



# Real Company Inc.

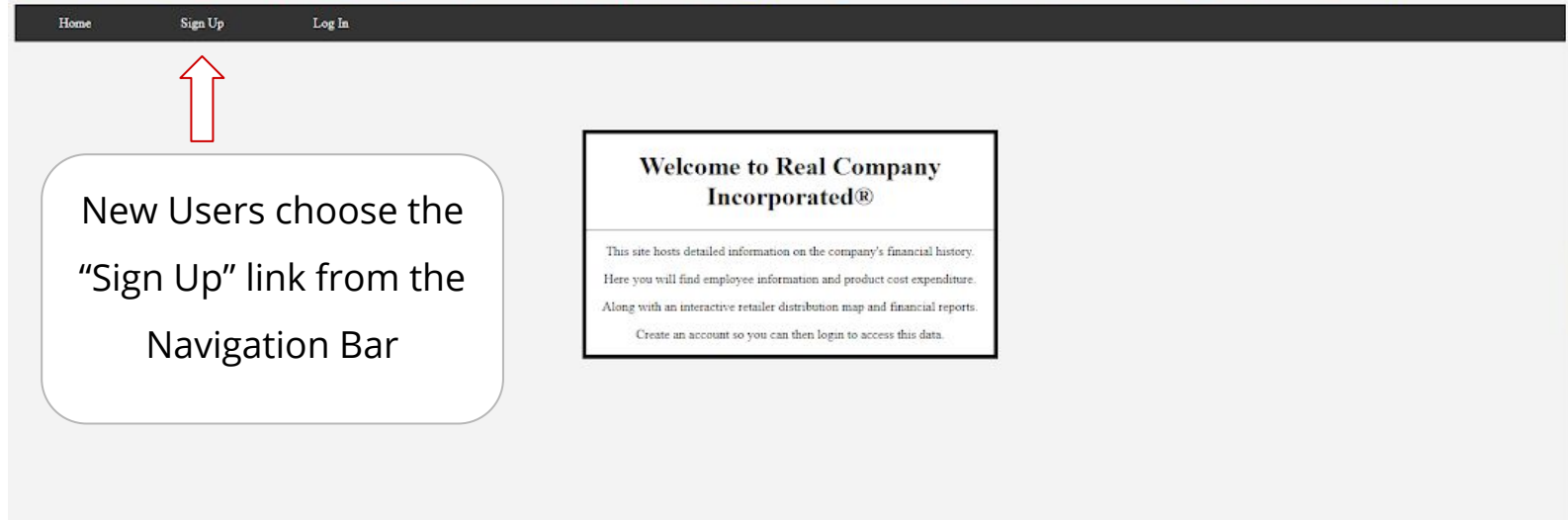
Michael Sullivan



# Feature List

- Sign in System
- Navigation Bar
- Retailer Map
- Employee Database
- Employee Search
- Interactive Employee Report
- Interactive Project Report

# Sign in System 1-4



# Sign in System 2-4

[Home](#) [Sign Up](#) [Log In](#)

