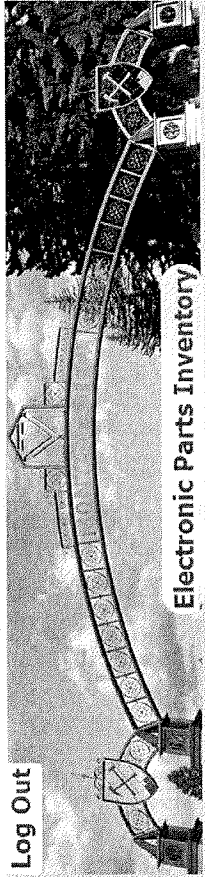


Browser tabs: M Digger Central - Montana... | Electronics Parts Inventory | + | Electronics Parts Inventory | Part.php | Montana Tech of the... | M Digger Central | Montana Tech email | MyMTech | OrediggerWeb

Address bar: https://mtc.edu/~mpd/places/ElectronicPartsInventory/Part.php

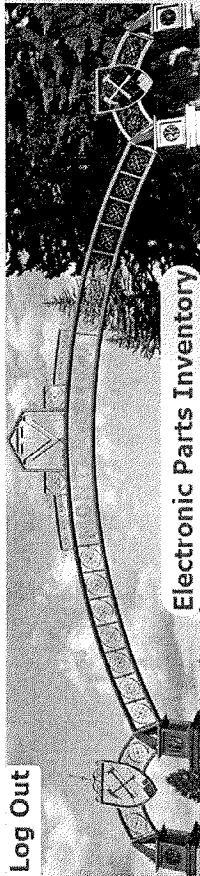
Navigation icons: Home, Back, Forward, Stop, Reload, Print, Search, etc.

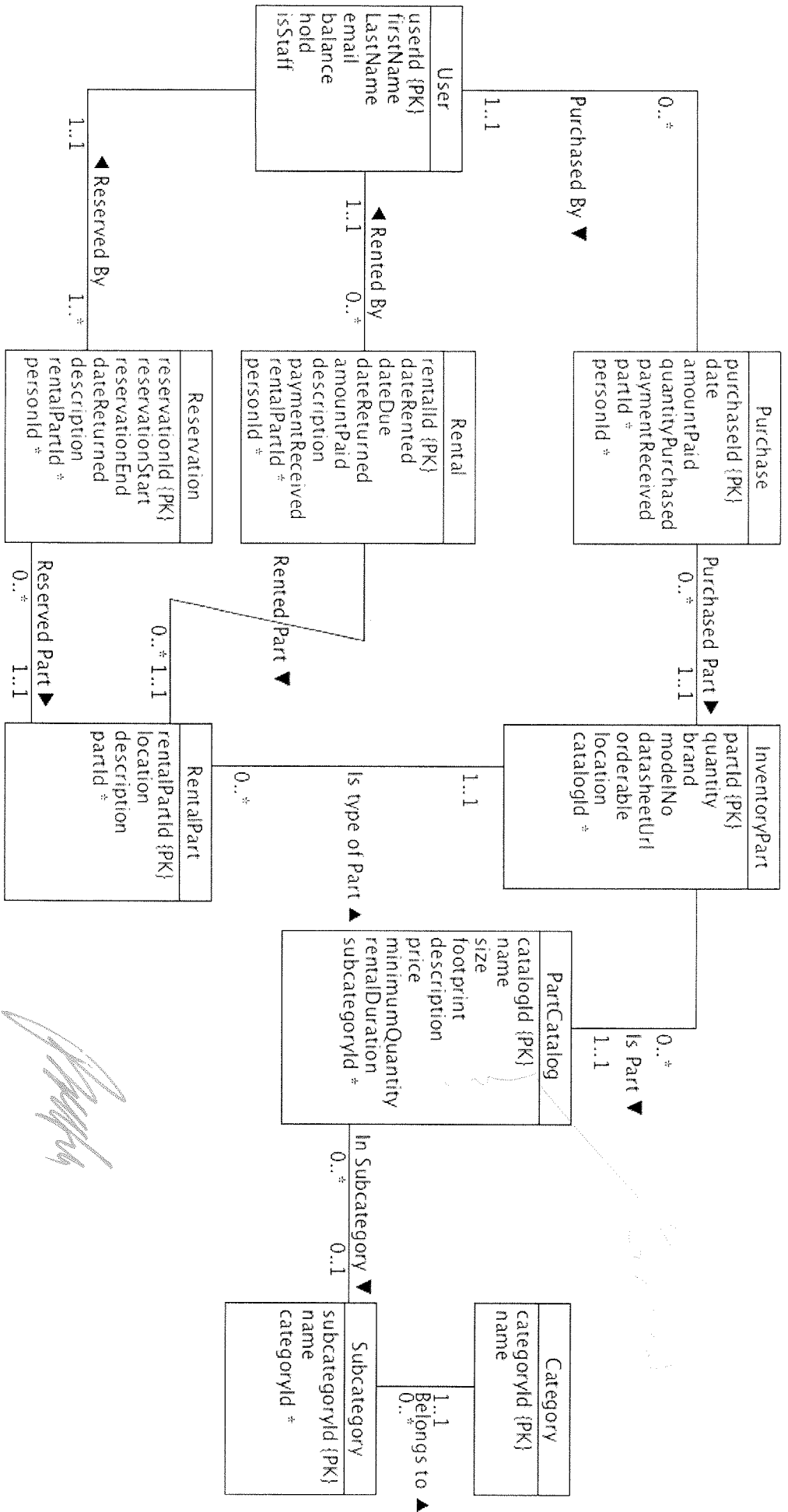
Page Content:

- Log Out**
- 
- Electronic Parts Inventory**
- Purchase Part (Mitchell Deplazes)**
- Scan Manufacturer Barcode:
- Quantity to Purchase:
- Buy Part

Footer: It looks like you haven't started Firefox in a while. Do you want to clean it up for a fresh, like-new experience? And by the way, welcome back!

