

Internship Summer 2014

Kaila Manca

Industrial Design

Information Architecture

Sociology

User Interface Design Interaction Design

Tech-Human Mediation

Computer Science Human Factors Design

Anthropology

Product Engineering

Cognitive Science Visual Design

Researchers

Ergonomics

Graphic Design

Professional Brainstorming

Content Strategy

UX Design Methods

Step One

Research

Step Two

- o Concepting
- Prototyping
- Designing
- Creating
- All of the above

Step Three

Development

Summer Projects

- Financials (Jason Quint)
 - Central Budget Entry
 - Grant Manager
 - Project Central
 - Accounting Entries
 - Milestones
 - Recurring Journal Entry
 - Budget Roll/Factor Merge
 - Chart of Accounts Builder
 Dev Assistance

- Centrals (Joe Paolino)
 - Budget Scenarios
 - Research
 - HTML/CSS styles for Tyler Pattern Library
- New Technology (Jeremy Randall)
 - Town Council Program

Testing: Lean UX vs. "Quick UX" vs. Traditional UX

Three Approaches to UX Design

Town Council App Traditional UX Design, Usability What are we making? Budget Roll Factor Startup Merge **Lean UX Agile UX** Financial Apps Measuring, validating Collaboration, product/market fit. Delivery How do we Are we making make it? the right thing? @ANDERSRAMSAY / #UXLONDON / APR 18 2012



Why develop for Windows?







VERSATILITY

POWERFUL TOOLS

OPPORTUNITY



Empowering people who serve the public Register | Login

WATCH TYLER WORK

About Us

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ABOUTUS

- ▶ Why Tyler
- ► Our Leadership
- **▶ Client Successes**
- ▶ Speaking From Experience
- **▶** Corporate History
- ► Technology Partners
- Awards and Accolades
- **▶** Office Locations

Home > About Us

About Us

Our passion is empowering our clients.

From financial management and property taxes to courts and education, we create, deliver and support software solutions and services that make it easier for local governments and schools to manage their complex, day-to-day business functions. We have a unique vantage point due to our singular focus on serving the public sector with a broad product portfolio.

From the courtroom to the classroom, Tyler's products serve as the backbone for core business functions in the public sector. We are dedicated to helping our local government and school clients streamline the many aspects of their financial management, court case, property tax, public safety, citizen services, public records and education systems.

However, our commitment goes well beyond delivering solutions that work for our public sector clients. It's about consistently delivering value for employees and shareholders as

Our deep industry knowledge comes from our staff - many of whom held public sector positions prior to joining Tyler. They understand what clients want and need to operate more efficiently because they've been there. They transfer their subject matter expertise to new employees who in turn become experts themselves, eventually passing it along to

With this knowledge and experience - along with focused innovation and an earnest commitment to our clients - we are positioned better than anyone to anticipate and

News & Events About Us vestors

Research Step C

Three Approaches to UX Design

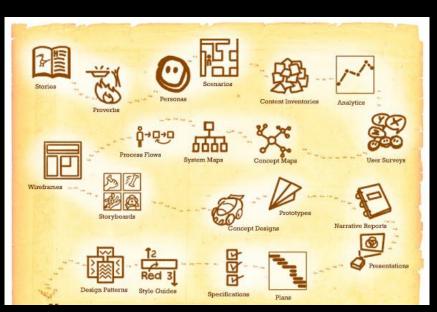
1. The "Traditional Approach"

Town Council App

Research: Mental model, Concept model, Persona

Design: Flows, mockups of sitemap and wireframes.

Low-level prototype, high-level prototype, several iterations.



