

# Simple Inventory



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Final Report

## Summary

Developing and maintaining a database system with an easy to use user interface can be costly and cumbersome. Our main customer's need is that they need a simple and responsive inventory management tracker that can help them conduct their business by keeping track of their products. Examples of target customers include libraries to manage their books, student recreation centers to manage their equipment, etc.

Our application currently is designed to be generic enough to meet all the varied customer needs through supporting the most basic functionality for organizations to create and manage their items while allowing for the tracking of items that have been rented out. Administrators and other users of the system such as workers and employees will be able to intuitively use this application to more efficiently carry out their everyday inventory management tasks.

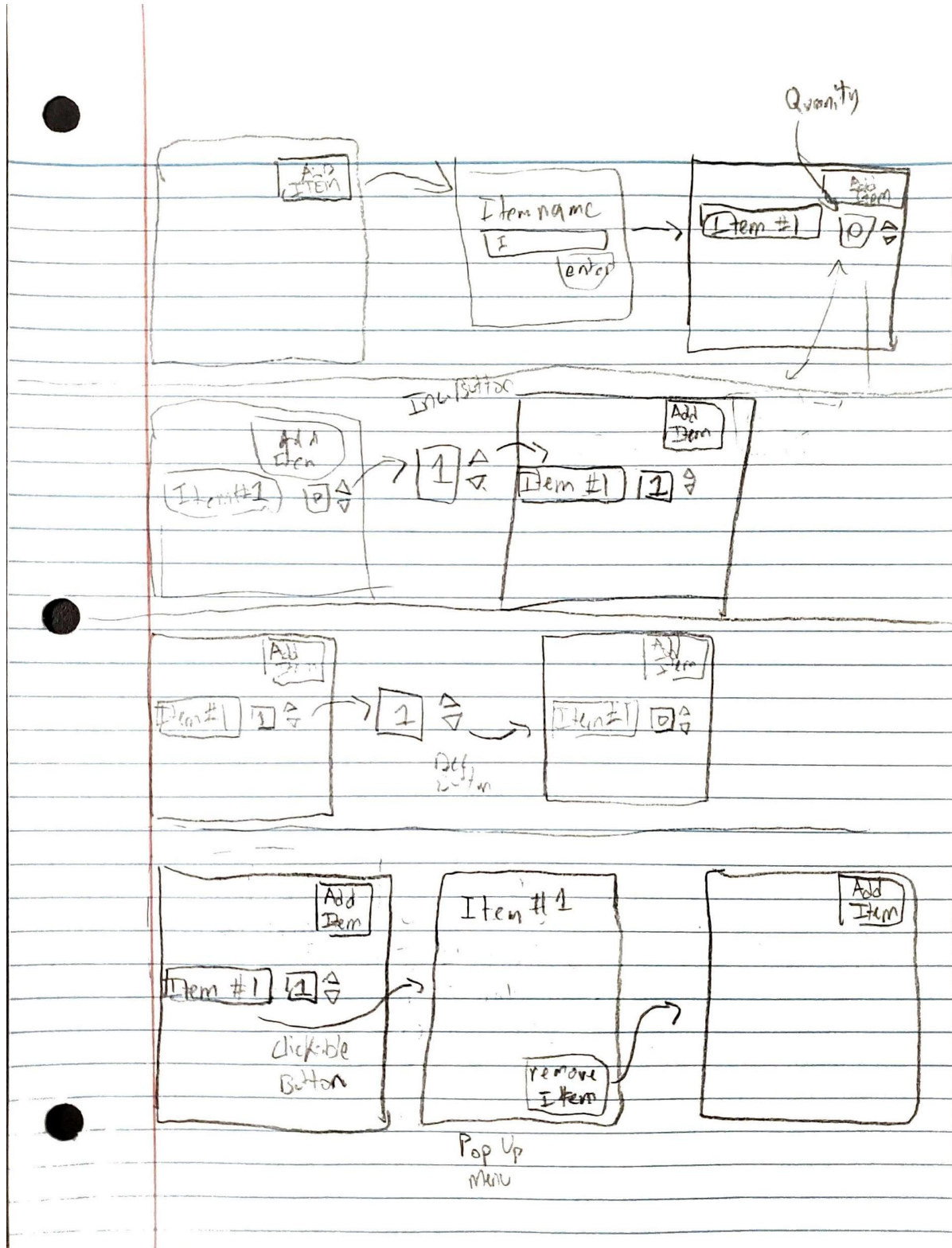
## User Stories

- Add a new item to an inventory - 2 - Complete
- Remove an item from an inventory - 1 - Complete
- Give an item a name - 1 - Complete
- Edit an item - 2 - Complete
- Give an item a description - 1 - Complete
- Give an item a quantity - 1 - Complete
- Decrease quantity of an item from an inventory - 1 - Complete
- Increase quantity of an item - 1 - Complete
- Give an item a price - 1 - Complete
- Give an item a store location - 1 - Complete
- Record when a rentable item was rented - 1 - Complete
- Checkout/Borrow an item from an inventory - 3 - Complete
- Return an item to an inventory - 1 - Complete
- Select if item is consumable or checkout-able - 1 - Not implemented due to reduction in scope
- See which user has checked out an item - 1 - Complete
- Be able to log in with google - 3 - Complete
- Be able to search rented items by age, user renting, return date, rented date, organization, and item id - 3 - Complete except for searching by organization
- Be able to search items by product id, content in their description, location, organization, name - 3 - Complete except for searching by organization
- Be able to sort rented items by age, return date, date rented, item id, renter name, helper name, organization, and phone number - 3 - Complete except age as it is now out of scope
- Be able to sort items by location, organization, product id, quantity remaining, name - 1

