

List of Teams
& team members?

ISL Data Entry Application

Overview:

The purpose of this document is to describe how the CSCI 470 class went about developing the database and front end of the application ISL will use to track contacts, projects, equipment and labs.

The project was split into three sections which were given to three groups of approximately six students. The groups were responsible for designing and implementing the IRIS database as well as the ISL specific functionality and the web interface for these databases. In the end, IRIS and ISL will be combined into one database which will allow for other labs – the vision lab for example – utilizing the functionality that is already provided for the ISL data.

The following three sections will discuss in more detail each of these three sections and the process it took for design to be accomplished.

The ISL Implementation:

Based on the input from the client, we designed the database should be user-centric. So we started with the contact table and sub-classed it to fit the needs of the various types of users. From there we added the supporting tables needed to keep track of the data related to the users such as what they are working on and who provided the funding for their projects. When the project was split the structure of the database remained overall unchanged although some of the major tables were passed to the other team.

? grammar

Not reflected in Doc.A. ?!
Integration w/ IRIS?
!!!

vague explain

The database is more or less finished. The only major feature that was not finished is the storage of various media files. This is at the request of the project leader. The media file were originally modeled as multi-valued attributes of the various tables they were associated with, but we wanted to unify all of the media tables into one table. Otherwise the database is fully functional.

What? Show me!

for which relations? Projects?

One of the future plans is to port the database to a DBMS that supports enforcement of foreign key constraints. Currently the database is being used on MySQL which syntactically supports foreign keys but it doesn't actually enforce them. The SQL we wrote have all the key constraints so the port should be fairly easy.

if I had access to it - a printed prog?

? What? Not MySQL support (enough)?

The IRIS Implementation:

The IRIS database design was based off of information received from our initial ISL entity relationship diagram, the ISL and IRIS websites, minutes from IRIS meetings, and feedback from group discussions. The database contains tables for Documents, Funding, Board Members, Expenses, and Contacts. Each of these tables contributes to the administration of ISL and all such projects. Our design of these tables were based on the idea of simplicity and effectiveness which allowed for the end user to input data with ease and quickness. We did this by adding enumerated fields that could be implemented with drop down boxes. In the Document's table we created an enumerated field with the

document Type which would allow the end user to choose from several subcategories of documents including: Contracts, Proposals, Projections, Funding Documents, Logs, Forms, Equipment, and Invoices. Each document would receive a Type as well as a Description from the end user. The document would also contain a path and a primary key of DocumentID. The Contact's table also made use of enumeration which included: Supplier, Student, Faculty, Media, and Sponsor. Each Contact would also contain: Name, Address, Phone Number, and Email along with the primary key of ContactID. The Expenses and Funding tables were created to give Board Members an interface to look up key financial information. The Expenses table explains to the end user a Description of the expense, the Type of the expense and the Price. This table also contains a foreign key of DocumentID so that a Document can be linked with the expense information. The Funding table gives details about Funding sources including: Total Amount of funding, the Amount Left, and the funding Source with foreign keys of ContactID, DocumentID, ProjectID and a primary key of FundingID. This table will give Board Members a quick reference to Funding information. The Board Members table will be made up of administrators within IRIS. This table will contain a ContactID as well as their Position and will contain the Primary key of BoardMemberID. The IRIS database will be a good start at allowing its user an easy interface to keep track of key information for its organization. Future implementations should include Outreach and Inreach projects to further integrate ISL and IRIS data into a cohesive database design.

integration?

The Interface Implementation:

The biggest decisions we as the interface group had to come to a consensus on were how to divide up the work, and what programming technologies we were going to use to develop the interface. About half the people in our group had done some sort of web programming at some point or another, and most of us were slightly more familiar with PHP than other technologies such as ASP.NET and PERL. Based on this we decided to do most of the programming for the interface using JavaScript and PHP.

Dividing up the work was a little bit more difficult. We decided early on that we wanted to focus mainly on three areas being Projects, Equipment, and Contacts. Once we'd developed basic functionality for these sections we could move on and improve upon this functionality while also working on some of the other required areas such as Inreach, Outreach, and Documents. Having around 6-7 people in our group we tried to pair people up and assign them to one of those three sections. We also decided to have two people concentrating on writing a search function that would be flexible enough to be inserted into any of the three major areas just described.

good choice

nice.

Status of Project:

Currently the interface group was able to implement basic searching and sorting functionality into the Equipment, Contacts, Projects, and Documents sections. Upon entering any of these sections a basic list of for example all equipment or contacts is listed to the user. They can then click on the different columns to then sort the data specifically by that corresponding column. From this point, the user can access search and add features that will allow them to add another item of that type to the database or to search through the existing data more specifically using selectable options and keyword

