding an Admin user) and re-deploy. (fugly!)
- Question: How can you remove an Admin? Or change his type? These are Machiavellian issues… a rogue Admin deleting users. What do you do? Is it more dangerous to allow Admins to delete each other or not have this power? Discuss.

Other possible security measures:

- Lockout a user account after 5 failed login attempts. Require a new password from an Admin.
- Password rules for all! What are they? Min length. At least one numeral. Etc.

Future Features

This is a repo of possible UX ideas for the future.

- ➢ Add capability to browse 1) pickups from the past, 2) pickup days from the past, and 3) rejected pickups. This "browsing" is probably launched from Reports.
- ➢ Add "?" help pop-ups next to complex form fields.
- ➢ How about a Help link in the footer Nav? This would take you to a one-page help screed.
- ➢ Add capability to search Pickups. Put this in Report?
- ➢ Add capability for Admin to delete Pickups that are more than 6 months old (for example). This is to keep the size of our database from swelling over time.

➢ Implement the Sharing Connections Pickup form ourselves. Can we improve the look and feel? Can we improve the email that this form generates?

Appendix A: Screen Index

Here are all our screens, listed by major area.

Name	Brief description
Login.1	the first screen
Home.1	unscheduled pickup bullpen
Home.2	new pickup form
Home.3	view/edit/schedule pickup
Schedule.1	list pickup days
Schedule.2	new pickup day
Schedule.3	list pickups on day
Report.1	list reports
Report.2	export donors CSV
Report.3	truck report
Admin.1	list users
Admin.2	add new user
Admin.3	edit user
About.1	about this website

Notes:
- Issue: Missing User.1, a screen where the user can change his/her password. You go to this screen by selecting the Account/Setting Nav at the top right. We'll hit this screen on Sprint #2. No worries.

Appendix B: Truck Report example

The goal here is for the Truck Report to be a nicely-formatted PDF file. The Truck Guy brings this along while making pickups. They markup the printout with all sorts of stuff, for example the actual order of pickups, and whether a pickup didn't workout or not. **Note:** I have posted my PDF file (truck_report1.pdf) in the #ux channel.

Pickup Schedule for Monday Mar 14, 2016

	Name/Contact	Address	Donor Items/Notes
1	Mark Christianson 789-5258	1233 Chanticleer Ave Bolingbrook	table/4 chairs, china cabinet (matching set) mark.christianson@mheducation.com
2	Sadiqa 631-3169	325 Clifton Lane Bolingbrook	table/chairs, end tables, stroller/carseat Donor: "when on your way"
3	Peter Clifford 703-203-6305	793 Forest Avenue Glen Ellyn	queen bed, twin mattress peter_clifford2000@yahoo.com
4	Nancy Randa 357-3126	1135 Hobson Mill Naperville	sofa Donor: "early as possible" nanranda@gmail.com
5	Debbie Moynihan 709-8282	960 E Chicago Ave. Sunrise Assisted Living Naperville	dresser, full bed, stool relivdeb@gmail.com
6	Robert Claytor 306-2625	2844 Bluewater Circle Naperville	2 recliners, bookcase, tv stand rclaytor_45040@yahoo.com
7	Raelisa Schmidt 479-3545	1663 Pathway Drive Naperville	full bed raelisa1@gmail.com
8	Sharon 904-6464	1311 Conan Doyle Drive Naperville	loveseat
9	Melissa Bruckelmeyer 209-5908	2036 Canterbury Place Wheaton	sofa mburck106@gmail.com
10	Bob Mondek 272-2920	2804 Carpenter Court Woodridge	sofa, 2 chairs, table/6 chairs Donor: early as possible
11	Ann Banks 985-4402	8208 Anchor Drive Woodridge	entertainment center, table/4 chairs Donor: in garage
12	John Doe 555-1212		
13	John Doe 555-1212		
14	John Doe 555-1212		
15	John Doe 555-1212		

Appendix C: MapQuest Routes CSV Example

The Truck Guy currently uses MapQuest Routes to create and print turn-by-turn directions to each pickup. They re-enter all pickup addresses into the MapQuest site to use this feature. Here's the site: http://classic.mapquest.com/routeplanner

The goal of our MapQuest Routes CSV File is to save the Truck Guy the hassle of re-entering all the pickup address.

At the MapQuest site, click on "Import Spreadsheet". They accept a CSV of all the addresses to map out. Here's the format example that MapQuest gives.

```
Street, City, State, Zip, Country, Notes
555 17th Street, Denver, CO, 80202, US, Deliver dozen yellow roses
300 Granite Run Drive, Lancaster, PA, 17601, US, Tulip arrangement
55 St. Clair Avenue West, Toronto, ON, M4V 2Y7, CA, Deliver dozen daffodils
```

Note: I have posted this small example file (sample.csv) on the #ux channel.

Appendix D: Export Donors CSV Example

Typically, the database person at Sharing Connections will extract donors from the past month and add them to their donor database.

The fields are:
```
FIRST,SPOUSE,LAST,ADDRESS,TOWN,STATE,ZIP,EMAIL,DATE DONATED,ITEMS DONATED

Jeri,,Lau,740 62nd St.,Downers Grove,IL,60516,delitephy@aol.com,03/02/2016,
"table/6 chairs, coffee table, end tables"
```

/* Bill: A "real" file is coming soon... */
/* Bill: Double-check this format with Maria too */