- See what organizations I am an admin in - 1 - Complete
- See what organizations I am a member of - 2 - Complete
- Only see items for organizations a user is a part of - 2 - Complete
- Make another user an admin of a user's organization - 1 - Complete
- Only create items for an organization the user is an admin for - 2 - Complete
- View a specific organizations items - 2 - Complete
- View a specific organizations members - 2 - Complete
- Leave an organization - 1 - Complete
- Join an organization - 2 - Complete
- Create organization - 3 - Complete
- Be able to toggle ascending and descending sort - 2 - Not implemented
- Display number of search results - 1 - Not implemented
- Easily search using a simple query language - 3 - Not implemented
- Clear search button - 1 - Not implemented
- Tables should be easy to read and have multiple pages for large data - 1 - Complete
- Be able to give an organization storage locations that can be assigned to items - 2 - Not implemented
- Be able to put multiple items into a cart to rent at one time - 2 - Not implemented
- Be able to see that I am signed in and be able to sign out - 1 - Complete

# Design Documents

## Storyboarding



Low-Fidelity Mockups

**Simple Inventory**

Sign In

Sign Up

Sign Up

# Simple Inventory

## LOGIN

Username:

Password:

Login

# Simple Inventory

## Inventory

Product ID	Name	Description	Quantity Remaining	Increase	Decrease	Rentable	Price		
1	Golf Ball	A ball for golf	19/25	<a href="#">Increase</a>	<a href="#">Decrease</a>	false	0.00	<a href="#">Show</a>	<a href="#">Remove</a>
2	Tennis Ball	A ball for tennis	12/20	<a href="#">Increase</a>	<a href="#">Decrease</a>	false	0.00	<a href="#">Show</a>	<a href="#">Remove</a>

[New Item](#)

# Simple Inventory

## Inventory

Product ID	Name	Description	Quantity Remaining	Increase	Decrease	Rentable	Price		
1	Golf Ball	A ball for golf	20/25	<a href="#">Increase</a>	<a href="#">Decrease</a>	false	0.00	<a href="#">Show</a>	<a href="#">Remove</a>
2	Tennis Ball	A ball for tennis	12/20	<a href="#">Increase</a>	<a href="#">Decrease</a>	false	0.00	<a href="#">Show</a>	<a href="#">Remove</a>

[New Item](#)



# Simple Inventory

## New Item

Id

Name

Description

Quantity Remaining

Quantity Total

Rentable

Price

Create Item

[Back](#)

## Simple Inventory

Item was successfully updated.

**Product:** 0003

**Name:** Basket Ball

**Description:** A ball for basketball

**Quantity remaining:** 7

**Quantity Total:** 15

**Rentable:** false


**Price:** 1.00

[Edit](#) | [Back](#)

## Simple Inventory


### Inventory

Product ID	Name	Description	Quantity Remaining	Increase	Decrease	Rentable	Price		
1	Golf Ball	A ball for golf	19/25	<a href="#">Increase</a>	<a href="#">Decrease</a>	false	0.00	<a href="#">Show</a>	<a href="#">Remove</a>
2	Tennis Ball	A ball for tennis	12/20	<a href="#">Increase</a>	<a href="#">Decrease</a>	false	0.00	<a href="#">Show</a>	<a href="#">Remove</a>
3	Basket Ball	A ball for basketball	7/15	<a href="#">Increase</a>	<a href="#">Decrease</a>	false	1.00	<a href="#">Show</a>	<a href="#">Remove</a>
<a href="#">New Item</a>									

 Simple Inventory

HomeRentalsOrganizationsMemberships

Log In




# Simple Inventory

Windows Setup

Login with Google

Activate Windows  
Go to Settings to activate Windows.

 Simple Inventory

HomeRentalsOrganizationsMemberships

Ryan Parker ▾

## Inventory

Search for an item

Product ID	Organization	Name	Description	Locations	Quantity Remaining	Quantity Total	Price	Rent
No Items Found.								