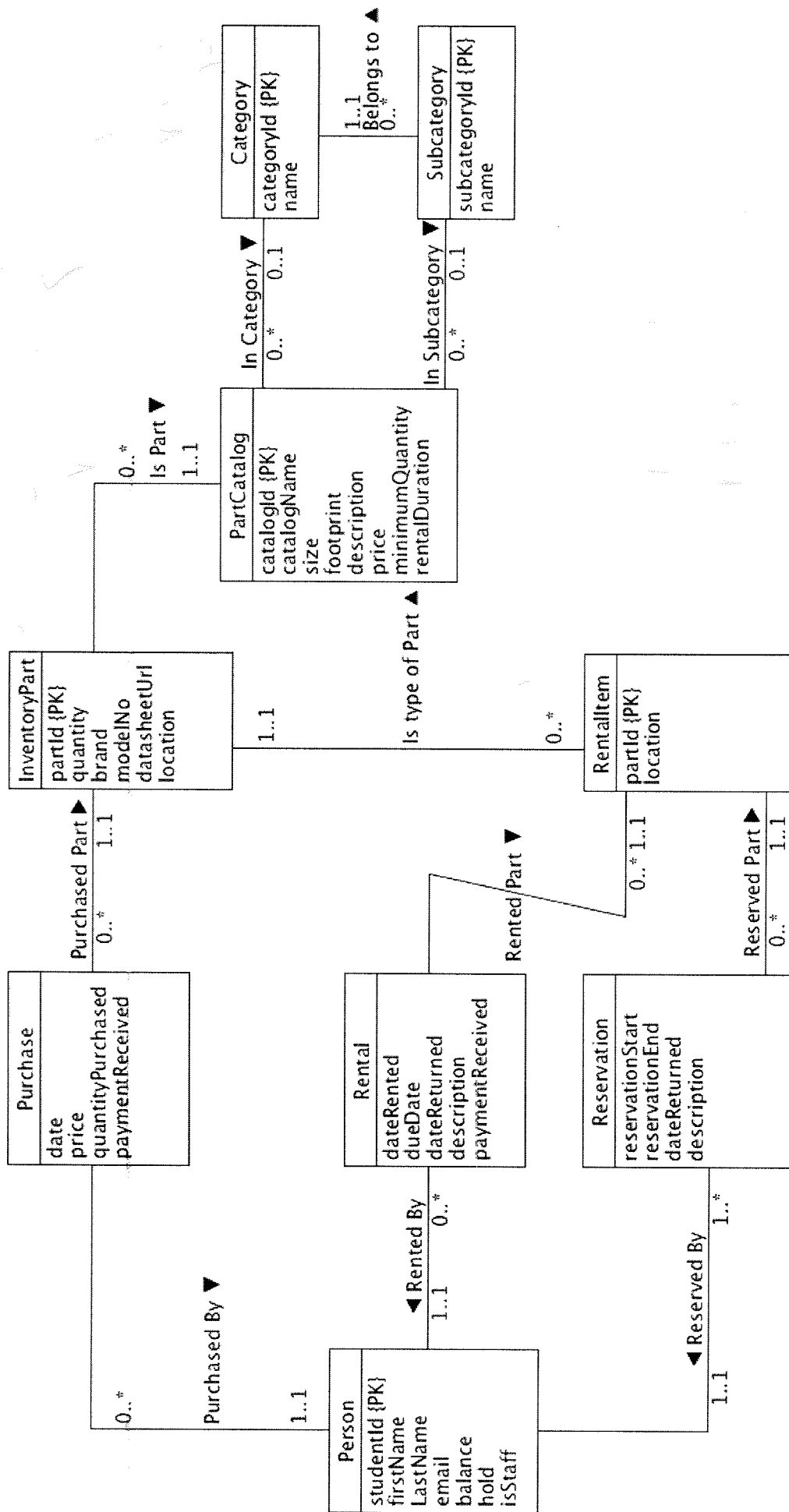
System tray: Rest Firefox... | 1:40 PM

Browser tabs: M Digger Central - Montana ... x Electronics Parts Inventory x
Address bar: https://katalin.mtech.edu/~mpe/elec/ElectronicPartsInventory.asp.php
Page title: Montana Tech of the ... M Digger Central M Montana Tech email MyMTech OrediggerWeb
Page content:

Reserve Part (Mitchell Deplazes)
Scan Rental Barcode: _____
reservationStart (YYYY/MM/DD): _____
reservationEnd (YYYY/MM/DD): _____
Description: _____
Reserve Part [button]
Footer: It looks like you haven't started Firefox in a while. Do you want to clean it up for a fresh, like-new experience? And by the way, welcome back!
Page status: Reset Firefox... x 1:40 PM



InventoryPart

PartCatalog



Electronic Parts Inventory

Scan Part

Find Part

Faculty Login (10 min AFK)

WMS — 39-8015

Login

E Login/Sign ID (Failed Attempt Tracking)

~~Create User if new~~

After login

Reserve

Action Rent / Return / Purchase

Scan Barcode / Enter Part No

↻

Action Successful

Scan another Part Yes No

Current Balance _____

Current Rentals _____

Rental Info

Reserve Page

Start Date

End Date

Description:

Part Category

Part Subcategory

} Filtered by

Catalog Name

Size

Footprint

Availability

SEARCH

Availability

Found Parts

Name	size	Footprint	Description	Price



Links to part page

Price

Catalog Page

Catalog Name

Catalog Desc.

Category

Subcategory

Size

Footprint

D

Qty

location

Parts to Buy

Parts to Rent

Part Name

Brand

Model No

datasheet

Faculty Login

Username

Password

[Go](#)

Faculty Home

Edit Users

Edit Parts

Edit Purchase/Rental/Part

Reports

Edit Categories

View Users

Add

St ID

FName

LName

Email

Balance

isStaff

[Go](#)

Edit

Same fields
just editing

[Go](#)

Remove

St ID

OR Name

[remove](#)

Edit Category Edit Parts

Enter New Catalog Enter New Inventory

Add Inventory Add Rental

Edit Part Data Remove Rental

Enter Catalog

catalog name

catalog category or Add Category

Subcategory " " "

size

price

footprint

min qty

description

rental Duration

Enter Inventory Part

Scan Barcode Qty to add

Brand

Model No

datasheet

Location

Edit Catalog or Edit Fav.