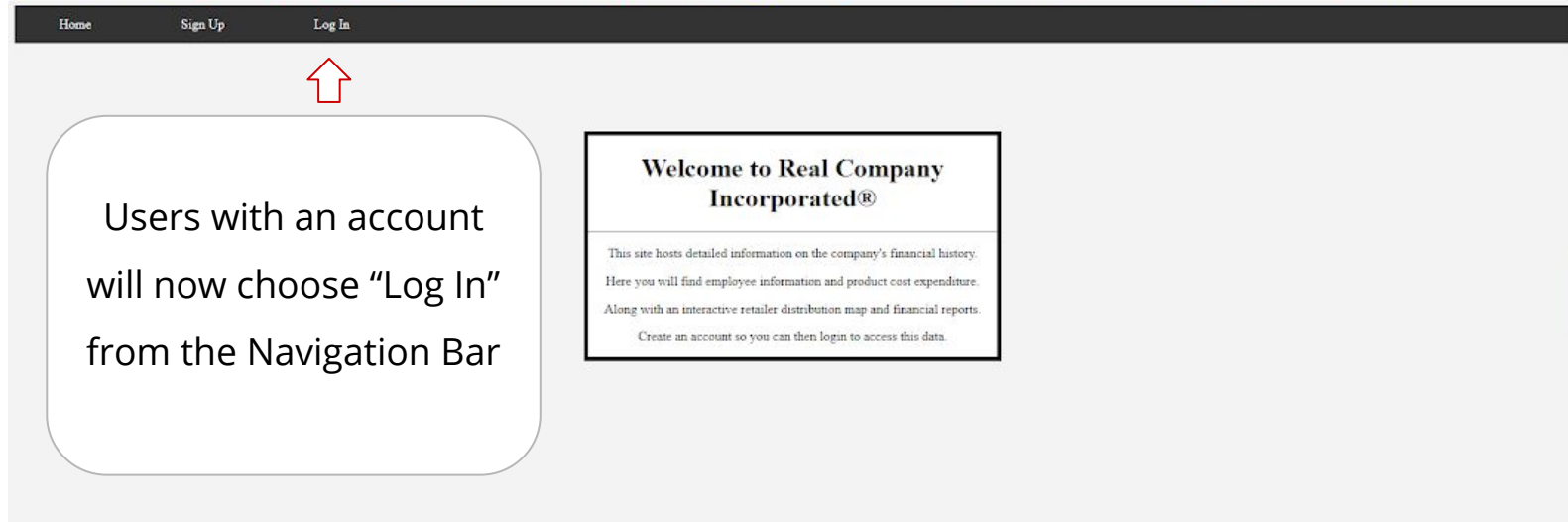
This page will allow you to create an account, which will allow you to access Real Company Inc.

### Sign Up

Full Name	<input type="text"/>
Email	<input type="text"/>
Username	<input type="text"/>
Password	<input type="password"/>
Repeat Password	<input type="password"/>

Sign Up

# Sign in System 3-4



# Sign in System 4-4

Users with an account will  
now enter previously  
created credentials and  
select "Login"

Features escape\_strings and  
password hashing

## Login

(for testing purposes: 12799 is a valid Employee Number)

Username	<input type="text" value="Sam123"/>
Employee Number	<input type="text" value="12799"/>
Password	<input type="password" value="*****"/>

Login



```
michasul@lab19:~$ psql "dbname=michasul_db366f20 host=shinji.cs.ndsu.nodak.edu u
ser=michasul_366f20 port=5432 sslmode=require" -f passTest.sql
Password for user michasul_366f20:
 uname | userpass
-----+-----
 fred1 | $2y$10$FKPvSRXpOj2irfzdZ/VjaeG2ryWWpu5a8LRbiVJ9/PgU70rieFor.
 asdf | $2y$10$7vtgHKJM.ya1RAldMQJvZuwfOK9CpcBNljW29OtCmPoS1c8CXnPug
 Sam123 | $2y$10$xsxVFL2KoBbWcHCSgS//LulrhlijCCx10TLMYAxbt87TFG45Q0upe
(3 rows)

michasul@lab19:~$
```

# Home Page

Retailer Distribution:



Search Database

## Business Search Engine

All Employees:

Number	Birth Date	First Name	Last Name	Gender	Hire Date
11777	1969-09-20	Amber	Chicotti	F	2008-03-06
11892	1993-04-06	Chrystal	Sharpless	F	2006-07-29
17976	1978-10-12	Magdalene	Somewcales	F	2011-10-30
14999	1989-03-21	Aqretha	Jessen	F	2012-10-02
15371	1967-02-06	Edd	Mance	M	2013-06-11
11566	1992-01-16	Lanaha	Bridie	F	2008-12-07
12168	1975-02-22	Sonia	Jozef	F	2016-04-09
17061	1974-07-06	Merrili	Douglass	F	2010-06-08
12178	1981-10-13	Shel	Allipport	F	2017-09-07
19390	1980-01-04	Sharonin	Jura	M	1999-12-12
10368	1989-02-21	Penceval	Gallagher	M	2007-11-08
18256	1983-03-18	Kam	Shewain	M	2012-11-22
15619	1992-03-07	Lane	Codi	M	2013-02-24
17193	1977-08-25	Jayne	Dmiterko	F	2010-08-23

Cost Analysis of Company:

- [Link to Employee Report](#)
- [Link to Project Report](#)