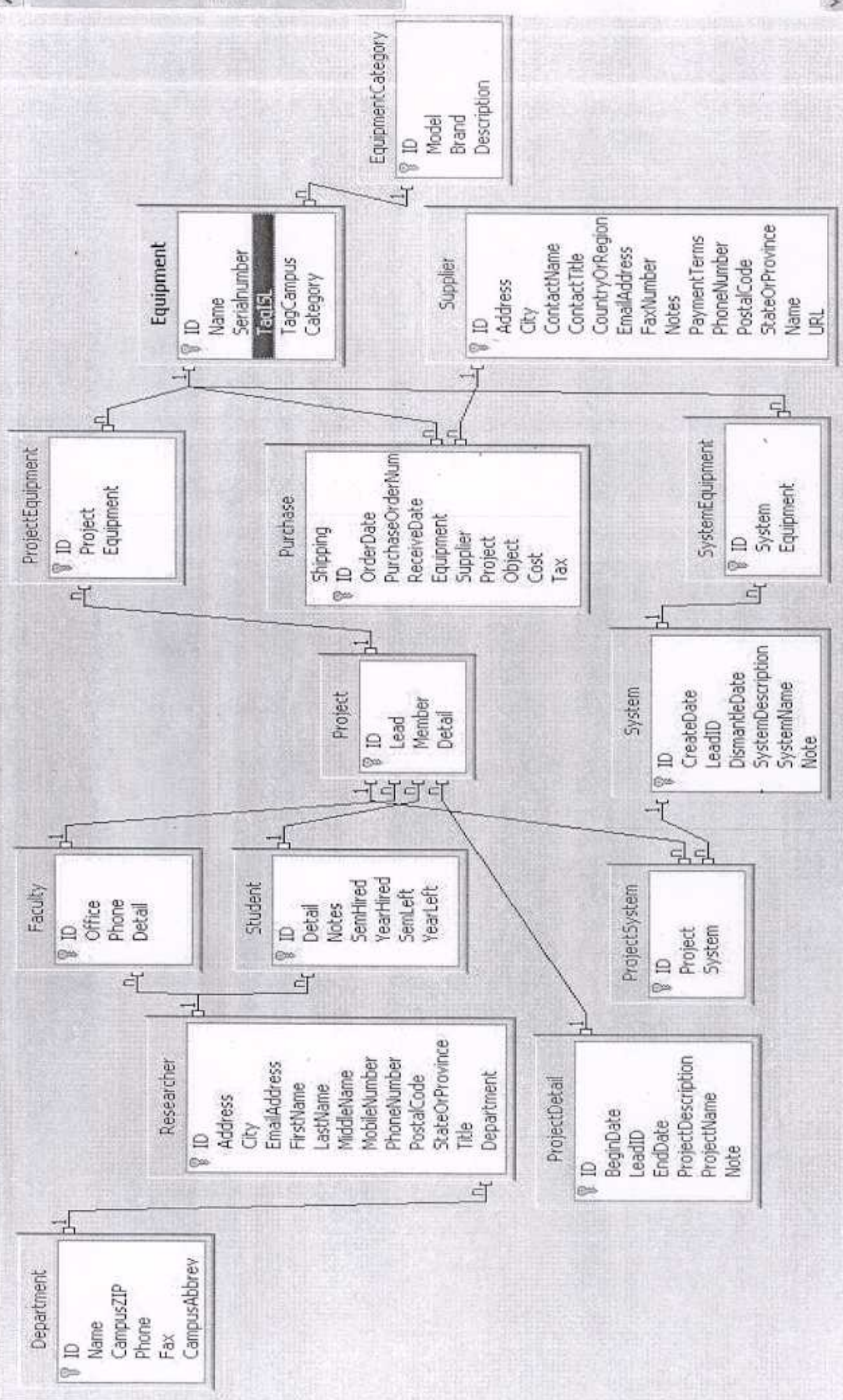
reports?

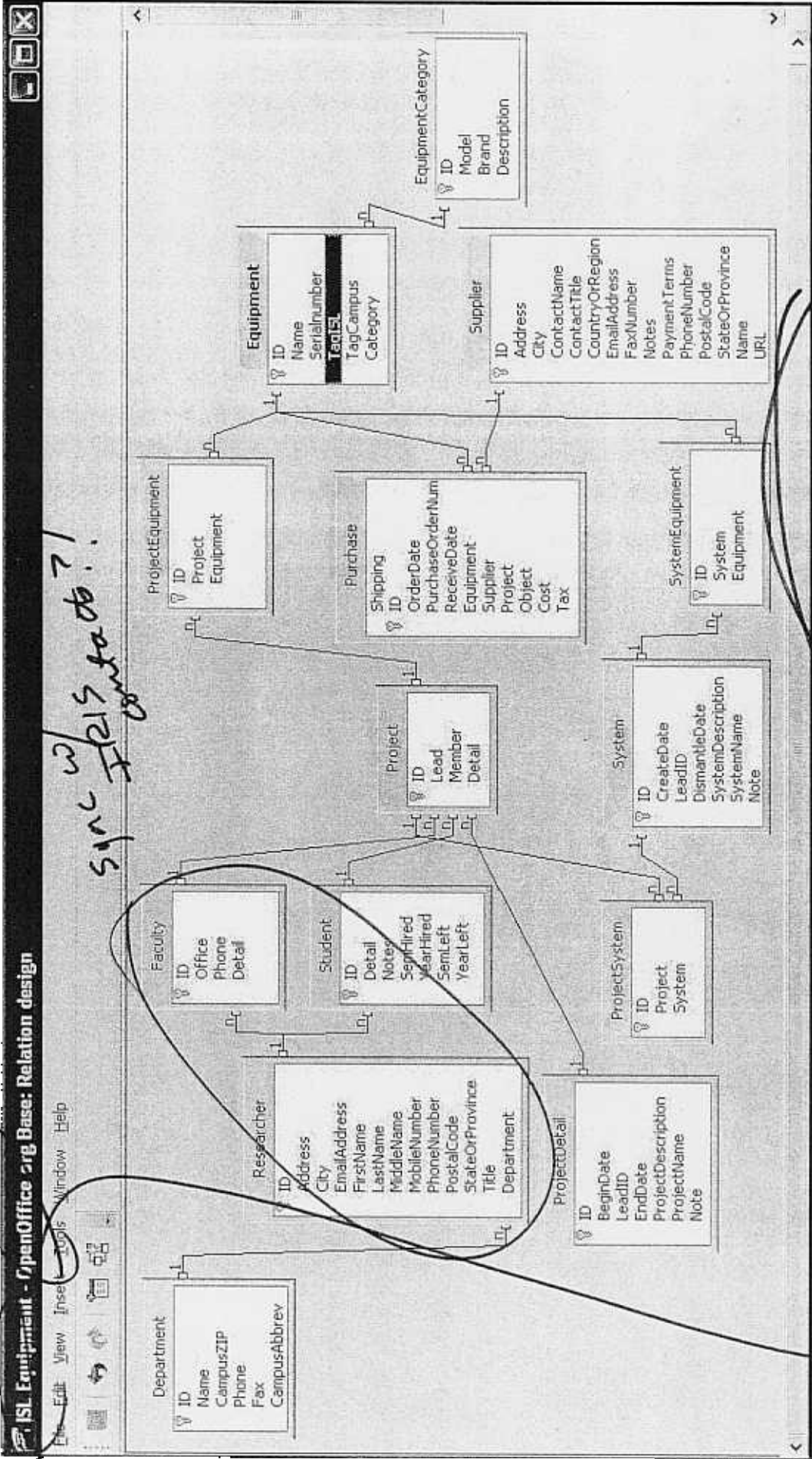
values. Currently there is no functionality for the inreach and outreach sections of the web interface due to the missing database tables.