Same forms as entering.

(With Remove Option)

Add Inventory

Scan barcode

~~Add as Rental~~

Add as Store Part

Qty

90

Add Rental

Scan Barcode

(Creates Unique Rental ID)

90

Remove Rental

Scan Barcode

remove

Edit Category

Add Category

Add Sub-cat

Remove Category

Remove Sub-cat

Reports

Under Quantity Report (Order Report)

Inventory Report (All items)

Desc | Location | Qty | Blank column

Current Rentals

Overdue Rentals

Rental History

Purchase History

Not for
not to Failed Purchase

} One Report

Database Design, CSCI 340, Spring 2015
Electronics Parts Inventory

Database Application Title – Electronics Parts Inventory

The electronics parts inventory application is being built for Montana Tech's Electrical Engineering department. The development team for this application consists of Jesse Anderson, Kendall Schmit, and Mitchell Deplazes. The projects mission statement is "The purpose of the Electronics Parts Inventory is to track inventory and facilitate the purchase and rental of electronic parts by students."

Objectives –

- Maintain (enter, update, delete) electronic parts in inventory.
- Allow rental and purchase of parts in inventory by students.
- Report on parts in inventory.
- Report on active leases.
- Report on overdue leases.
- Report on understocked parts.

List of Tasks –

- Store information about electronics parts that the EE department has available to buy or rent.
- Allow the use of student ID card reading for purchases or rentals.
- Implement forms for entering, editing, and deleting student information.
- Implement forms for entering, editing, and deleting electronic parts information. (Including minimum stock)
- Implement a form to facilitate renting an available part.
- Implement a form to facilitate buying an available part.
- Implement a form for viewing available electronic inventory.
- Create inventory reports.
- Create rental reports.
- Allow the use of barcode scanning.
- Have a method for creating barcodes.
- Create an automated system for sending emails out to faculty for overdue parts.

The Electronic Parts Inventory application will have only one type of user. Due to FERPA regulations in relation to storing Student ID numbers and Names together, only faculty or TA's will be allowed to access this database. The single user view will have access to all forms and reports.



Database Design, CSCI 340, Spring 2015

Electronics Parts Inventory

List of Tasks:

1. Store information about electronics parts that the EE department has available to buy or rent.
2. Allow the use of student ID card reading for purchases or rentals.
3. Implement forms for entering, editing, and deleting student information.
4. Implement forms for entering, editing, and deleting electronic parts information.
(Including minimum stock)
5. Implement a form to facilitate renting an available part.
6. Implement a form to facilitate buying an available part.
7. Implement a form for viewing available electronic inventory.
8. Create inventory reports.
9. Create rental reports.
10. Create an automated system for sending emails out to faculty for overdue parts.
11. Allow the use of barcode scanning.
12. Have a method for creating barcodes.

Database Design, CSCI 340, Spring 2015
Electronic Parts Inventory

The application is being developed for Bryce Hill by students Jesse Anderson, Mitchell Deplazes, and Kendall Schmit. Mission statement: "The purpose of the Electronics Parts Inventory is to track inventory and facilitate the purchase and rental of electronic parts by students."

Objectives:

- Maintain (enter, update, delete) electronic parts in inventory.
- Allow rental and purchase of parts in inventory by students.

- Report on parts in inventory.
- Report on active leases.
- Report on overdue leases.
- Report on understocked parts.

Database Design, CSCI 340, Spring 2015

Meeting Minute template

Purpose of meeting: Introduction

Attendees: Mitch, Kendall, Bryce, Jesse

Date/time: 2/6/2015, 4:00 PM

Location: Bryce's office.

Recorder: Jesse Anderson

1. Items < 10\$ generally are given out not rented.
2. Register Students using their Digger ID card.
3. (Future, may allow students to purchase items using their digger id card)
4. Keep track of date taken out and due date for parts.
5. Monthly email to admins for overdue items.
6. Bar codes are in groups, might be different codes for same items.
7. Phone apps could be used in the future.
8. Students have a dollar limit for renting/purchasing before they have to actually pay.
9. Some items can be purchased or given away, others (equipment) are rented.

4:08: Be able to produce a page that shows the stock needing replenished. Students have a limit on how much they may purchase/rent per semester, as well as a limit on the total value checked out at any given time.