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## Inventory

Search for an item

Product ID	Organization	Name	Description	Locations	Quantity Remaining	Quantity Total	Price	Rent
1457	Adams, Nienow and Barton	<a href="#">Heavy Duty Plastic Knife</a>	etc. etc.	Baby	17	30	\$9.99	<a href="#">Rent</a>
1460	Munchkin, Inc.	<a href="#">Lightweight Aluminum Chair</a>	data points	Toys	18	48	\$54.30	<a href="#">Rent</a>
1531	Adams, Nienow and Barton	<a href="#">Intelligent Bronze Wallet</a>	infographic	Tools	11	41	\$30.26	<a href="#">Rent</a>
1537	SWE	<a href="#">Intelligent Linen Bottle</a>	agile marketing	Shoes	17	45	\$99.92	<a href="#">Rent</a>
2	SWE	<a href="#">Tennis Ball</a>	A ball for tennis	Gear Locker	9	20	\$10.00	<a href="#">Rent</a>
3	SWE	<a href="#">Basket Ball</a>	A ball for basketball	Backwall	4	15	\$0.00	<a href="#">Rent</a>
28	Test Group	<a href="#">Practical Leather Bottle</a>	two-way street	Grocery	11	30	\$97.39	<a href="#">Rent</a>
67	Munchkin, Inc.	<a href="#">Awesome Linen Car</a>	home stretch	Electronics	20	47	\$39.21	<a href="#">Rent</a>
107	Munchkin, Inc.	<a href="#">Rustic Granite Plate</a>	tee it up	Movies	8	49	\$6.24	<a href="#">Rent</a>
114	SWE	<a href="#">Heavy Duty Plastic Bag</a>	snackable content	Kids	4	42	\$13.48	<a href="#">Rent</a>
137	SWE	<a href="#">Heavy Duty Silk Knife</a>	customer journey	Home	1	50	\$45.75	<a href="#">Rent</a>
156	Test Group	<a href="#">Small Linen Lamp</a>	heads down	Movies	12	29	\$63.50	<a href="#">Rent</a>
159	Munchkin, Inc.	<a href="#">Rustic Plastic Shoes</a>	thought leadership	Toys	17	28	\$34.43	<a href="#">Rent</a>
168	Test Group	<a href="#">Durable Linen Car</a>	out of the box	Kids	2	37	\$26.02	<a href="#">Rent</a>
180	SWE	<a href="#">Enormous Wool Car</a>	heads down	Books	15	48	\$88.13	<a href="#">Rent</a>
181	Adams, Nienow and Barton	<a href="#">Awesome Cotton Watch</a>	heads down	Grocery	6	30	\$88.52	<a href="#">Rent</a>
184	Adams, Nienow and Barton	<a href="#">Lightweight Bronze Table</a>	t-shirt sizes	Automotive	14	48	\$76.27	<a href="#">Rent</a>
192	Munchkin, Inc.	<a href="#">Fantastic Aluminum Bottle</a>	learnings	Automotive	11	50	\$57.06	<a href="#">Rent</a>
196	Adams, Nienow and Barton	<a href="#">Intelligent Iron Coat</a>	thought leadership	Toys	11	34	\$45.68	<a href="#">Rent</a>
199	Test Group	<a href="#">Economic Paper Shirt</a>	hunkering it	Electronics	19	43	\$80.22	<a href="#">Rent</a>
94	Barrows-Wunsch	<a href="#">Sleek Wooden Plate</a>	put a bow on it	Books	15	30	\$50.65	<a href="#">Rent</a>
95	Bechtelar and Sons	<a href="#">Small Bronze Table</a>	get a pulse on	Toys	14	26	\$76.71	<a href="#">Rent</a>
108	Baumbach and Sons	<a href="#">Heavy Duty Granite Computer</a>	tee it up	Industrial	1	43	\$46.12	<a href="#">Rent</a>
116	Bechtelar and Sons	<a href="#">Mediocre Copper Coat</a>	sprint to the finish line	Clothing	3	28	\$71.22	<a href="#">Rent</a>
160	Baumbach and Sons	<a href="#">Fantastic Rubber Lamp</a>	out of pocket	Beauty	3	31	\$71.62	<a href="#">Rent</a>
161	Barrows-Wunsch	<a href="#">Aerodynamic Leather Bottle</a>	t-shirt sizes	Home	13	47	\$98.00	<a href="#">Rent</a>
169	Baumbach and Sons	<a href="#">Practical Leather Coat</a>	SWAG	Computers	13	29	\$50.71	<a href="#">Rent</a>
181	Adams, Nienow and Barton	<a href="#">Awesome Cotton Watch</a>	heads down	Grocery	6	30	\$88.52	<a href="#">Rent</a>
183	Bechtelar and Sons	<a href="#">Lightweight Leather Coat</a>	put a pin in it	Outdoors	1	44	\$3.34	<a href="#">Rent</a>
184	Adams, Nienow and Barton	<a href="#">Lightweight Bronze Table</a>	t-shirt sizes	Automotive	14	48	\$76.27	<a href="#">Rent</a>
188	Baumbach and Sons	<a href="#">Practical Wooden Knife</a>	swim lane	Games	17	28	\$53.40	<a href="#">Rent</a>
191	Barrows-Wunsch	<a href="#">Heavy Duty Granite Gloves</a>	button up the loose ends	Industrial	5	25	\$90.41	<a href="#">Rent</a>
196	Adams, Nienow and Barton	<a href="#">Intelligent Iron Coat</a>	thought leadership	Toys	11	34	\$45.68	<a href="#">Rent</a>
204	Baumbach and Sons	<a href="#">Enormous Wooden Wallet</a>	best practice	Garden	18	36	\$31.32	<a href="#">Rent</a>
217	Barrows-Wunsch	<a href="#">Small Cotton Keyboard</a>	learnings	Sports	4	25	\$33.03	<a href="#">Rent</a>
232	Bechtelar and Sons	<a href="#">Synergistic Bronze Chair</a>	out of pocket	Tools	6	44	\$27.86	<a href="#">Rent</a>
270	Barrows-Wunsch	<a href="#">Synergistic Granite Watch</a>	synergy	Kids	10	40	\$31.13	<a href="#">Rent</a>
274	Adams, Nienow and Barton	<a href="#">Gorgeous Silk Bottle</a>	buying cycle	Games	10	40	\$89.81	<a href="#">Rent</a>
286	Barrows-Wunsch	<a href="#">Aerodynamic Silk Shoes</a>	bleeding edge	Toys	18	35	\$2.04	<a href="#">Rent</a>
301	Bechtelar and Sons	<a href="#">Fantastic Bronze Gloves</a>	gamification	Tools	2	25	\$96.63	<a href="#">Rent</a>
309	Adams, Nienow and Barton	<a href="#">Practical Concrete Bench</a>	growth unit	Outdoors	14	43	\$30.70	<a href="#">Rent</a>
310	Baumbach and Sons	<a href="#">Small Marble Coat</a>	immersive experience	Automotive	3	33	\$17.28	<a href="#">Rent</a>
311	Baumbach and Sons	<a href="#">Rustic Leather Bottle</a>	gamification	Tools	16	31	\$35.34	<a href="#">Rent</a>
330	Barrows-Wunsch	<a href="#">Gorgeous Cotton Pants</a>	rubber meets the road	Garden	13	32	\$31.99	<a href="#">Rent</a>