Recommendations:

As for the future of the interface there are a few things we think would be good to pick up with; one being to add in more advanced linking between the different areas such as Project and Equipment. For example currently there is no way to check out a piece of equipment to a specific project, or to assign a particular student to a research team without knowing their unique id numbers before hand. Implementing a drop down list that would automatically populate with all projects equipment can be checked out to, or all students eligible to work on a research team when doing these modifications would be much more user friendly. Once this linkage is achieved further work on the inreach and outreach sections along with a system for monitoring checked out keys would be our suggested course of action.

*Overall
Summary?*





sync w/ consultants?!

is this A.I.'s
 this copy provided to Quora as a guide

write 2 parts that?

DOC A

(see attachment) = add it

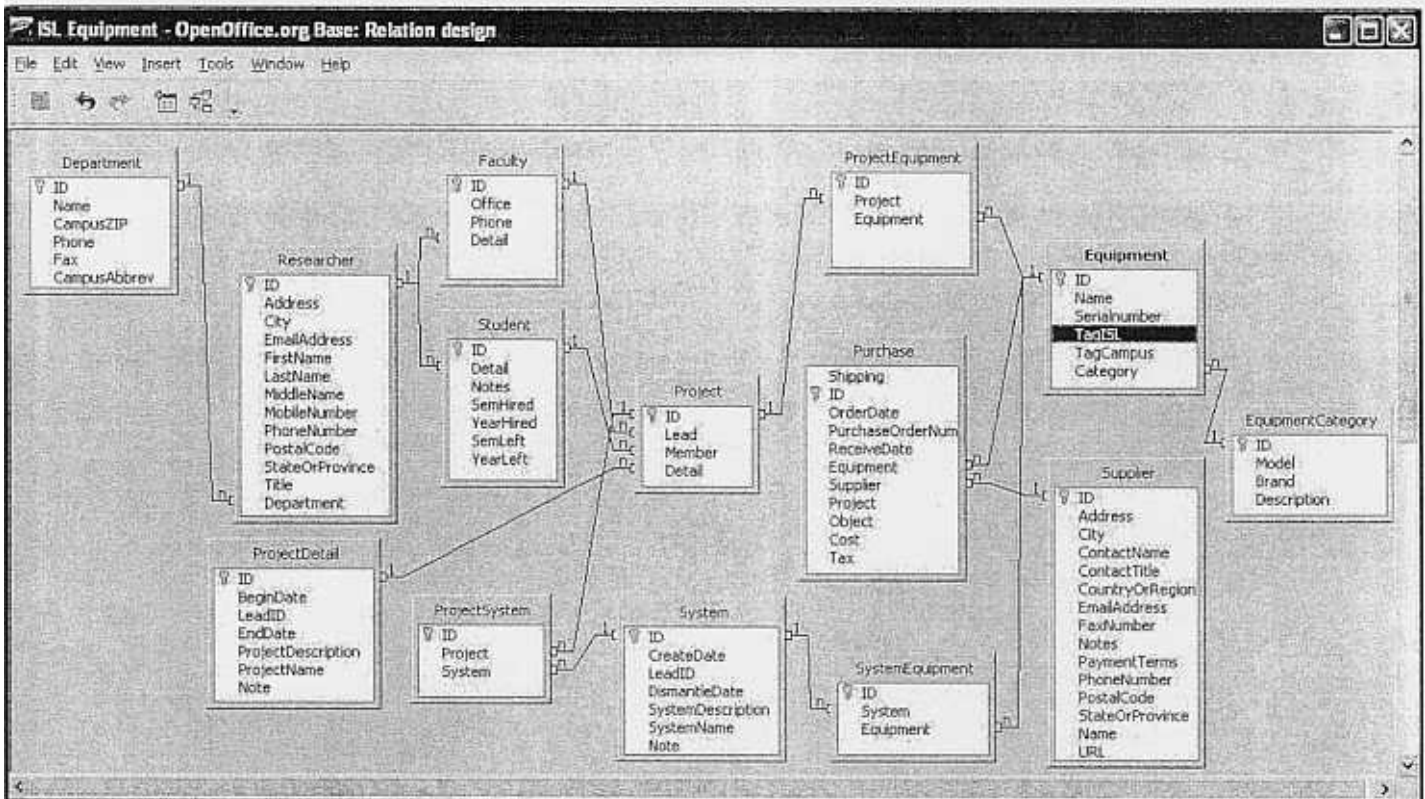
IS this for modeling only

what happened to find up a MySQL

Subject: ISL DB Stuff
 From: "Dr. J" <juliano@csuChico.edu>
 Date: Fri, 07 Apr 2006 07:16:02 -0700
 To: renner@csuChico.edu
 CC: "Dr. J" <juliano@csuChico.edu>

Here's what I started with on the ISL Inventory
 using the OpenOffice.org database feature ...

--
 Dr. B.A. JULIANO
 Associate Professor, Computer Science
 Director, Intelligent Systems Laboratory
 California State University, Chico
 400 West First Street
 Chico, CA 95929-0410
 Tel: 530 898-4619/6442 Fax: 530 898-5995
 E-mail: juliano@csuChico.edu
<http://www.ecst.csuchico.edu/~juliano>
<http://gotbots.org/>

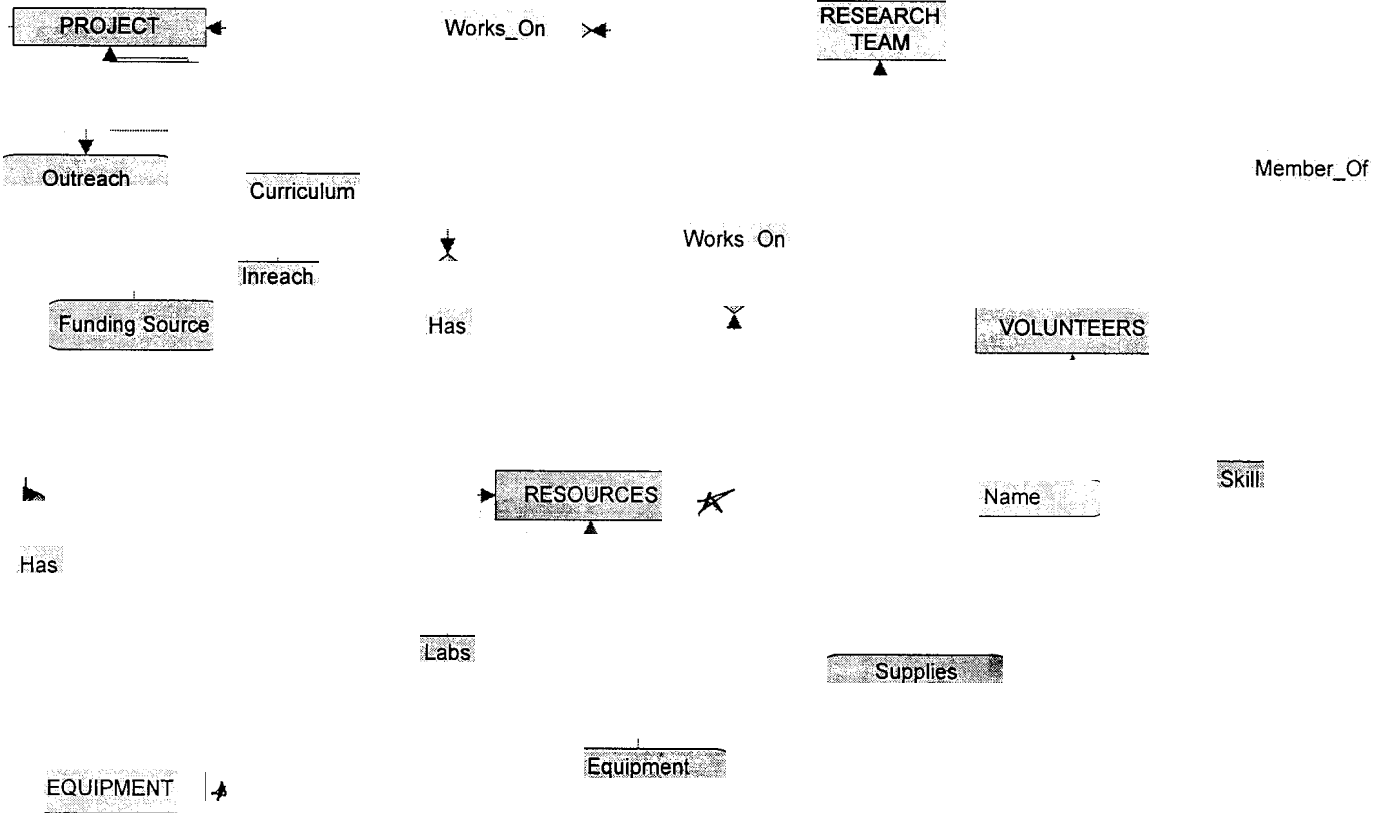


DBdesign.JPG	Content-Type: image/jpeg Content-Encoding: base64
--------------	--

ISL Equipment.odb	Content-Type: application/vnd.oasis.opendocument.database Content-Encoding: base64
-------------------	---