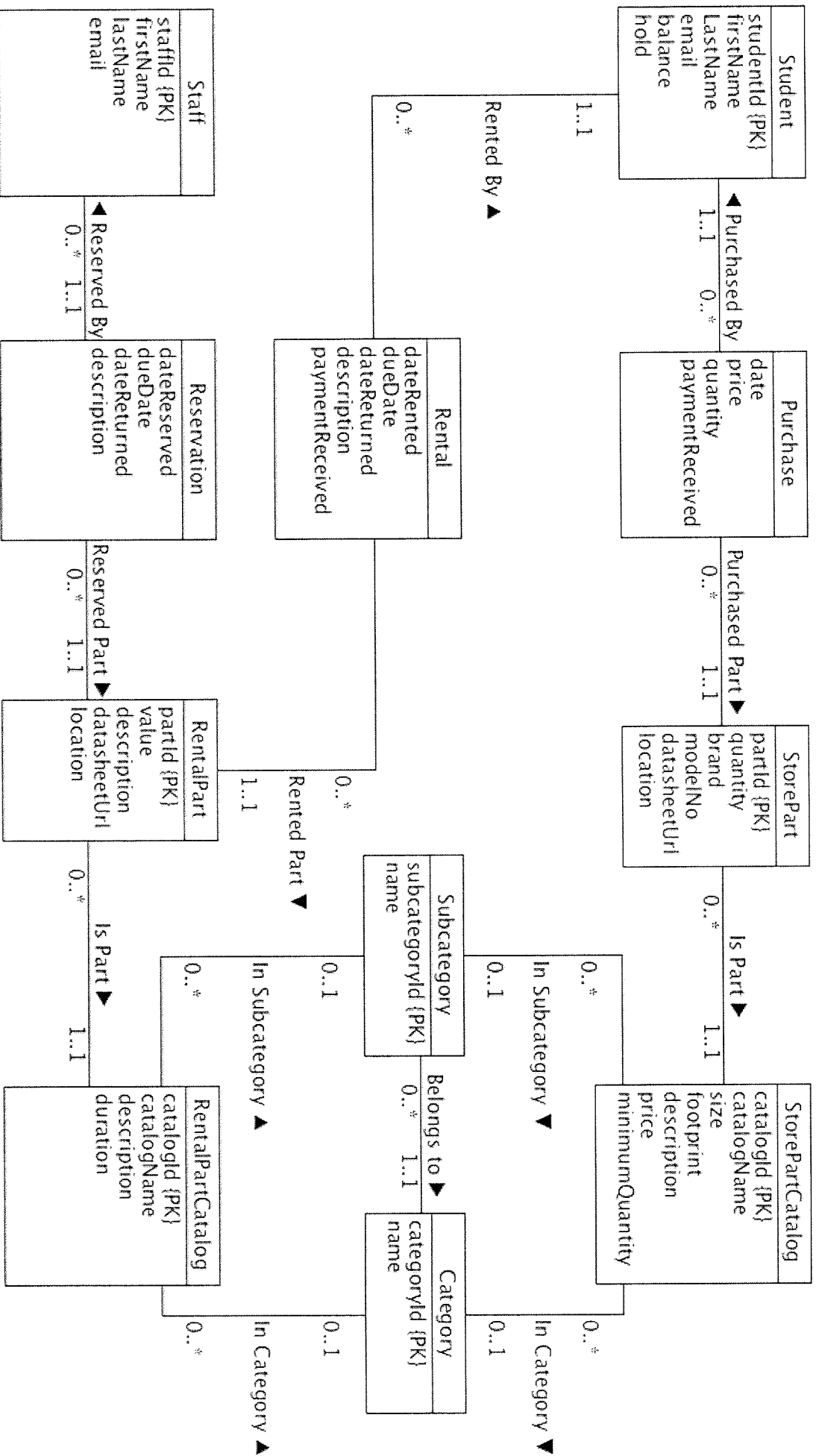
4:10 User hierarchy: admins have full access, others can just check items in/out.

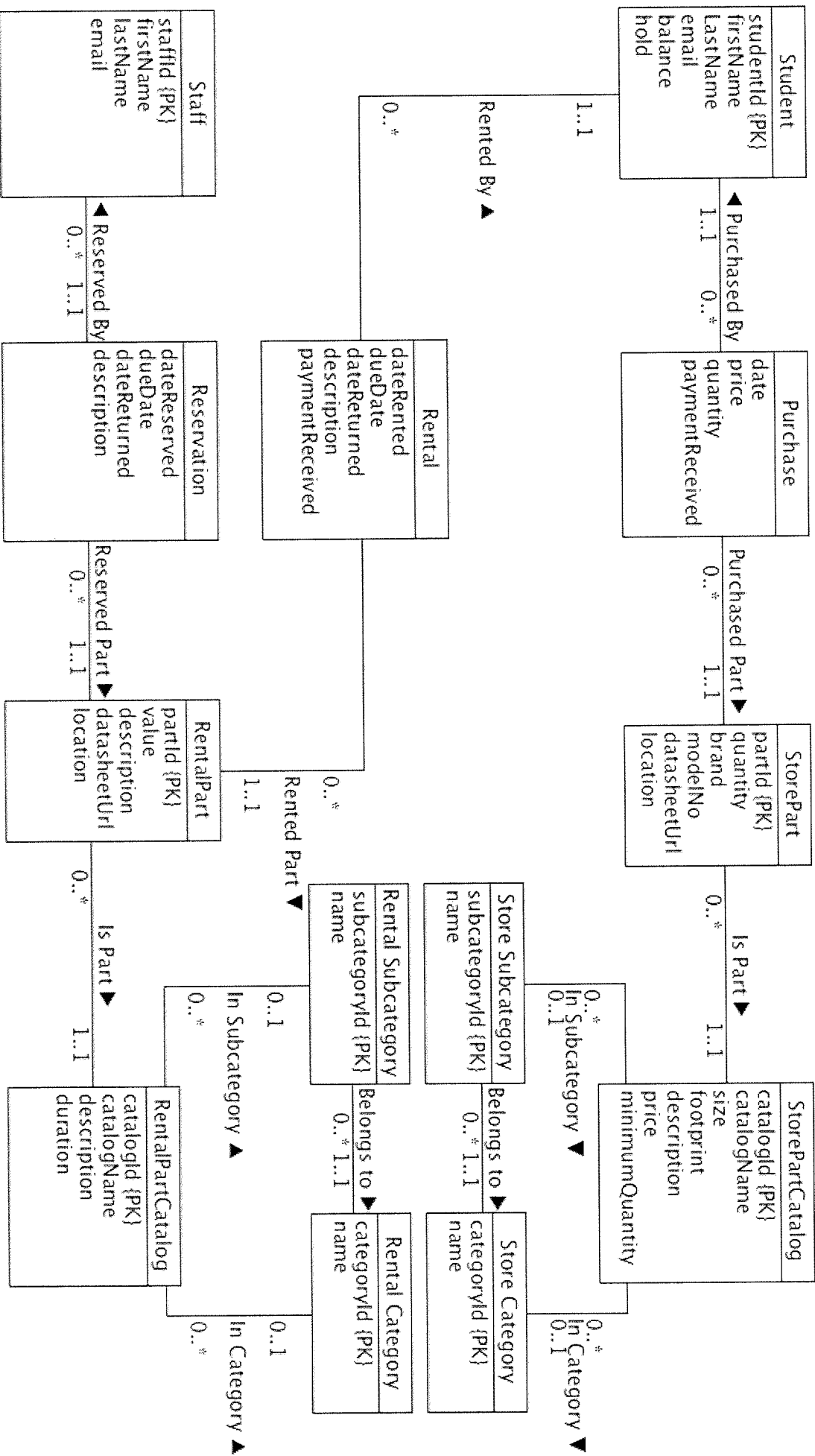
4:12 We need to find what information we can read/write from a Student ID. Things we'd like to do: fetch first and last name when card is swiped, possible check for declared major and whether their account has holds. Can we make purchases with Digger Dollars?