## Inventory

Search for an item

Knife

Product ID	Organization	Name	Description	Locations	Quantity Remaining	Quantity Total	Price	Rent
1457	Adams, Nienow and Barton	<a href="#">Heavy Duty Plastic Knife</a>	etc. etc.	Baby	17	30	\$9.99	<a href="#">Rent</a>
188	Baumbach and Sons	<a href="#">Practical Wooden Knife</a>	swim lane	Games	17	28	\$53.40	<a href="#">Rent</a>
419	Baumbach and Sons	<a href="#">Fantastic Granite Knife</a>	plug and chug	Industrial	12	27	\$99.42	<a href="#">Rent</a>
809	Bechtelar and Sons	<a href="#">Enormous Silk Knife</a>	get value out of the conversation	Garden	1	26	\$86.81	<a href="#">Rent</a>
928	Adams, Nienow and Barton	<a href="#">Heavy Duty Steel Knife</a>	data points	Home	5	41	\$77.87	<a href="#">Rent</a>
1017	Adams, Nienow and Barton	<a href="#">Rustic Wooden Knife</a>	customer journey	Music	9	44	\$0.39	<a href="#">Rent</a>
1960	Barrows-Wunsch	<a href="#">Aerodynamic Aluminum Knife</a>	let's take this offline	Electronics	7	47	\$25.00	<a href="#">Rent</a>

Activate Windows  
Go to Settings to activate Windows.



## Inventory

Search for an item

Knife

Product ID	Organization	Name	Description	Locations	Quantity Remaining	Quantity Total	Price	Rent
809	Bechtelar and Sons	<a href="#">Enormous Silk Knife</a>	get value out of the conversation	Garden	1	26	\$86.81	<a href="#">Rent</a>
928	Adams, Nienow and Barton	<a href="#">Heavy Duty Steel Knife</a>	data points	Home	5	41	\$77.87	<a href="#">Rent</a>
1960	Barrows-Wunsch	<a href="#">Aerodynamic Aluminum Knife</a>	let's take this offline	Electronics	7	47	\$25.00	<a href="#">Rent</a>
1017	Adams, Nienow and Barton	<a href="#">Rustic Wooden Knife</a>	customer journey	Music	9	44	\$0.39	<a href="#">Rent</a>
419	Baumbach and Sons	<a href="#">Fantastic Granite Knife</a>	plug and chug	Industrial	12	27	\$99.42	<a href="#">Rent</a>
188	Baumbach and Sons	<a href="#">Practical Wooden Knife</a>	swim lane	Games	17	28	\$53.40	<a href="#">Rent</a>
1457	Adams, Nienow and Barton	<a href="#">Heavy Duty Plastic Knife</a>	etc. etc.	Baby	17	30	\$9.99	<a href="#">Rent</a>

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## Rent Item

[Back](#)

Renter name

Phone number

Address

Date rented

Return date

[Submit](#)

Activate Windows  
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Rented item was successfully created.