# Interactive Retailer Map 1-2

## Retailer Distribution:



Search Database

Search

## Business Search Engine

### All Employees:

Number	Birth Date	First Name	Last Name	Gender	Hire Date
11777	1969-09-20	Amber	Chicotti	F	2008-03-06
11882	1993-04-06	Chrystal	Sharpless	F	2006-07-20
13976	1978-10-12	Margdalene	Somerville	F	2011-10-30
14999	1989-03-21	Agatha	Jessen	F	2012-10-02
15371	1967-02-06	Edt	Mance	M	2013-06-11
11566	1992-01-16	Lataha	Bridoe	F	2008-12-07
12168	1975-02-22	Sonia	Jozef	F	2016-04-09
17061	1974-07-06	Merrill	Douglass	F	2010-06-08
12178	1981-10-13	Shel	Allport	F	2017-09-07
19390	1980-01-04	Sharnan	Jrn	M	1999-12-12
10168	1989-02-21	Perceval	Gallagher	M	2007-11-08
18556	1983-05-18	Kain	Shewman	M	2013-11-22
15619	1992-03-07	Lane	Codi	M	2013-02-24
17193	1977-08-25	Jayne	Dmitenko	F	2010-08-25

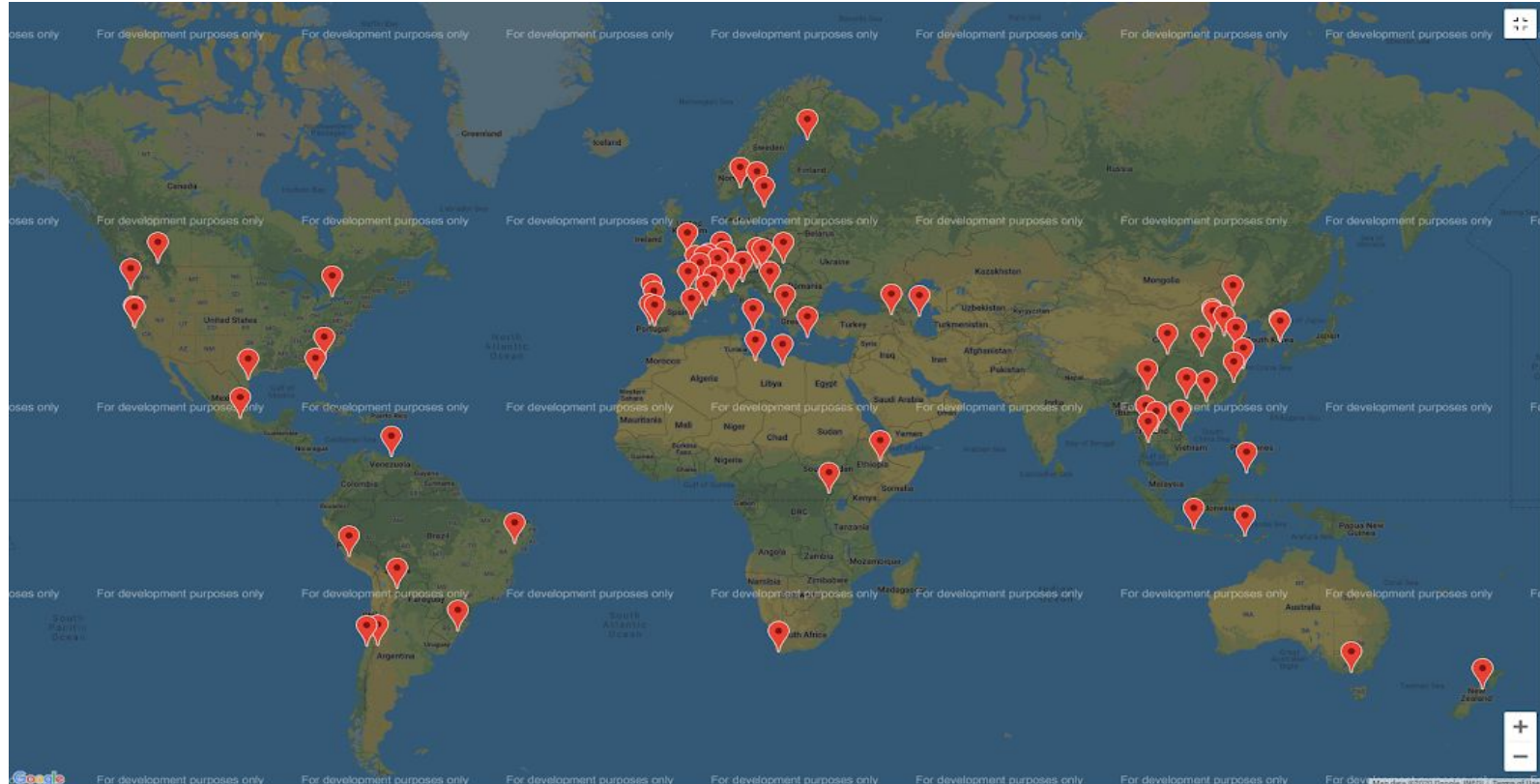
### Cost Analysis of Company:

[Link to Employee Report](#)

[Link to Project Report](#)



# Interactive Retailer Map 2-2



# Employee Database

## Retailer Distribution:



## Search Database

## Business Search Engine

### All Employees:

Number	Birth Date	First Name	Last Name	Gender	Hire Date
11777	1969-09-20	Amber	Charcett	F	2008-03-06
11892	1991-04-06	Chrystal	Sharpless	F	2006-07-20
17976	1978-10-12	Magdalene	Somescuales	F	2011-10-30
14999	1989-03-21	Agretha	Jessen	F	2012-10-02
15371	1967-02-06	Edd	Mance	M	2013-06-11
11566	1992-01-16	Latusha	Brubie	F	2008-12-07
12168	1975-02-22	Sonia	Jozef	F	2016-04-09
17061	1974-07-06	Merrili	Dougless	F	2010-06-08
12178	1981-10-13	Shel	Allport	F	2017-09-07
19190	1980-01-04	Sharnan	Jira	M	1999-12-12
10368	1989-02-21	Parcervall	Gallagher	M	2007-11-08
18556	1983-05-18	Kara	Shervan	M	2012-11-22
15619	1992-05-07	Lane	Cosh	M	2013-02-24
17193	1977-08-25	Jayne	Dmutterko	F	2010-08-23



## Cost Analysis of Company:

[Link to Employee Report](#)  
[Link to Profit Report](#)

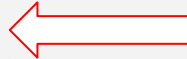
# Employee Search 1-3

## Retailer Distribution:



Search Database

Jayne



## Business Search Engine

### All Employees:

Number	Birth Date	First Name	Last Name	Gender	Hire Date
11777	1969-09-20	Amber	Chicotti	F	2008-03-06
11892	1993-04-06	Chrystal	Sharpless	F	2006-07-20
17976	1978-10-12	Magdalene	Somerscales	F	2011-10-10
14999	1989-03-21	Agretha	Jessen	F	2012-10-02
15371	1987-02-06	Edi	Mance	M	2013-06-11
11566	1992-01-16	Larada	Bridie	F	2008-12-07
12168	1975-02-22	Sonia	Jozef	F	2016-04-09
17061	1974-07-06	Merrili	Douglas	F	2010-06-08
12178	1981-10-13	Shel	Allport	F	2017-09-07
19390	1980-01-04	Sharnan	Jra	M	1999-12-12
10368	1989-02-21	Perceval	Gallagher	M	2007-11-08
18556	1983-05-18	Kam	Shewan	M	2012-11-22
15619	1992-05-07	Lane	Cosh	M	2013-02-24
17193	1977-08-25	Jayne	Dmterko	F	2010-08-25

## Cost Analysis of Company:

[Link to Employee Report](#)

[Link to Project Report](#)

# Employee Search 2-3

Real Company inc.

Search Page [Home](#)

There are 1 result(s).

[Jayne Dmiterko 17193](#)



Search results will return a match based on first name or last name and will output any matching results with their respective first name, last name, or employee number.

# Employee Search 3-3

Real Company inc.

**Result(s).** [Home](#)

Here is employee number 17193's salary history.

Number	First Name	Last Name	Gender	Raises	Salary	Dept. Name
17193	Jayne	Dmiterko	F	2010-08-25	35796.00	Marketing
17193	Jayne	Dmiterko	F	2015-05-23	40366.00	Marketing
17193	Jayne	Dmiterko	F	2016-12-27	42489.51	Marketing

By clicking on one of the results, you are able to view the employee's salary history. This view gives you information on when the raise was given and what the updated salary is.