Research: Town Council Project

- To Understand User Needs:
- Site visit (watch videos)
- Research Competitive Software
 - Analysis of Similar Systems
- Design Principles (Specs)
- Create
 - Mental Model
 - Concept Model
 - Personas (Secretary, Council Members, General Public)



Eagle Mountain City Council Meeting 1-7-14



Research: Town Council Project



Jenny McCarthy

Secretary for Local Government Meetings and Judicial Trials

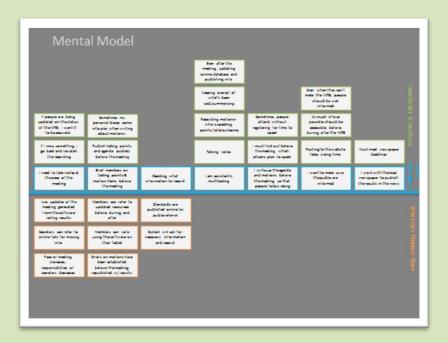
Local Government Organization

Serves as admin to the mayor, city administrator, and other officials. <u>Manades</u>, organizes, processes <u>ciry</u> records, supervises elections, coordinates public meetings, etc.
Example of duties:

· Prepares and manages agendas

Secretary

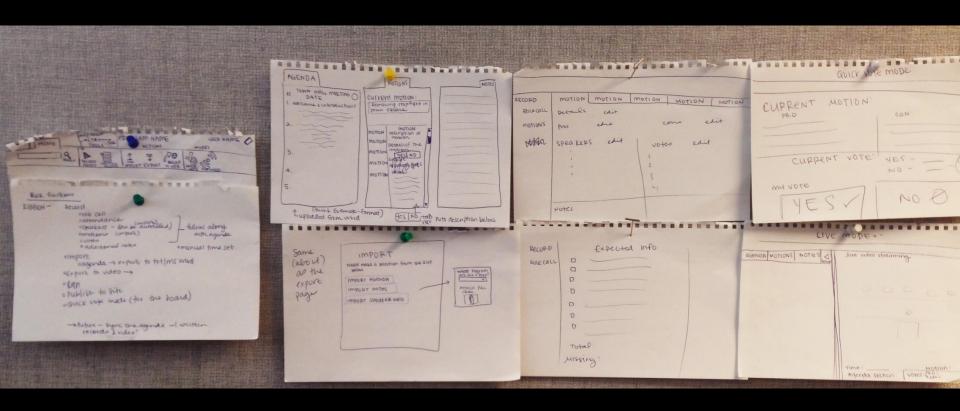
- Compiles supporting documents for agendas, posts meeting notices, including to the City's website.
- Prepares meeting minutes
- Attends evening meetings of the City Council and other Boards and Commissions as the recording secretary.
- Publishes all required legal notices in the official newspaper of the City within the appropriate time requirements
- Responds to requests for information and assistance from Council, staff and citizens.
- Maintains records, filing, drafts and correspondence for Mayor, City Administrator and other city officials
 Maintains custody of city seal and official records of the city including ordinances, resolutions, minutes of
- Maintains custody of city seal and official records of the City including ordinances, resolutions, minutes or the City Council, contracts, agreements, etc. Attests to all official documents of the City.
 Serves as the Official Records Management Officer for all city documents; insures City is compliant with
- Receives on behalf of the City petitions, initiatives, referendums, recall proceedings and applications for
 office, and verifies all applications and petitions.
- Coordinates and administers elections and related matters for the City and other agencies as directed.