Organization: Bechtelar and Sons

Item: 809

Helped By: Ryan Parker

Rented By: Sully Ross

Phone Number: (123) 456-7890

Address: 1234 Road Rd

Date rented: 2022-05-01

Return date: 2022-05-15

[Edit](#) | [Return](#) | [Back](#)

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Product: 1457  
Organization: Adams, Nienow and Barton  
Name: Heavy Duty Plastic Knife  
Description: etc. etc.  
Location: Baby  
Quantity remaining: 17.0  
Quantity total: 30.0  
Rentable: true  
Price: 9.99

Rent

Back

Activate Windows  
Go to Settings to activate Windows.



Listing Rented Items

Search for an item

<input type="text"/>	Search								
Organization	Item ID	Helped By	Rented By	Phone Number	Address	Date Rented	Return Date		
Bechtelar and Sons	809	Ryan Parker	Sully Ross	(123) 456-7890	1234 Road Rd	2022-05-01	2022-05-15	<a href="#">Return</a>	<a href="#">Show</a>

Activate Windows  
Go to Settings to activate Windows.



Simple Inventory

HomeRentalsOrganizationsMemberships

Ryan Parker

Listing Organizations

Search for an item

Search

Name	Description	Phone Number	Address	Join
<a href="#">Adams, Nienow and Barton</a>	Upgradable real-time analyzer	(678) 134-1076	Apt. 939 7110 Harold Rapids, East Melyndaton, MS 92508	<a href="#">Join</a>
<a href="#">Barrows-Wunsch</a>	Re-engineered local policy	(694) 262-4032	Suite 207 9998 Ziemann Viaduct, East Gertie, NE 57448-5464	<a href="#">Join</a>
<a href="#">Baumbach and Sons</a>	Open-source exuding customer loyalty	(637) 564-9045	Suite 674 66295 Haley Creek, Macejkovicbury, ID 25778-4180	<a href="#">Join</a>
<a href="#">Bechtelar and Sons</a>	Progressive national access	(872) 828-8025	Suite 557 363 Hamill Rapids, West Freemanfort, NY 38071-0978	<a href="#">Join</a>
<a href="#">Beer, Glover and Kertzmann</a>	Synergistic hybrid migration	(467) 701-1635	718 Spencer Springs, Emmashire, WY 56939	<a href="#">Join</a>
<a href="#">Block, Schultz and Dach</a>	Multi-lateral executive success	(726) 058-5186	Suite 887 45692 Sally View, Lunafort, TX 06847-3912	<a href="#">Join</a>
<a href="#">Boyer-Satterfield</a>	Ergonomic tertiary collaboration	(392) 222-3985	Suite 411 9960 Watsica Mission, Celiaborough, OH 01909	<a href="#">Join</a>
<a href="#">Brekke, Lebsack and Boyer</a>	Universal heuristic paradigm	(129) 129-8403	Suite 548 44973 Solomon Skyway, Jonietown, IN 06869	<a href="#">Join</a>
<a href="#">Casper-Erdman</a>	Upgradable local model	(249) 378-7481	Suite 300 842 Skiles Harbors, Cummeratamouth, NY 97538-5329	<a href="#">Join</a>
<a href="#">Christiansen, Raynor and Leffler</a>	Object-based local standardization	(968) 340-4340	25055 Runolfsdottir Stream, Port Monty, SD 75976	<a href="#">Join</a>
<a href="#">Crooks and Sons</a>	Reverse-engineered maximized algorithm	(602) 341-8389	6436 Schmeler Underpass, West Estela, ID 86987-6448	<a href="#">Join</a>
<a href="#">Dooley, Witting and Doyle</a>	Multi-lateral cohesive migration	(885) 403-7297	Apt. 127 37851 Ariane Bridge, Mohrtown, AK 65057	<a href="#">Join</a>
<a href="#">Emmerich and Sons</a>	Expanded full-range matrices	(841) 454-6890	9108 Doyle Stream, Kovacekland, PA 99020-3585	<a href="#">Join</a>
<a href="#">Erdman Inc</a>	Right-sized cohesive standardization	(215) 477-6866	Suite 313 71382 Ha Via, Beerborough, AZ 35288	<a href="#">Join</a>
<a href="#">Ernser-Rowe</a>	Reverse-engineered explicit framework	(848) 481-1401	Suite 994 8341 Kessler Pike, Windlerton, IL 40685	<a href="#">Join</a>
<a href="#">Feeney, Tremblay and Huel</a>	Balanced system-worthy circuit	(852) 924-1689	Apt. 156 1493 Shirley Passage, North Gilton, NV 40971	<a href="#">Join</a>
<a href="#">Grady Inc</a>	Optional 6th generation parallelism	(306) 628-2719	89592 Bartoletti Overpass, South Andree, ME 68043-6197	<a href="#">Join</a>
<a href="#">Greenfelder-Abbott</a>	Multi-lateral system-worthy installation	(152) 031-8646	89587 Rodriguez Vista, Ruperttown, IN 87885-8231	<a href="#">Join</a>
<a href="#">Hauke-Carroll</a>	Synergized zero tolerance application	(253) 828-7356	9163 Rennie Forest, West Nanette, RI 45402	<a href="#">Join</a>