7

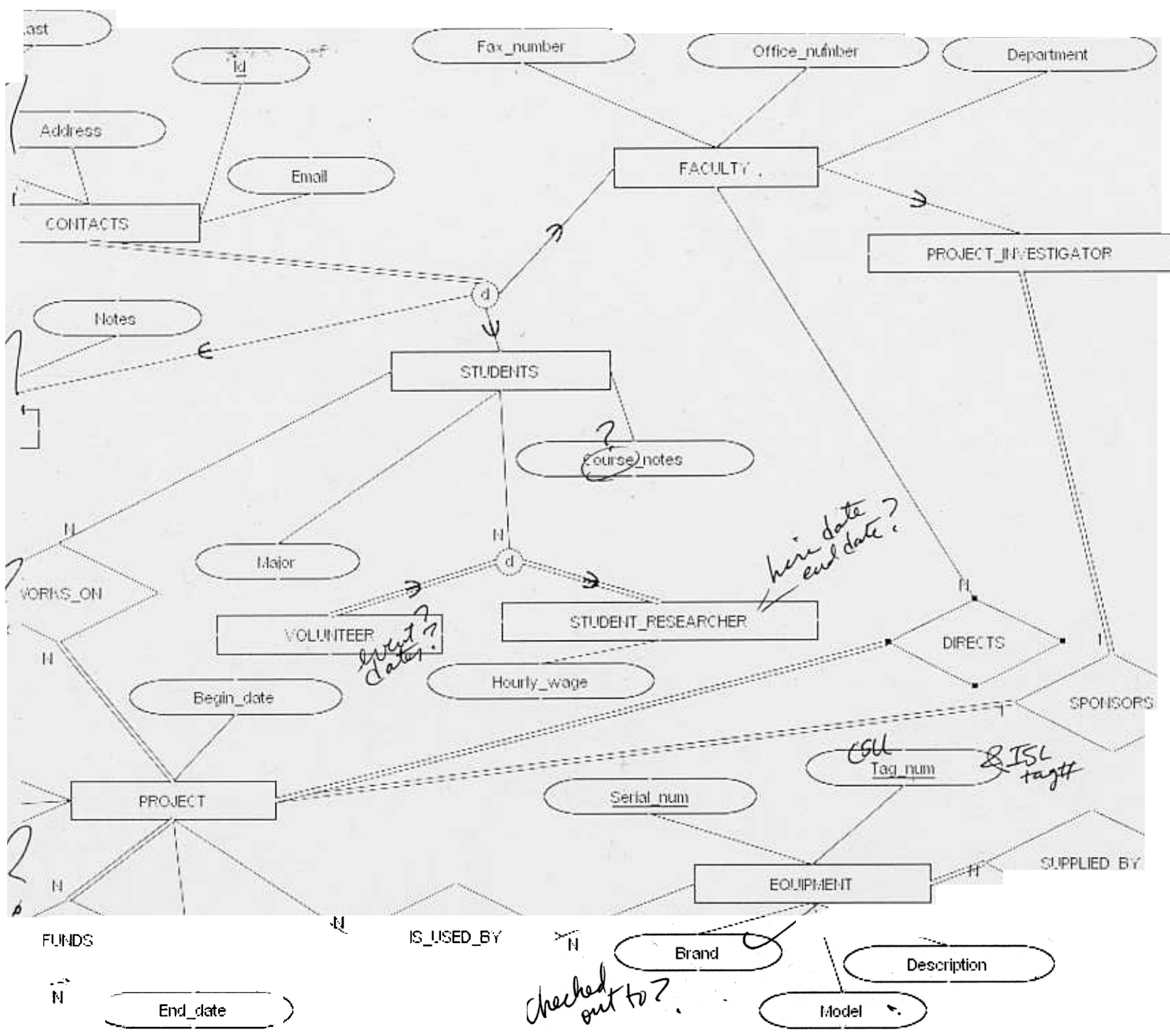
BOARD



details?