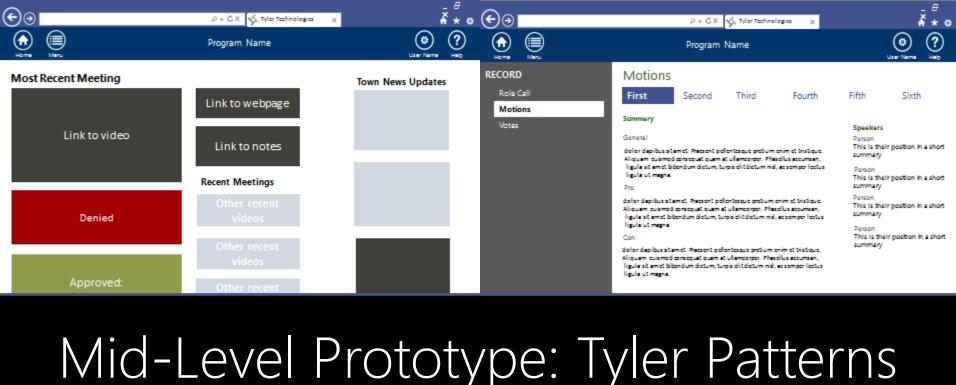


Needs

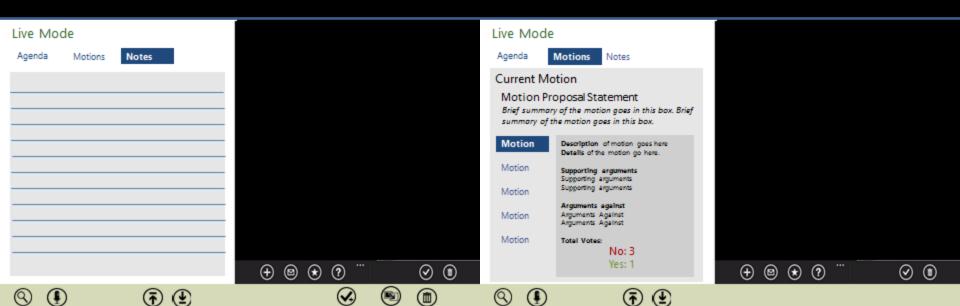
- Town council information
- Job efficiency
- Agendas
- Political history
- Voting ability/tracking
- Town Media
- Roll call
- Ability to take notes
- Export/Import data

Low-Level Prototype





Mid-Level Prototype: Tyler Patterns



Clark County, IA

101 Main Street, Township clarkcountycouncil@gmail.com (476) 878-0990

Elected Officials



Bruce Wayne Town Governor 2078678779



Bruce Wayne Town Governor 2078678779



Bruce Wayne Town Governor 2078678779



Bruce Wayne Town Governor 2078678779



Bruce Wayne Town Governor 2078678779



Bruce Wayne Town Governor 2078678779



Bruce Wayne Town Governor 2078678779



Bruce Wavne

Meeting Central

June 2, 2014 >



Board of Directors Meeting

Location: Town Hall, Foreside Room

Topics Covered

00:00:04	New School Building
00:00:04	Motion Made to Pass
01:00:09	Extending the Budget
03:55:00	New Policemen
00:00:04	Motion Made to Pass
04:05:06	Re-elections
00:00:04	Motion Made to Pass
10:29:22	Sewer Issues
03:55:00	Stoplight on 4th St.
00:00:04	Motion Made to Pass
02.55.00	Canadiaba an Ash Ca

Members Present







Recent Meetings >



Town Council Meeting June 4, 2014



Town Council Meeting June 4, 2014



High-Level Prototype: Windows/Tyler Hybrid

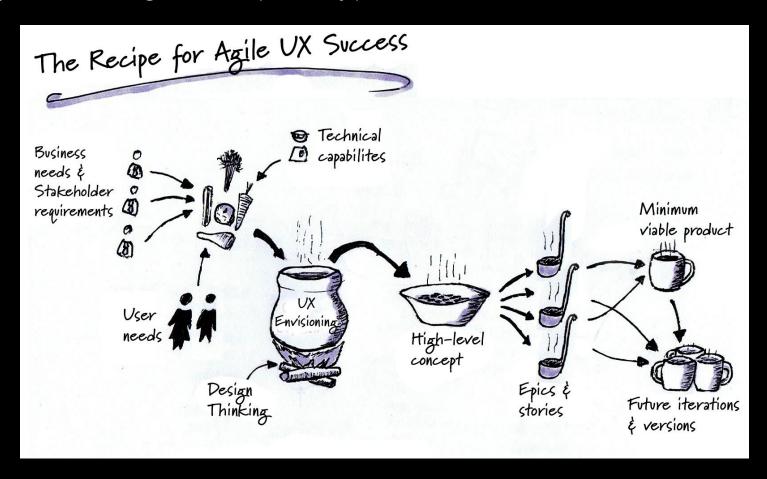
2. The "Quick/Agile-Based" Approach

Financial Programs

(Joe's Budget Scenarios & Jason's Programs)