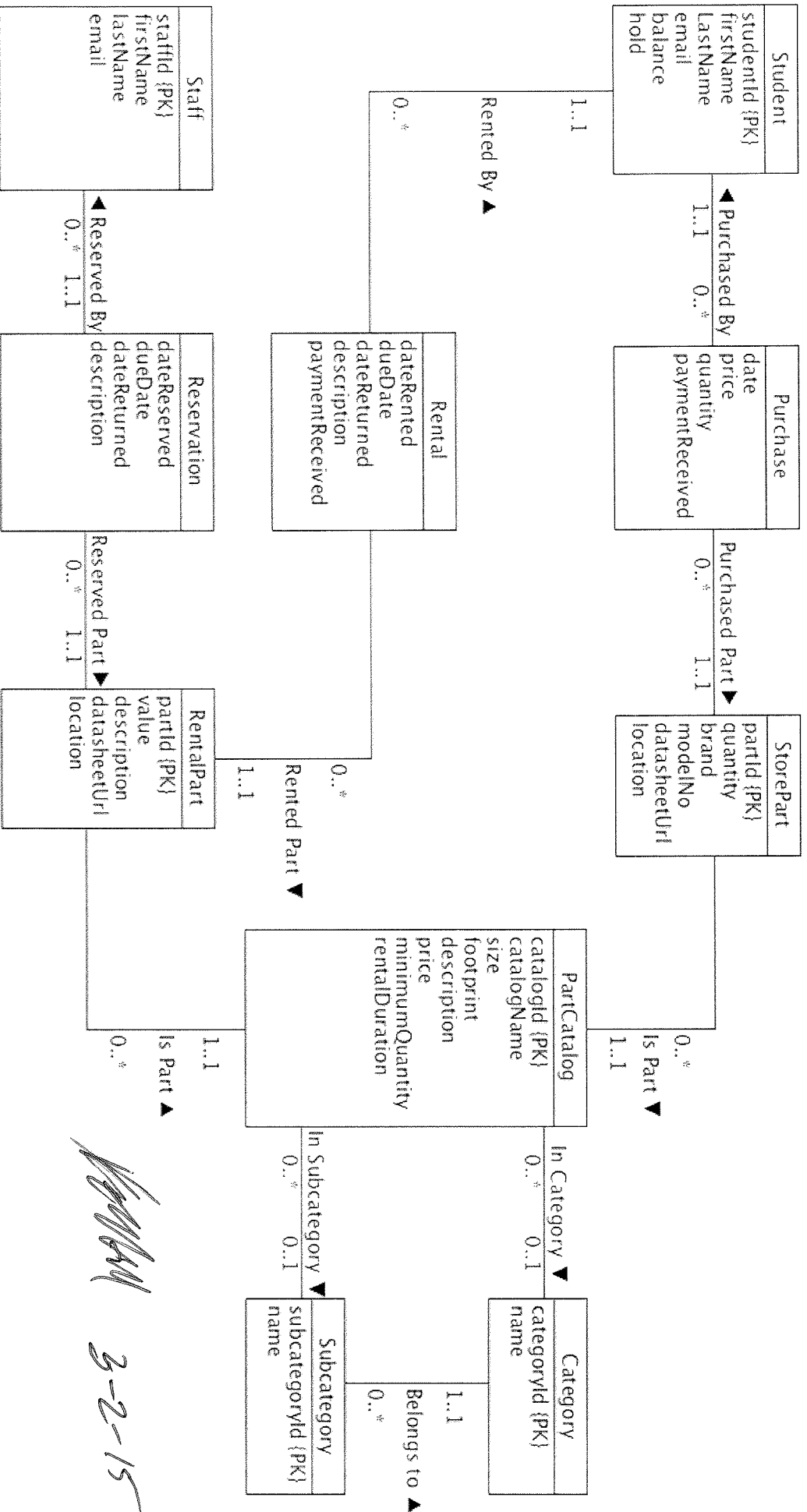
4:13 Would like to store PDF spec sheets for parts. Though local access is all he requires for the database, he would like students to be able to access the data sheets for their parts. This would require some kind of remote interface.

4:14 Parts can have multiple bar codes, it would be nice to have their DigiKey part numbers pages for easy purchasing.