↓ details

*? IRIS
or
? ISL*



ISL

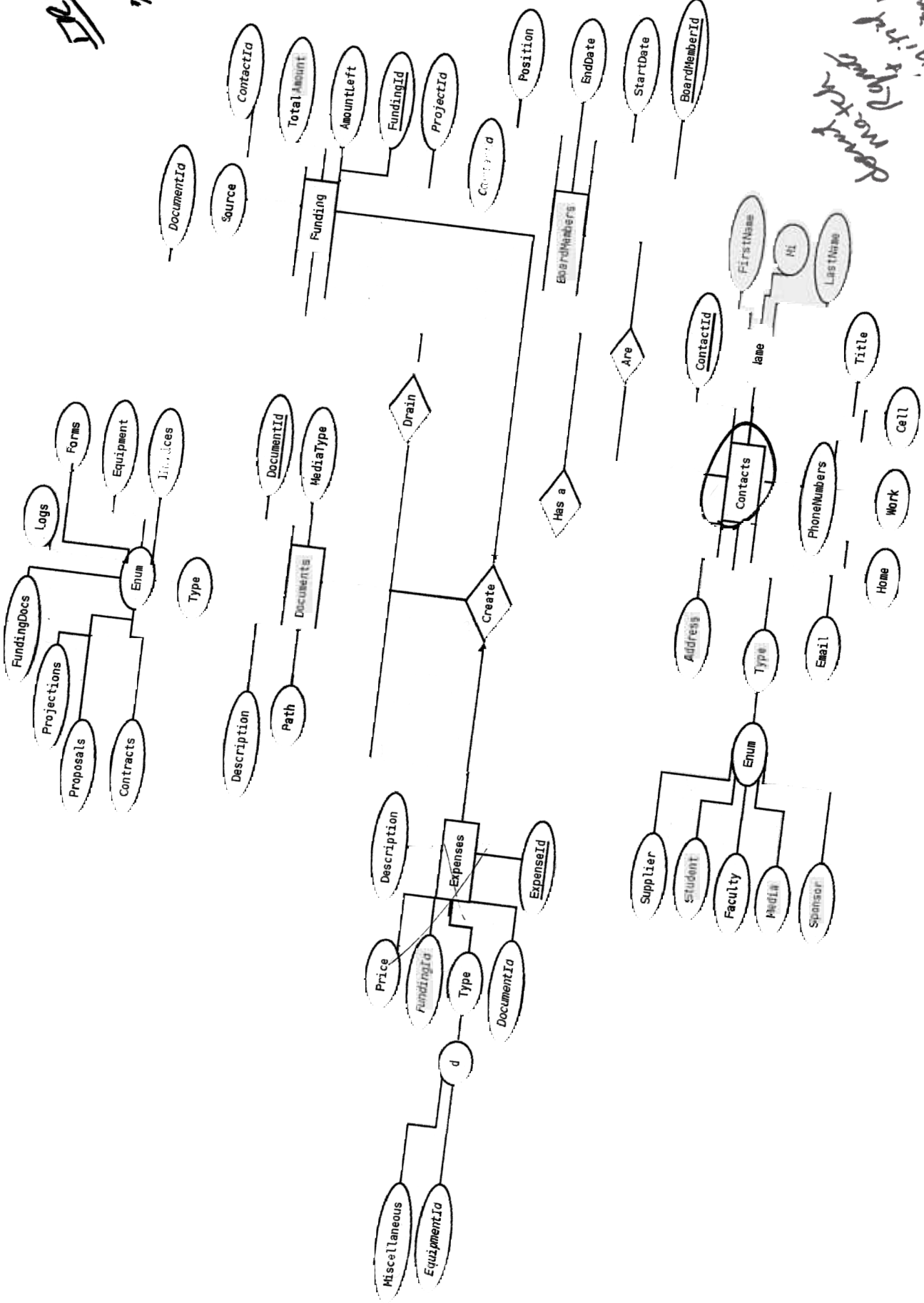
incomplete
 (didn't get a
 other page)
 ? for
 (draft 2, not
 final
 (~April))

Name

SUPPLIER

Payment_terms

DBS
7 Simul



PURCHASE ORDER

THE RESEARCH FOUNDATION

BILL TO:

REFERENCE PO # 05540
 THE RESEARCH FOUNDATION
 BELL MEMORIAL UNION, ROOM 219
 Chico, CA 95929-0248
 Phone: (530) 898-6815
 FAX: (530) 898-6999

SHIP TO:

REFERENCE PO # 05540
 THE RESEARCH FOUNDATION
 RECEIVING DEPARTMENT
 1st and Orange Streets
 Chico, CA 95929-0920

PO#: 05540	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> CONFIRMING ORDER (Do Not Duplicate)	DATE: 06/21/05
------------	--	----------------

Crossbow Technology, Inc. 4145 N. First Street San Jose, CA 95134	Amount:	Project:	Object:
	\$8,028.94	60280	8645

COPY

Vendor #: 800-XBOWTEC	Total: \$8,028.94
Date Wanted:	

Deliver to: Benjoe Juliano	OCNL 215	NOTICE TO VENDOR: 1. Reference invoice in triplicate and bill of lading in duplicate. 2. Reference our purchase order number on your invoice. 3. Reference all cash discounts. 4. This purchase order is not complete until approved by Foundation's Purchasing Officer.
Ship Via:		
Terms: net 30		

Quantity	Unit of Measure	Description	Unit	Amount
5		MNAV100CA - Comprehensive Sensor Suite	1,495.00	7,475.00
		Digital sensor system & servo control board; includes 6DOF, inertial MEMS, 3 axis magnetometer, air data GPS & temperature sensors.		
		<i>(detailed descrip.)</i>		
A8-10-05	1 BX	Name = GPS sensor ISL tag = ISL CBMN #101 CBMN 02		
		Serial # ?		
		campus tag (typically > 15 items)		

Please indicate purchase order number on shipping label to ensure correct delivery.

Special Instructions:	Subtotal:	\$7,475.00
	Freight:	12.00
	State Sales Tax:	\$541.94
	Total:	\$8,028.94
Requested By: Dr. Benjoe Juliano 530-898-4619 Zip 410	Approved By Purchasing Officer: Susan Jennings	

? forms provided by client!