# Interactive Employee Report 1-4

## Retailer Distribution:



Search Database

## Business Search Engine

### All Employees:

Number	Birth Date	First Name	Last Name	Gender	Hire Date
11777	1969-09-20	Amber	Chacetti	F	2008-03-06
11892	1991-04-06	Chrystal	Sharpless	F	2006-07-20
17976	1978-10-12	Magdalene	Somerscales	F	2011-10-30
14999	1989-03-21	Agretha	Jessen	F	2012-10-02
15371	1967-02-06	Edd	Mance	M	2013-06-11
11566	1992-01-16	Latisa	Bridie	F	2008-12-07
12188	1975-02-22	Sonia	Jozef	F	2016-04-09
17061	1974-07-06	Merrili	Dougliss	F	2010-06-08
12178	1981-10-13	Shel	Allipert	F	2017-09-07
19390	1980-01-04	Sharon	Jira	M	1999-12-12
10368	1989-02-21	Perceval	Gallagher	M	2007-11-08
18556	1983-05-18	Kain	Shewan	M	2012-11-22
15619	1992-05-07	Lane	Cosh	M	2013-02-24
17193	1977-08-25	Jayne	Dmiterko	F	2010-08-23

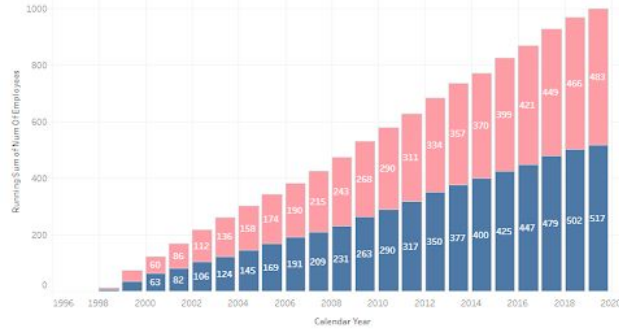
### Cost Analysis of Company:

[Link to Employee Report](#)  
[Link to Project Report](#)

The Employee Report takes employee information from the database and presents a visual breakdown of employee data.

# Interactive Employee Report 2-4

Number of Employees Per Year



Average Company Salary by Gender



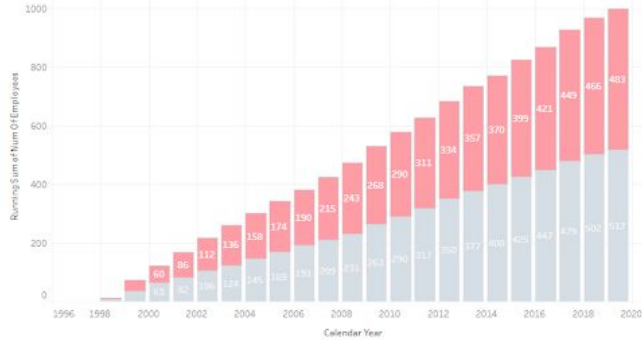
Average Salary by Department and Gender



The Interactive Legend in the Employee Report allows you to quickly change which dataset is represented in your graphs.

# Interactive Employee Report 3-4

Number of Employees Per Year



Average Company Salary by Gender

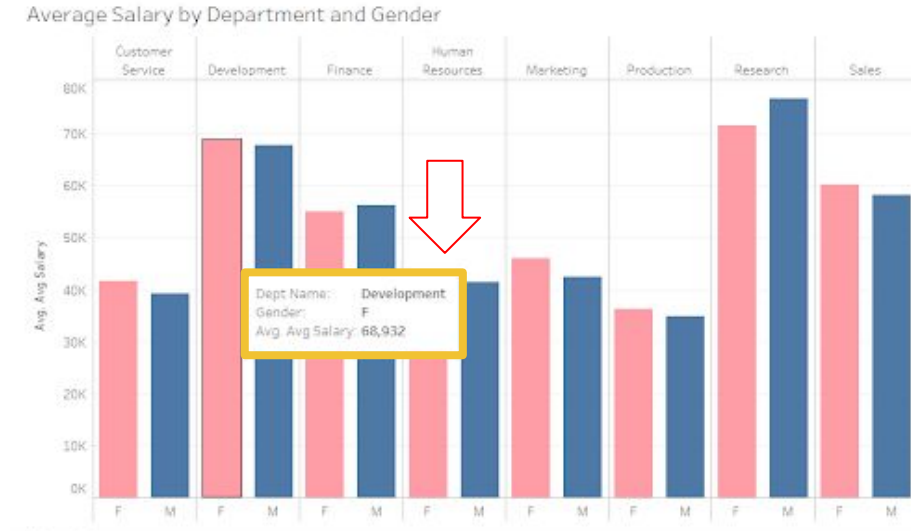


Average Salary by Department and Gender





# Interactive Employee Report 4-4



Note that by hovering the cursor over individual properties, relevant data will be displayed.