Simple Inventory

HomeRentalsOrganizationsMemberships

Ryan Parker

Back

**Name:** Brekke, Lebsack and Boyer

**Description:** Universal heuristic paradigm

**Phone Number:** (129) 129-8403

**Address:** Suite 548 44973 Solomon Skyway, Jonietown, IN 06869

Join

Activate Windows  
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Back

**Name:** Adams, Nienow and Barton

**Description:** Upgradable real-time analyzer

**Phone Number:** (678) 134-1076

**Address:** Apt. 939 7110 Harold Rapids, East  
Melyndaton, MS 92508

View Items

Join

Leave

Activate Windows  
Go to Settings to activate Windows.



Back

**Name:** Adams, Nienow and Barton

**Description:** Upgradable real-time analyzer

**Phone Number:** (678) 134-1076

**Address:** Apt. 939 7110 Harold Rapids, East  
Melyndaton, MS 92508

View Items

View Members

Edit

Destroy

Join

Leave

Activate Windows  
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## Adams, Nienow and Barton Inventory

Search for an item

Product ID	Organization	Name	Description	Locations	Quantity Remaining	Quantity Total	Rent	Price
1457	Adams, Nienow and Barton	Heavy Duty Plastic Knife	etc. etc.	Baby	17	30	<a href="#">Rent</a>	9.99
1531	Adams, Nienow and Barton	Intelligent Bronze Wallet	infographic	Tools	11	41	<a href="#">Rent</a>	30.26
181	Adams, Nienow and Barton	Awesome Cotton Watch	heads down	Grocery	6	30	<a href="#">Rent</a>	88.52
184	Adams, Nienow and Barton	Lightweight Bronze Table	t-shirt sizes	Automotive	14	48	<a href="#">Rent</a>	76.27
196	Adams, Nienow and Barton	Intelligent Iron Coat	thought leadership	Toys	11	34	<a href="#">Rent</a>	45.68
274	Adams, Nienow and Barton	Gorgeous Silk Bottle	buying cycle	Games	10	40	<a href="#">Rent</a>	89.81
309	Adams, Nienow and Barton	Practical Concrete Bench	growth unit	Outdoors	14	43	<a href="#">Rent</a>	30.7
381	Adams, Nienow and Barton	Awesome Paper Chair	deep dive	Outdoors	3	34	<a href="#">Rent</a>	85.52
389	Adams, Nienow and Barton	Rustic Rubber Table	button up the loose ends	Electronics	17	44	<a href="#">Rent</a>	75.07
454	Adams, Nienow and Barton	Ergonomic Silk Bottle	value add	Jewelry	5	45	<a href="#">Rent</a>	66.86
494	Adams, Nienow and Barton	Rustic Aluminum Gloves	agile marketing	Music	15	39	<a href="#">Rent</a>	85.36
546	Adams, Nienow and Barton	Sleek Bronze Coat	branding	Music	3	27	<a href="#">Rent</a>	76.94
579	Adams, Nienow and Barton	Fantastic Cotton Wallet	gamification	Clothing	12	31	<a href="#">Rent</a>	42.35
600	Adams, Nienow and Barton	Heavy Duty Plastic Wallet	ideate	Shoes	7	47	<a href="#">Rent</a>	35.36
644	Adams, Nienow and Barton	Enormous Wool Coat	penetrate the market	Books	14	40	<a href="#">Rent</a>	78.46
679	Adams, Nienow and Barton	Aerodynamic Granite Table	immersive experience	Clothing	20	43	<a href="#">Rent</a>	8.47
795	Adams, Nienow and Barton	Small Plastic Clock	plug and chug	Grocery	7	44	<a href="#">Rent</a>	59.69
928	Adams, Nienow and Barton	Heavy Duty Steel Knife	data points	Home	5	41	<a href="#">Rent</a>	77.87
1017	Adams, Nienow and Barton	Rustic Wooden Knife	customer journey	Music	9	44	<a href="#">Rent</a>	0.39
1044	Adams, Nienow and Barton	Aerodynamic Granite Ban	put a pin in it	Beauty	4	37	<a href="#">Rent</a>	17.84

## Adams, Nienow and Barton Members

Name	Email	Admin?		
Ryan Parker	ryanparker@tamu.edu	true	<a href="#">Edit</a>	<a href="#">Show</a>
Ryan Parker	ryan@ryanparker.org	false	<a href="#">Edit</a>	<a href="#">Show</a>

[Back](#)

Activate Windows  
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Organization: Adams, Nienow and Barton

User: Ryan Parker

Admin?: false

Back

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## Editing Membership

Organization  
Adams, nienow and barton

User  
Ryan parker

Admin ☐

[Show](#) | [Back](#)