Research: Understood background, looked for areas of improvement

Design: Flow, High-level prototype



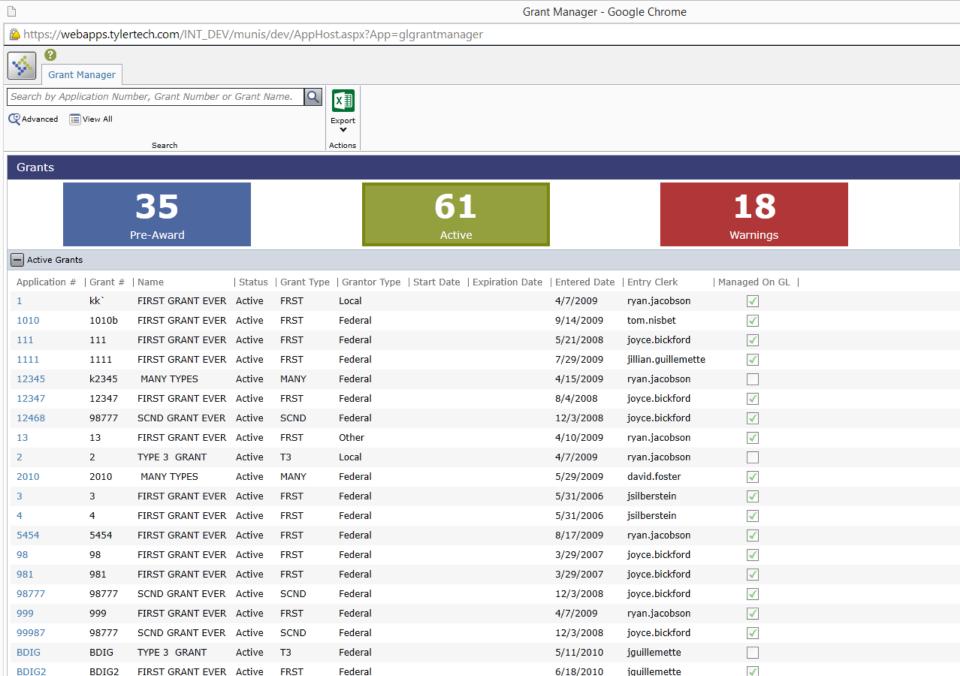
Financial App Process

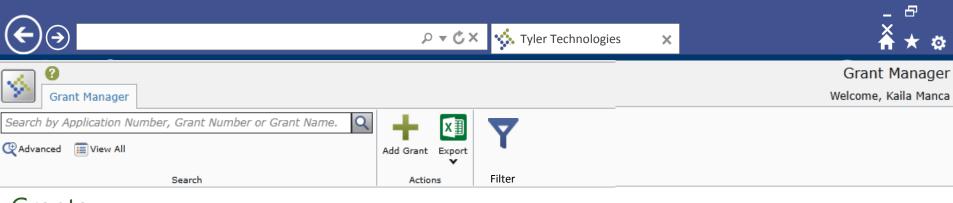
Step One: Researching

- Took background research about topic & talked to development and support
- Discussed any further questions with the project manager & development team