# Interactive Project Report 1-3

## Retailer Distribution:



Search Database

Search

## Business Search Engine

### All Employees:

Number	Birth Date	First Name	Last Name	Gender	Hire Date
11777	1969-09-20	Amber	Chacott	F	2008-05-06
11892	1991-04-06	Chrystal	Sharpless	F	2006-07-20
17976	1978-10-12	Magdalene	Somerscales	F	2011-10-30
14999	1989-01-21	Agretha	Jessen	F	2012-10-02
15371	1967-02-06	Edd	Mance	M	2013-06-11
11566	1992-01-16	Lataha	Brodie	F	2008-12-07
12168	1975-02-22	Sonia	Jorez	F	2016-04-09
17061	1974-07-06	Merrili	Douglass	F	2010-06-08
12178	1981-10-13	Shel	Allport	F	2017-09-07
19390	1980-01-04	Shannan	Jira	M	1999-12-12
10368	1989-02-21	Perceval	Gallagher	M	2007-11-08
18536	1983-05-18	Kain	Shevan	M	2012-11-22
13619	1992-05-07	Lane	Cosh	M	2013-02-24
17193	1977-08-25	Jayne	Dmiterko	F	2010-08-25

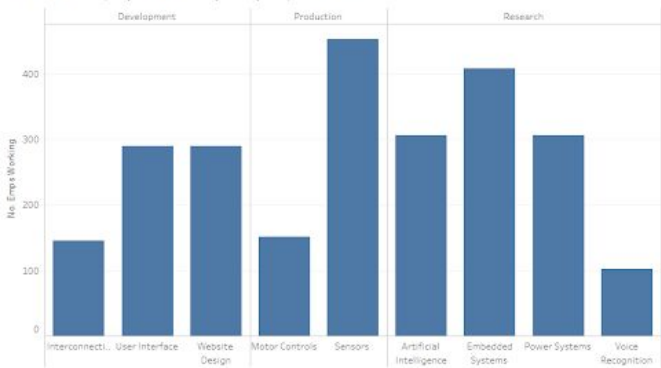
### Cost Analysis of Company:

[Link to Employee Report](#)  
[Link to Project Report](#)

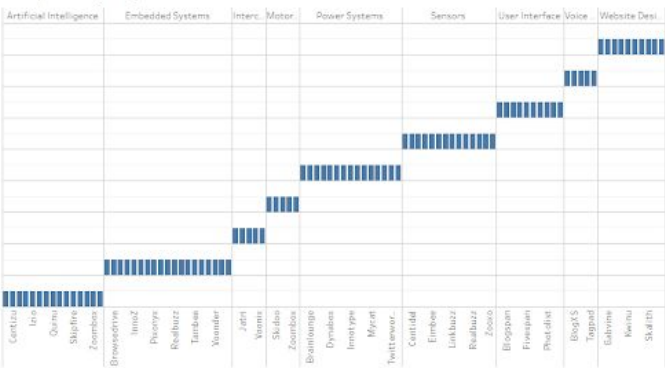
The Project Report offers a comprehensive visual breakdown of different projects at Real Company Inc.

# Interactive Project Report 2-3

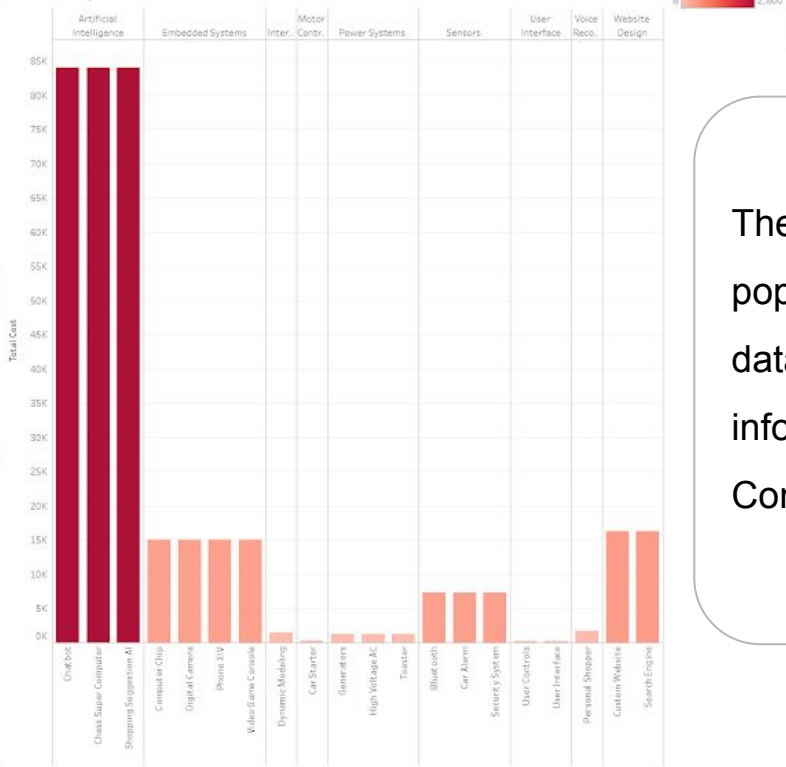
Number of Employees Per Project by Department