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## Editing Organization

Name  
Adams, Nienow and Bartc

Description  
Upgradable real-time ana

Phone number  
6781341076

Address  
Apt. 939 7110 Harold Rap

Submit

Show | Back

Activate Windows  
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Organization: Bechtelar and Sons

Item: 809

Helped By: Ryan Parker

Rented By: Sully Ross

Phone Number: (123) 456-7890

Address: 1234 Road Rd

Date rented: 2022-05-01

Return date: 2022-05-15

Edit | Return | Back

Activate Windows  
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## Editing Rented Item

Organization

Bechtelar and Sons ▾

Renter name

Sully Ross

Phone number

1234567890

Address

1234 Road Rd

Date rented

2022-05-01

Return date

2022-05-15

Submit

Show

Back

Activate Windows  
Go to Settings to activate Windows.

## Listing Memberships

Organization	User	Admin?	
Adams, Nienow and Barton	Ryan Parker	true	<a href="#">Leave</a>
Barrows-Wunsch	Ryan Parker	false	<a href="#">Leave</a>
Baumbach and Sons	Ryan Parker	false	<a href="#">Leave</a>
Bechtelar and Sons	Ryan Parker	false	<a href="#">Leave</a>

Activate Windows  
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## Project Roles

Our team started off with Sabrina being the Product Owner and Hanson being our Scrum Master. Throughout the project Hanson dropped the course so Ryan took on his responsibilities as Scrum Master. As things progressed Jireh and Sabrina began to share the Product Owner Role with Jireh being in charge the majority of the time.

## Scrum Breakdown

Iteration 1 - 8 points - Got an extremely basic items page setup that controls the addition, modification, and deletion of items from the database. Items only have a name, description, and quantity. In total this iteration was worth eight points.

Iteration 2 - 4 points - Added more data to items as well as the ability to increment and decrement an item's quantity from the inventory page. Added the ability to declare an item's price and location.

Iteration 3 - 32 points - Added the ability to rent an item out as well as return an item. Added the ability to search the item and rented items table as well as sort the columns. Added the ability to sign in through Google OAuth.

Iteration 4 - 18 points - Added organizations and memberships. A user can create an organization and other users can join the organization and be made admins. Admins can view an organization's members as well as create and modify items for an organization.

Iteration 5 - 15 points - Added more data to organizations such as their contact information. Added more convenient buttons to join and leave. Notifications for joining and leaving. And finally pagination and styling.

## Client Meetings

- Iteration 0 - December 30th, 2021
  - Discussed possible features and potential use cases
- Iteration 1 - January 3rd, 2022
  - Demonstrated the ability to add, modify, and delete items from the database and generated more user stories
- Iteration 2 - February 11th, 2022
  - Demonstrated the items page where items contained additional information as well as the ability to increment and decrement an item's quantity
- Iteration 3 - April 7th, 2022
  - Demonstrated the ability to rent and return items as well as sorting and searching these tables. Continued to gather more user stories specifically pertaining to the addition of organizations and users membership.
- Iteration 4 - April 22nd, 2022
  - Demonstrated organizations including the ability to create, join, and destroy orgs. Demonstrated differentiated views between an organization admin and a normal user
- Iteration 5 - April 29th, 2022
  - Demonstrated expanded organization data, finalized styling, and improved navigation.

## Testing

Using a Test Driven Design process was useful in developing new features for our project. The biggest impact TDD had was that it improved our vision for what we were building and improved the workflow of our program. After we gathered user stories from the client, as a team, we picked which stories we wanted to work on for that iteration. The stories picked were often the ones that we deemed as the core of our application. We would then figure out a general workflow for how we should expect the new feature to work. Naturally, cucumber features were created with this process and written. These tests were very simple at first but it dictated the flow of our actions and ensured that the user experience made sense. As we walked through the user flow, whenever we encountered forms, we would also add test cases for validation and expected outputs. Features were also written for CRUD actions as well as permission validation once users and organizations were being created.

While we were developing users with Google OAuth, we encountered an issue with cucumber. With OAuth, a user id was needed for all future actions in the application. However, cucumber would start with a fresh database and lacked a user identity. We initially tried manually creating a user through the login button but failed because Google did not permit it. This caused a period of time in which tests were blocked. While we were able to come up with cucumber scenarios, we were unable to automate the feature testing. Development continued on with the same methodology but the cucumber tests weren't able to validate our actions. Eventually, we figured out how to configure our test environment to enable OmniAuth and configured a mock user..

To configure, under config/environments/test.rb, you must add the lines:

```
“OmniAuth.config.test_mode = true“
```

And create a mock\_auth user as seen in the project file.

We encountered issues with cucumber where links would be pressed but failed to be redirected because it required javascript to function properly. Capybara cucumber does not natively support javascript so pages must be compliant with it. This would cause errors in our test cases and needed to be worked around. We tried solutions such as installing gems to make Capybara compatible as well as trying different inputs for link identifiers so it might path correctly. All these attempts to get Capybara to be compatible with javascript failed. As a result, we needed to change our code to be functional without javascript or fail to test the links through clicking.