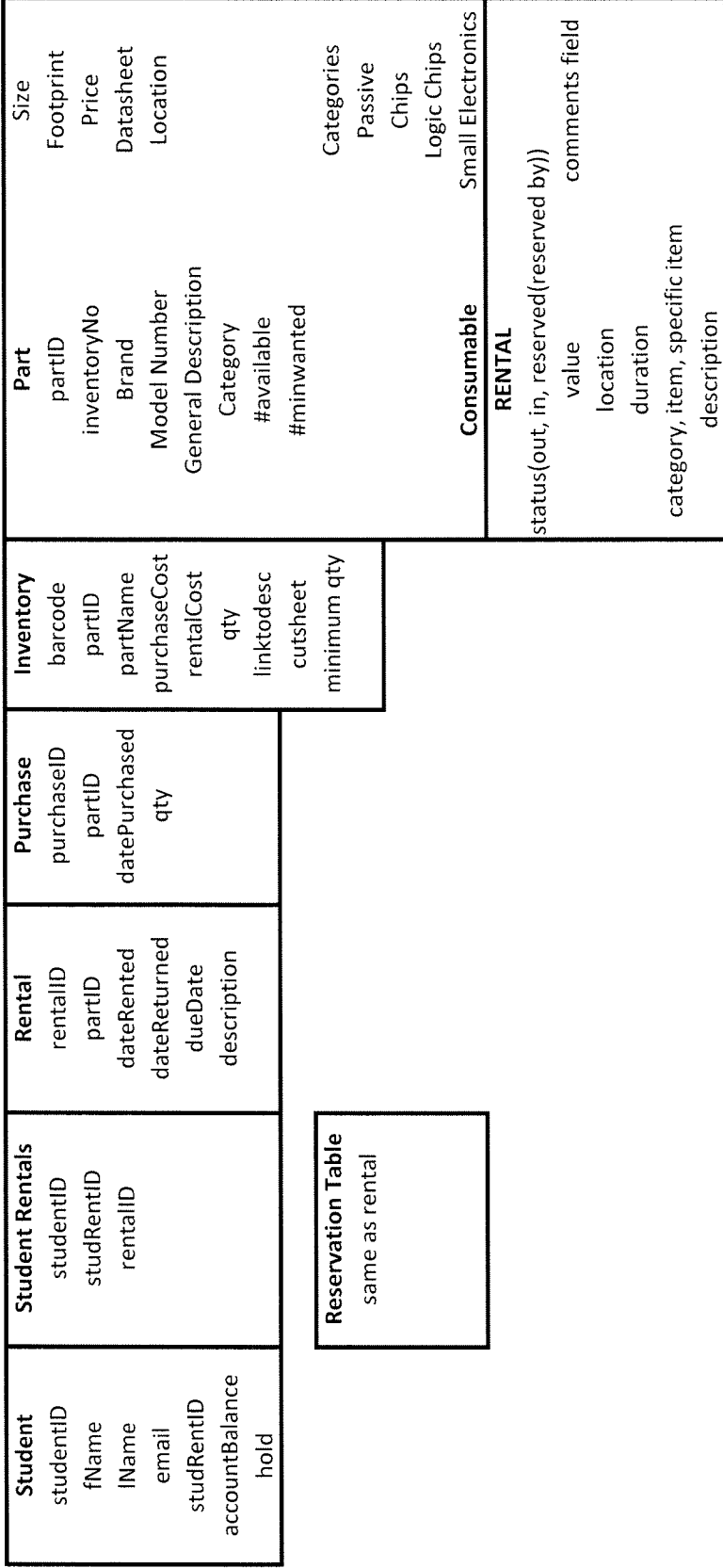
End time: 4:22 PM





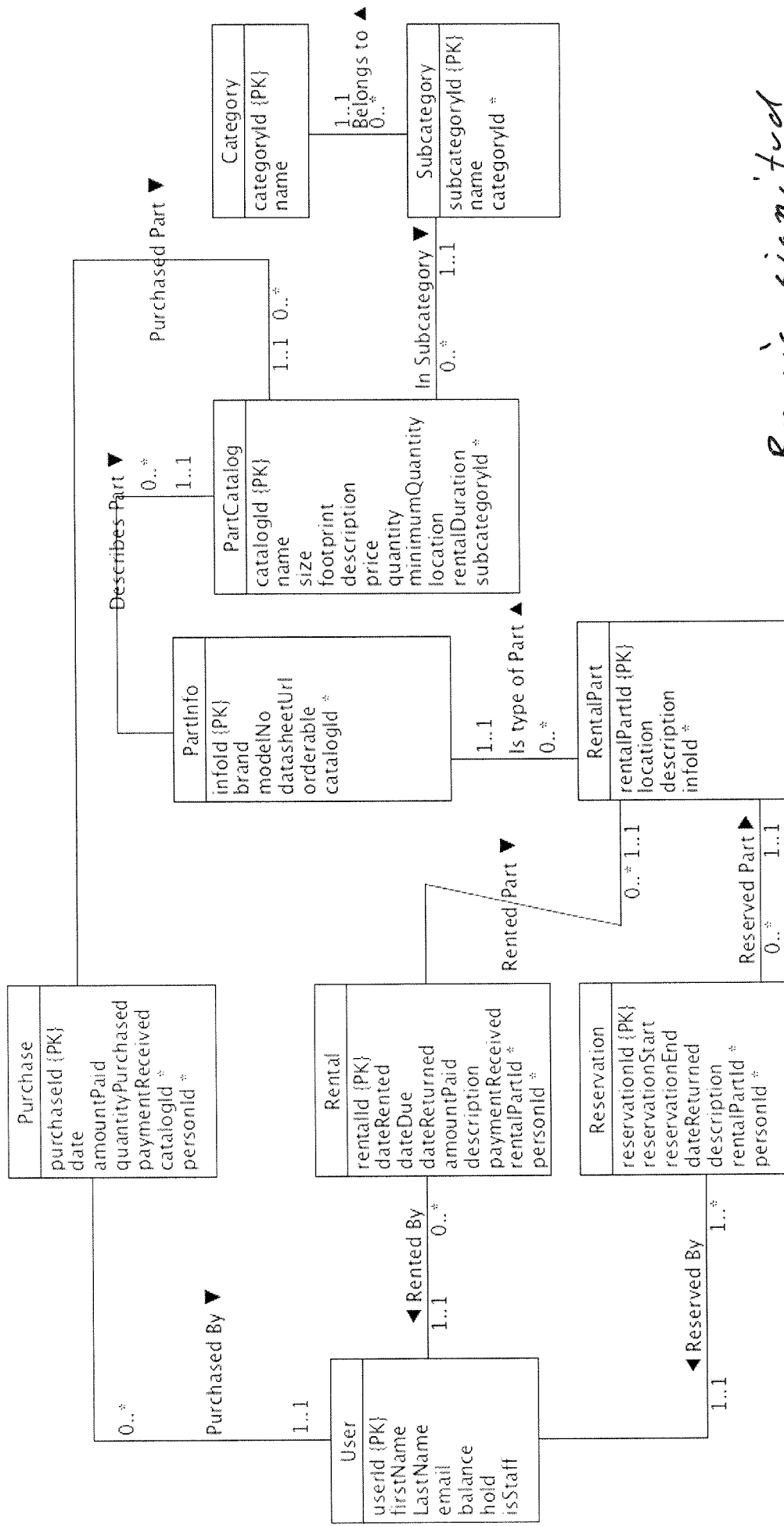


Handwritten signature
 3-2-15

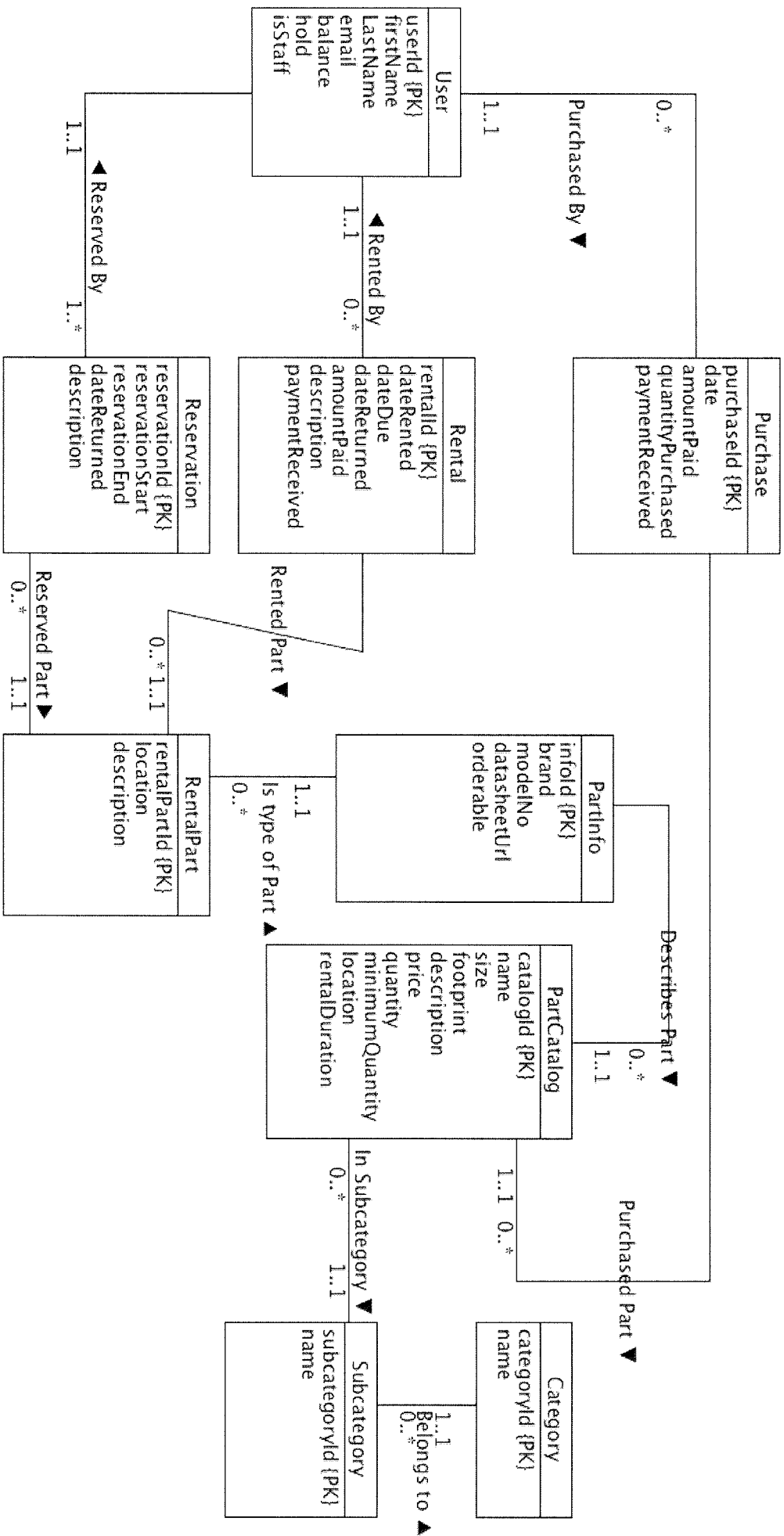


Reservation Table
same as rental

sub category
resistor



Bryce's signified on previous version



Database Design, CSCI 340, Spring 2015
Electronics Parts Inventory

Database Application Title – Electronics Parts Inventory

The electronics parts inventory application is being built for Montana Tech's Electrical Engineering department. The development team for this application consists of Jesse Anderson, Kendall Schmit, and Mitchell Deplazes. The project's mission statement is "The purpose of the Electronics Parts Inventory is to track inventory and facilitate the purchase and rental of electronic parts by students."

Objectives –

- Maintain (enter, update, delete) electronic parts in inventory.
- Allow rental and purchase of parts in inventory by students.
- Report on parts in inventory.
- Report on active leases.
- Report on overdue leases.
- Report on understocked parts.

List of Tasks –

- Store information about electronics parts that the EE department has available to buy or rent.
- Allow the use of student ID card reading for purchases or rentals.
- Implement forms for entering, editing, and deleting student information.
- Implement forms for entering, editing, and deleting electronic parts information. (Including minimum stock)
- Implement a form to facilitate renting an available part.
- Implement a form to facilitate buying an available part.
- Implement a form for viewing available electronic inventory.
- Create inventory reports.
- Create rental reports.
- Allow the use of barcode scanning.
- Have a method for creating barcodes.
- Create an automated system for sending emails out to faculty for overdue parts.

The Electronic Parts Inventory application will have two types of users. Due to FERPA regulations in relation to storing Student ID numbers and Names together, only faculty or TA's will be allowed to access the entire database. The faculty user view will have access to all forms and reports. The student user view will have access to data about what parts are available for rental/purchase and access to checking or buying a part.

Meeting
Minutes

Meeting Minutes

Purpose of the meeting: Introduction

Attendees: Mitch, Kendall, Bryce, Jesse

Date/time: 2/6/2015, 4:00 PM

Location: Bryce's Office

Recorder: Jesse Anderson

Items < 10\$ generally are given out not rented.

Register Students using their Digger ID card.

(Future, may allow students to purchase items using their digger id card)

Keep track of date taken out and due date for parts.

Monthly email to admins for overdue items.

Bar codes are in groups, might be different codes for same items.

Phone apps could be used in the future.

Students have a dollar limit for renting/purchasing before they have to actually pay.

Some items can be purchased or given away, others (equipment) are rented.