Companies By Project



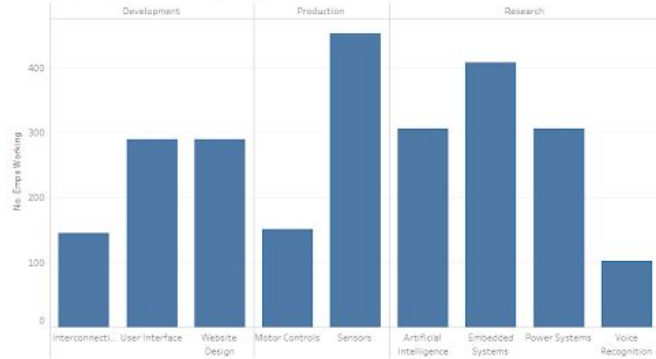
Total Cost by Product and Labor Hours



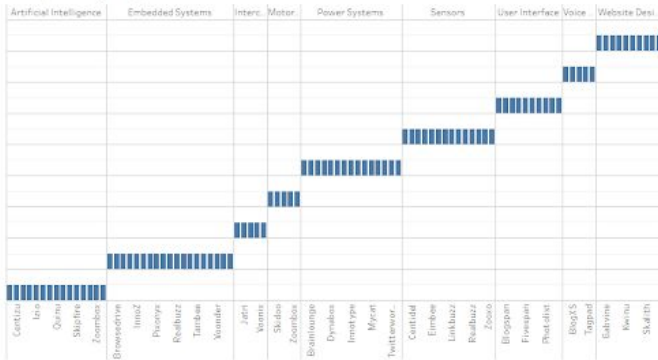
These graphs are populated with data from project information at Real Company Inc.

# Interactive Project Report 3-3

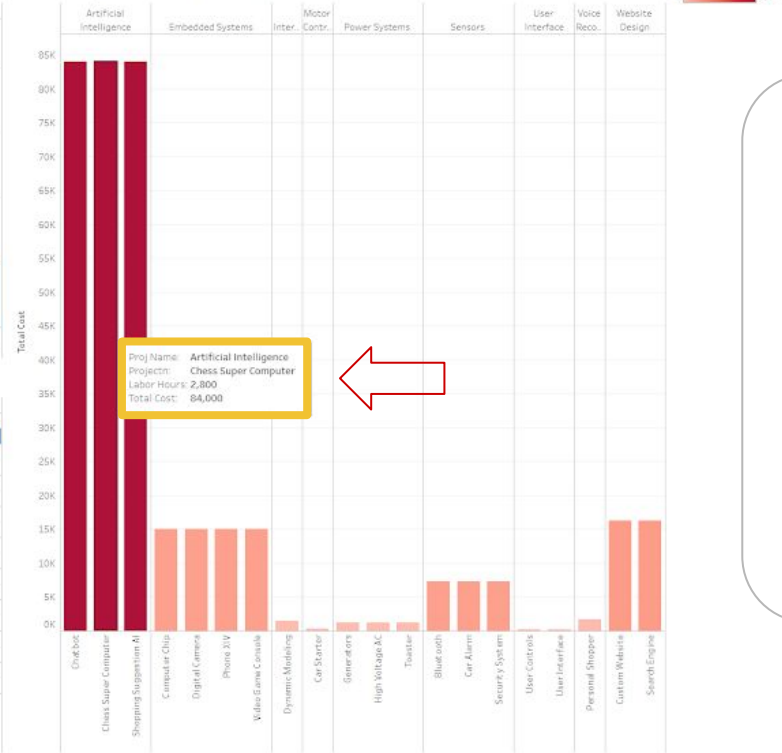
Number of Employees Per Project by Department