PURCHASE ORDER

THE RESEARCH FOUNDATION

BILL TO:

REFERENCE PO # 05146
 THE RESEARCH FOUNDATION
 BELL MEMORIAL UNION, ROOM 219
 Chico, CA 95929-0248
 Phone: (530) 898-6815
 FAX: (530) 898-6999

SHIP TO:

REFERENCE PO # 05146
 THE RESEARCH FOUNDATION
 RECEIVING DEPARTMENT
 1st and Orange Streets
 Chico, CA 95929-0920



PO#: 05146	CONFIRMING ORDER (Do Not Duplicate)	DATE: 09/23/04
JAMECO Electronics 1355 Shoreway Rd. Belmont, CA 94002	COMPUTER SCIENCE	Amount: \$362.85
800-536-4316 or 650-592-2503	SEP 23 2004 RECEIVED BY DR. JULIANO	Project: 60280
Vendor #:		Object: 8082
Date Wanted:		Total: \$362.85
Deliver to: Dr. Benjoe Juliano	OCNL 215 / 222	NOTICE TO VENDOR: 1. Reference invoice in triplicate and bill of lading in duplicate. 2. Reference our purchase order number on your invoice. 3. Reference all cash discounts. 4. This purchase order is not complete until approved by Foundation's Purchasing Officer.
Ship Via:		
Terms: net 30		

Quantity	Unit of Measure	Description	Unit	Amount
A 1	✓	#72696 Glue Gun, Silicon Nozzle		9.95
A 4	✓	#78633 Glue Sticks, 11.5mm Diameter, 6 pack	3.15	12.60
A 1	✓	#72768 Knife Set, 13 Blades		10.95
A 4	✓	#78991 Stripper Wire, 10-30A	3.95	15.80
A 1	✓	#211289 Electric Grinder, 6-speed w/40pc Accessories		44.95
A 1	✓	#76865 Heat Gun, 600F / 1100F		39.95
A 2	✓	#262001 Vise, Hobby, 2.4" Jaw	6.75	13.50
A 4	✓	#19166 Desolder Pump, Non-Electric	4.95	19.80
A 4	✓	#102461 Soldering Iron, 30W, 110-120Vac	4.99	19.96
A 2	✓	#22091 Tip (2) for #19166	4.49	8.98
A 4	✓	#36329 Soldering Stand	4.95	19.80
A 2	✓	#116020 Tip, Replacement for #10261	2.25	4.50
A 1	✓	#112344 Solder Roll, .020"		17.95
See Attached				

Please indicate purchase order number on shipping label to ensure correct delivery.

Special Instructions:	Subtotal:	\$329.00
	Freight:	10.00
	State Sales Tax:	\$23.85
	Total:	\$362.85
Requested By: Benjoe Juliano zip:410 530-898-4619	Approved By Purchasing Officer: Susan Jennings	

PURCHASE ORDER

THE RESEARCH FOUNDATION

BILL TO:

REFERENCE PO # 05145
 THE RESEARCH FOUNDATION
 BELL MEMORIAL UNION, ROOM 219
 Chico, CA 95929-0248
 Phone: (530) 898-6815
 FAX: (530) 898-6999

SHIP TO:

REFERENCE PO # 05145
 THE RESEARCH FOUNDATION
 RECEIVING DEPARTMENT
 1st and Orange Streets
 Chico, CA 95929-0920



PO#: 05145	CONFIRMING ORDER (Do Not Duplicate)	DATE: 09/23/04
LEGO Shop At Home PO Box 1310 Enfield, CT 06083-1310	Amount: \$2,753.44	Project: 60280 Object: 8082
Vendor #:		
Date Wanted:	Total: \$2,753.44	
Deliver to: Dr. Benjoe Juliano	OCNL 215/ 222	NOTICE TO VENDOR: 1. Reference invoice in triplicate and bill of lading in duplicate. 2. Reference our purchase order number on your invoice. 3. Reference all cash discounts. 4. This purchase order is not complete until approved by Foundation's Purchasing Officer.
Ship Via:		
Terms: net 30		

Quantity	Unit of Measure	Description	Unit	Amount
33		#W979649 LEGO Technology Resource Set	57.00	1,881.00
33		#W979891 LEGO 9V Angle Sensor	18.00	594.00
<i>A 10/6/04 - vgs - 39</i> <i>complete</i>				
COMPUTER SCIENCE OCT 07 2004 RECEIVED BY DR. JULIANO				

Please indicate purchase order number on shipping label to ensure correct delivery.

Special Instructions:	Subtotal	\$2,475.00
	Freight	99.00
	State Sales Tax	\$179.44
	Total:	\$2,753.44
Requested By: Benjoe Juliano zip: 410 530-898-4619	Approved By Purchasing Officer: <i>Susan Jennings</i> Susan Jennings	

PURCHASE ORDER

THE RESEARCH FOUNDATION, California State University, Chico

BILL TO:

REFERENCE PO # 4131
 THE RESEARCH FOUNDATION
 BELL MEMORIAL UNION ROOM 219
 Chico, CA 95929-0248
 Phone: (530) 898-6815
 FAX: (530) 898-6999

SHIP TO:

REFERENCE PO # 4131
 THE RESEARCH FOUNDATION
 RECEIVING DEPARTMENT
 1st and Orange Streets
 Chico, CA 95929-0920

PO#: 4131	CONFIRMING ORDER (Do Not Duplicate)	DATE: 09/18/03
-----------	--	----------------

Parallax
 599 Menlo Drive, Ste. 100
 Rocklin, CA 95765



Amount:	Project:	Object:
\$2,386.65	60280	8081
Total:		
\$2,386.65		

888-512-1024

Vendor #:

Date Wanted:

Deliver to:

B. Juliano

Ocnl 215

Ship Via:

Terms:

net 30

NOTICE TO VENDOR:

1. Reference invoice in triplicate and bill of lading in duplicate.
2. Reference our purchase order number on your invoice.
3. Reference all cash discounts.
4. This purchase order is not complete until approved by Foundation's Purchasing Officer.