## Configuration Management

For our approach we utilized feature branches to keep new features separate from the working product that we kept in our main branch. These feature branches would contain an overarching story such as the implementation of organizations. Once a feature was completed we would merge it into main where we would eventually create a release and deploy it to Heroku. At some point during the course of the project we resorted to mob programming which for the most part resulted in us not following this approach any longer. In the end we had 7 total branches resulting in three releases as the process of releasing got lost in the whirlwind of rushing to finish.



## Heroku

We had the issue with the fact that on Heroku the items would be ordered by most recently modified by default which was something that did not occur locally. We also often ran into issues with our database migrations. This was likely due to improper use of rails migrations causing us to have to completely reset the existing database instead of being able to add new data with ease. We also ran into an issue with the initial deployment to Heroku although those issues were due to our own local environments being configured improperly.

## Environments

The team did not work with a Cloud9 IDE and instead opted to work locally on our own machines. Our workflow was configured in a way where each individual would pull from a feature branch and run the server and its dependencies on their local machine. After editing, the team would push/merge into branches. This would sometimes create merge conflicts where members worked on the same files and file corrections needed to be done manually.

In the beginning, the group intended to create a development environment in an ec2 instance. The instance would be a postgres server that holds the database for our deployment application. The ec2 instance was put in place to provide consistency between database migrations for the deployed product. During development, the team would work with a sqlite database which was compatible with cucumber for testing.

Initially, there were problems in setting up the ec2 instance and database. While Amazon provides dedicated postgresql servers when choosing which type of ec2 instance to create, the team opted to create an ubuntu instance that ran a postgres server within it. In the case that we wanted to run local commands or alterations to the database. When setting up the instance, we opted to have local permission keys in order to log in. This posed a small hurdle as the team had trouble accessing the server. After investigation and troubleshooting, we discovered that it was a combination of problems that caused it. To successfully log in, the keys needed to be in the same folder as the terminal or path to it when using putty. The files also needed to have the proper permissions (chmod 600) or else the instance would deem the key unsafe and reject the login.

Once the ec2 instance was created, postgresql was set up and the team were able to connect to the database remotely. Environment variables were gathered from the instance and created in the Heroku dashboard under the config vars of the deployment. Once that was configured, no further needed to be taken.

GitHub was used throughout the entire project lifespan to act as source control for our project. Each major feature would branch from main and would be developed on that branch. Major features included creating items, creating a renting feature, adding users, and creating organizations. Separate branches were also created as test or experimental environments. This was prominently seen in certain branches that were used to learn and understand bootstrap/css as well as configuring mock oAuth users for testing and deployment.

## Project Sources and Details

This project is built on Ruby 2.6.6, Rails 4.2.11.3, and Bundler 1.17.2. For additional gems we utilized the omniauth, omniauth-google-oauth2, omniauth-rails\_csrf\_protection, dotenv-rails, and bcrypt gems to implement logging in with Google OAuth. We also used the will\_paginate gem to implement pagination for all of our models.

We used CodeClimate to monitor the maintainability and test coverage of our code to ensure our code was as clean as possible. While we utilized the test coverage feature of CodeClimate we did not stick to keeping it as good as possible due to lack of time to participate in test and behavior driven design.

- Pivotal Tracker:  
<https://www.pivotaltracker.com/n/projects/2547196>
- GitHub Repository:  
<https://github.com/CSCE-431-Team-8>
- Code Climate:  
<https://codeclimate.com/github/CSCE-431-Team-8/InventoryTracker>
- Heroku:  
<https://simple-inv-tamu.herokuapp.com/>
- Google Drive:  
[https://drive.google.com/drive/u/1/folders/0ANjzVVh\\_2QnkUk9PVA](https://drive.google.com/drive/u/1/folders/0ANjzVVh_2QnkUk9PVA)
- Presentation and Demo  
<https://vimeo.com/705222276>

## Repository Contents and Getting Started

To deploy our project you must be using Ruby 2.6.6, Rails 4.2.11.3, and Bundler 1.17.2. You must also ensure you have installed the gems listed in the project sources and details section. This can be accomplished by running bundler. You must set up the environment file to have GOOGLE\_CLIENT\_ID and GOOGLE\_CLIENT\_SECRET. This can be done by setting up a project in Google Developer Console and generating distinct keys that associate with your deployed URL. A guide for how to do so can be found here: <https://support.google.com/cloud/answer/6158849?hl=en>. Then if using Heroku you must go to settings then configure var. In configure bars place GOOGLE\_CLIENT\_ID and GOOGLE\_CLIENT\_SECRET and their associated values in the “key” and “value” forms. Then it should be as simple as pushing. There is a Procfile set up that will tell Heroku to run migrations. If you wish to seed the database then run “heroku run rake db:seed” and it will generate organizations and items for those organizations.