Companies By Project



Total Cost by Product and Labor Hours

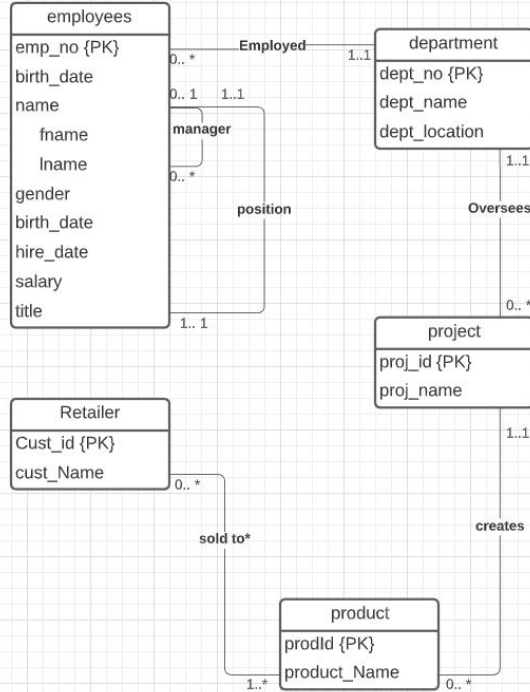


Like with the Employee Report graphs, hovering the cursor over properties will show additional data.

# Backend Information

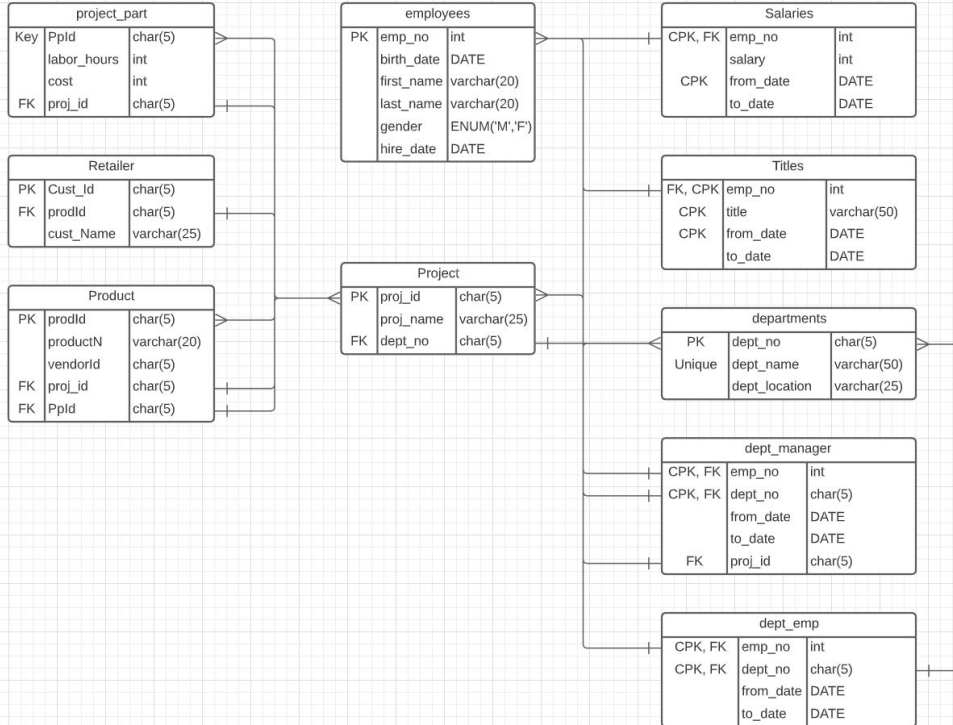
- ER Mapping Diagram
- Relation Diagram

# ER Mapping Diagram



This mapping diagram details important relationships between the entities in the Real Company Inc project.

# Relation Diagram



This relation diagram displays the relationships between each table present in the database.

# Conclusion



Project Link (may temporarily be down due to NDSU maintenance on computer lab):

<http://students.cs.ndsu.nodak.edu/~michasul/NewIndex.php>

Python Project:

<https://twitter.com/RealCompanyInc1>