Quantity	Unit of Measure	Description	Unit	Amount
A 15		#28016 - Parallax IR Buddy Pair	59.00	885.00
A 10		#29113 - Parallax Compass App. Mod.	79.00	790.00
A 10		#29143 - Parallax Audio Amplifier App. Mod	29.00	290.00
A 10		#28019 - Parallax SSIR Detector	14.95	149.50
A 10		800-00003 - Service Cable for BS2 Programming	10.00	100.00

*A 9-25-3-ups = 10x
 Complete*

COMPUTER SCIENCE

SEP 23 2003

RECEIVED BY
 DR. JULIANO

Please indicate purchase order number on shipping label to ensure correct delivery.

Special Instructions:

Subtotal:	\$2,214.50
Freight:	11.60
State Sales Tax:	\$160.55
Total:	\$2,386.65

Requested By:

B. Juliano

zip:410

(530)898-4619

Approved By Purchasing Officer:

Susan Jennings

ISL Database

- Home
- Equipment
- Projects
- Contacts
- Search
- Documents
- Outreach
- Inreach
- Logout

Add Contact :: View Contacts

Contact Type	Student
First Name:	
Middle Initial:	
Last Name:	
Title:	
Home Phone:	
Cell Phone:	
Work Phone:	
E-mail:	
Street Address:	
City:	
Zip:	
Major:	
Class:	
Class Notes:	
Skill Notes:	

Add Contact

no color? feature in type?
no report photo type?

CSlug, org / group a
user: renner
passwd: renner

Home
Equipment
Projects
Contacts
Search
Documents
Outreach
Inreach
Logout

[Add Equipment](#) :: [View Equipment](#)

Add Equipment

Available: No Yes

Location: _____

DateDueBack: _____

DateOut: _____

Brand: _____

Model: _____

Description: _____

CheckedOut: _____

Value: _____

MiscellaneousDescription: _____

SerialNumber: _____

Notes: _____

ISL Database

Add Project :: [View Projects](#) ✓

Add Projects

Project name:

Status:

Description:

Start date:

End date:

DirectorID:

SponsorID:

modify? delete?

Select date...

? May, 2006 x

Today >

Mon	Tue	Wed	Thu	Fri	Sat	Sun
	1	2	3	4	5	6
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Select date

ISL Database

[Home](#) | [Equipment](#) | [Projects](#) | [Contacts](#) | [Search](#) | [Documents](#) | [Outreach](#) | [Inreach](#) | [Logout](#)

[Add Documents](#) :: [View Documents](#)

Search: Type:

Title	Type	Doc Type	Download
Bibliography	Invoices	sxw	Download
Software Engineering Crap	Invoices	doc	Download
Old Research Paper	Contracts	sxw	Download
Technology Sucks	Contracts	odt	Download
More Papers	Projections	sxw	Download
Picture Test	Forms	JPG	Download

- Home
- Equipment
- Projects
- Contacts
- Search
- Documents
- Outreach
- Inreach
- Logout

Please Log In

3SSW01



ISL Database

- Home
- Equipment
- Projects
- Contacts
- Search
- Documents
- Outreach
- Inreach
- Logout

Add Contact :: [View Contacts](#)

Search: Type:

good

First Name: Jim
Last Name: Cheezit
Middle Initial: F
Title: Ski Instructor
Type: Faculty
Home Phone: 123-123-1234
Work Phone: 987-987-9876
Cell Phone: 456-456-4567
Email: MrCheezit@gmail
Address: 123 The Stre
City: The Ci
Zip: 99949

ISL Database

[Home](#)

[Equipment](#)

[Projects](#)

[Contacts](#)

[Search](#)

[Documents](#)

[Outreach](#)

[Inreach](#)

[Logout](#)

[Add Project](#) :: [View Projects](#)

<u>Name</u>	<u>Status</u>	<u>Description</u>	<u>Start Date</u>	<u>Spots/Day</u>
Alans Project	Finished	hhhhhhhhhh	2006-05-19	1458
Rumsfelds brain	Broken	Simulates a wild monster	2006-05-01	879
Test bot	Nearing completion	Blah	2006-05-02	899
Dave's big bot	Ready	Fast and furious	1969-12-31	5675
Kenny rowdy bot	Borked	Got bots?	2006-05-12	3343
Eric!!	Rockin	Leetness	2006-05-01	7869
omg saral111one	Hot	Rowdy	2006-06-02	588
Alan is God	Ready	No explanation required	2006-05-10	1
Scott's big bot	Handicapped	Hunk o' junk	2006-05-01	98
Benbot	Going crazy	This thing is sick	2006-05-08	334
Ben's lady bot	Broken	This one sucks	2006-05-10	2391
Ferguson's bot	In progress	Really smart robot	2006-05-10	2392
Retard	Hellooo?	Cool it, bucko	2006-05-10	788
Flying toasters	In progress	Old school, but sweet	2006-05-10	42
Sweet project	Friggin sweet	self-destructing robots	2006-05-09	668

May 16, 2006, 10:45 pm

[Home](#) | [Back to top](#)