4:08

Be able to produce a page that shows the stock needing replenished. Students have a limit on how much they may purchase/rent per semester, as well as a limit on the total value checked out at any given time.

4:10

User hierarchy: admins have full access, others can just check items in/out.

4:12

We need to find what information we can read/write from a Student ID. Things we'd like to do: fetch first and last name when card is swiped, possible check for declared major and whether their account has holds. Can we make purchases with Digger Dollars?

4:13

Would like to store PDF spec sheets for parts. Though local access is all he requires for the database, he would like students to be able to access the data sheets for their parts. This would require some kind of remote interface.

4:14

Parts can have multiple bar codes, it would be nice to have their DigiKey part numbers pages for easy purchasing.

End time: 4:22 PM

Meeting Minutes

Purpose of the meeting: List of tasks, conceptual model

Attendees: Mitch, Kendall, Bryce, Jesse

Date/time: 2/23/2015, 4:00 PM

Location: Bryce's Office

Recorder: Mitchell Deplazes

4:00

Recap of what was learned since the previous meeting –

- The database will have no access to any external databases meaning that user information will need to be inputted manually. This was accepted without any issues.
- In order to use digger dollars, a ~\$1,700 card reader would need to be purchased. It was explained that this would need to be manually operated and the database would not interact with that system in anyway.

4:05

- The database will need to associate fake money like student printer money for renting out items.
- While barcode printing is a wanted feature, it was decided that it is a low priority since it is not actually a database design. (However, we should design for its future implementation)
- Parts will not need to be grouped together as a single product since the groups would require frequent editing.
- Every part should have a barcode (Things that are too small can be placed in a bag with the barcode on that).
- It will be required for students to be able to access their own user view which will show them available parts for them to buy or to rent.

4:20

- Discussed data entities and the attributes that we will want for them (recorded in an excel spreadsheet)
- Database will need to be able to add inventory that already exists (increasing qty's)

4:30

- Will possibly need a separate form for adding existing parts vs adding totally new parts.
- The database will only be responsible for tracking the previous 3 semesters of data.

4:40

- The parts entity will need to be split into store parts and library parts since single store parts do not need to be unique from parts of their own type.
- Went over attributes for the student entity (recorded in an excel spreadsheet).
- Went over attributes for rental/purchase entities (recorded in an excel spreadsheet).

4:55

- Bryce accepted and signed a copy of the set out lists of tasks. (Nothing needs to be changed)
- End Meeting

Meeting Minutes

Purpose of the meeting: Conceptual Model Confirmation

Attendees: Mitch, Kendall, Bryce, Jesse

Date/time: 3/2/2015, 4:00 PM

Location: Bryce's Office

Recorder: Mitchell Deplazes

4:00

- Overviewed the three conceptual models that our group developed since the last meeting.

4:10

- A model was agreed upon with no changes needing to be made.

4:15

- Started discussing the user interface that would be wanted.
- Was shown a sample program that Bryce uses that he would like our interface to resemble.
- Bryce will send us the code of the program for us to look at before our next meeting.

4:20

- End of meeting.

Database Design, CSCI 340, Spring 2015

Electronics Parts Inventory

Meeting Minutes

Purpose of the meeting: Create Sample User Interface

Attendees: Mitch, Kendall, Jesse

Date/time: 3/4/2015, 2:00 PM

Location: Museum Lab

Recorder: Mitchell Deplazes

2:00

- Developed a sample user interface for the electronic parts inventory.
- Discovered a way to make our conceptual model more efficient (See updated model)

3:00

- End of Meeting

Database Design, CSCI 340, Spring 2015

Electronics Parts Inventory

Meeting Minutes

Purpose of the meeting: Show Sample User Interface

Attendees: Mitch, Kendall, Jesse, Bryce

Date/time: 3/9/2015, 4:00 PM

Location: Museum Lab

Recorder: Mitchell Deplazes

4:00

- Showed small modification to conceptual model
- Bryce identified some attributes that we need to add to the model.

4:15

- Went over the sample user interface.
- Made slight changes to what we had designed (directly wrote down changes on interface drawings).

4:30

- End Meeting

Database Design, CSCI 340, Spring 2015

Electronics Parts Inventory

Meeting Minutes

Purpose of the meeting: Show Sample User Interface

Attendees: Mitch, Kendall, Jesse, Bryce

Date/time: 3/23/2015, 4:00 PM

Location: Museum Lab

Recorder: Mitchell Deplazes

4:00

- Discussed changes to the conceptual model.
- Connected to the MySQL and executed a query using PHP.

4:30

- Created PHP scripts to take data and insert into test table.

5:00

- End Meeting

Database Design, CSCI 340, Spring 2015

Electronics Parts Inventory

Meeting Minutes

Purpose of the meeting: Show UI development

Attendees: Mitch, Kendall, Jesse, Bryce

Date/time: 3/30/2015, 4:00 PM

Location: Museum Lab

Recorder: Mitchell Deplazes

4:00

- Showed Bryce the improvements on the UI interface including scanning digger cards and entering information.
- No changes were suggested by Bryce.

4:15

- End Meeting

Database Design, CSCI 340, Spring 2015

Electronics Parts Inventory

Meeting Minutes

Purpose of the meeting: Update on User Interface

Attendees: Mitch, Kendall, Jesse, Bryce

Date/time: 4/6/2015, 4:00 PM

Location: Museum Lab

Recorder: Mitchell Deplazes

4:00

- Showed improvements to the UI
- Discussed implementing barcodes with the database.
- Learned that changes would need to be made to both the conceptual model and the logical model.
- Bryce approves of current UI for prototype submittal.

4:30

- End Meeting

Database Design, CSCI 340, Spring 2015

Electronics Parts Inventory

Meeting Minutes

Purpose of the meeting: Changing Logical/Concept. Model

Attendees: Mitch, Kendall, Jesse

Date/time: 4/7/2015, 4:30 PM

Location: Museum Lab

Recorder: Mitchell Deplazes

4:00

- Met to change models that were found needed at the last meeting.

4:45

- Created views and queries for the reports needed in the application.

5:30

- End Meeting