Step Two: Designing

- Applied UI design changes
- Reiterated





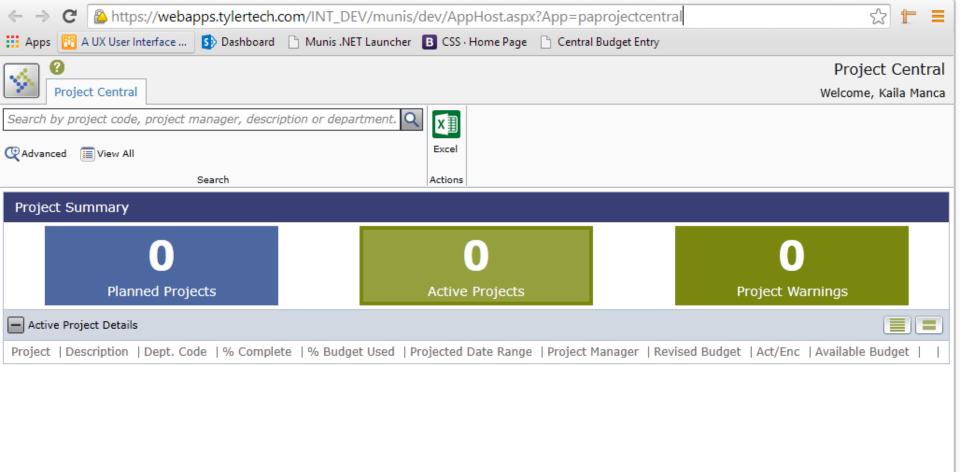
Grants

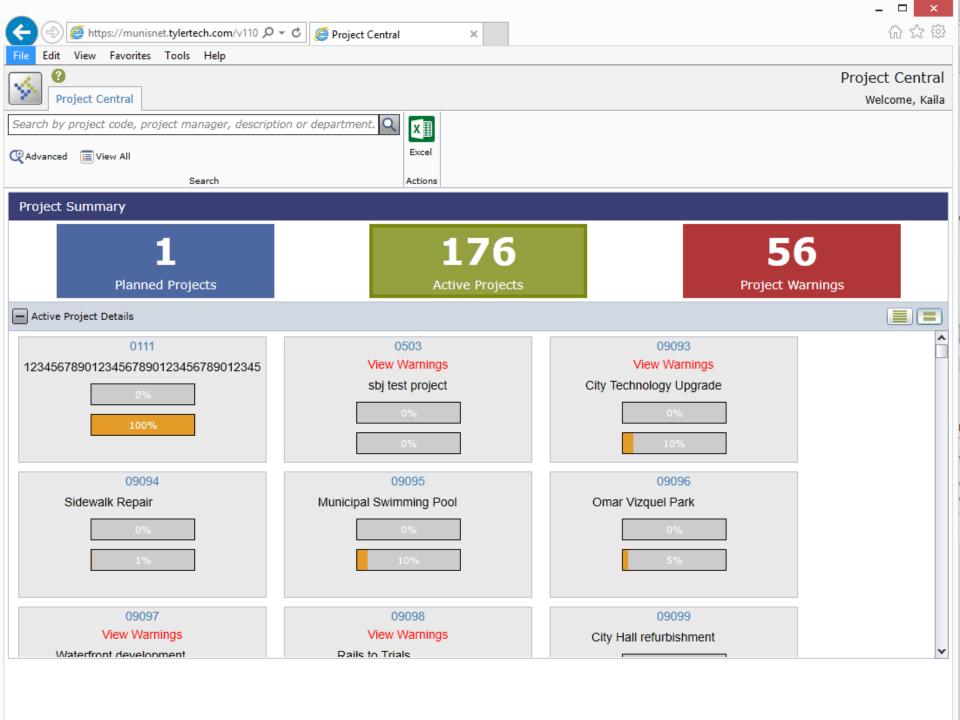
Status

Pre-Awarded Active 25 Warnings

Closed

Application No.	Grant No.	Name	Status	Grant Type	Grantor Type	Entered Date	Entry Clerk	Managed
1	KLK	Many types	Active	First	Local	4/7/2009	David.foster	
11	1010	First Grant	Active	Many	Local	5/6/2010	Ryan.jacobson	
1111	11	Type 3 Grant	Closed	Second	Federal	12/12/2015	Jsilberstein	
1	KLK	Many types	Active	First	Local	4/7/2009	David.foster	
11	1010	First Grant	Active	Many	Local	5/6/2010	Ryan.jacobson	
1111	11	Type 3 Grant	Closed	Second	Federal	12/12/2015	Jsilberstein	
1	KLK	Many types	Active	First	Local	4/7/2009	David.foster	
11	1010	First Grant	Active	Many	Local	5/6/2010	Ryan.jacobson	
1111	11	Type 3 Grant	Closed	Second	Federal	12/12/2015	Jsilberstein	











×









Search





Project Central



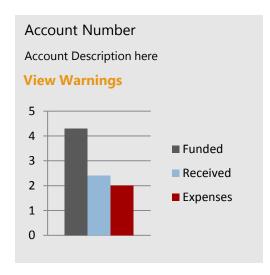
Status

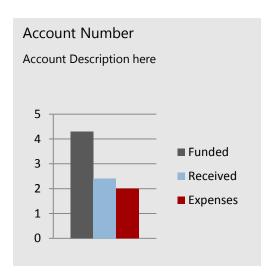


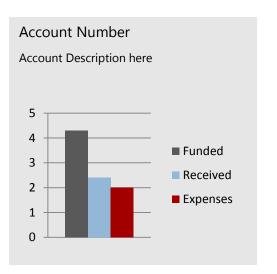


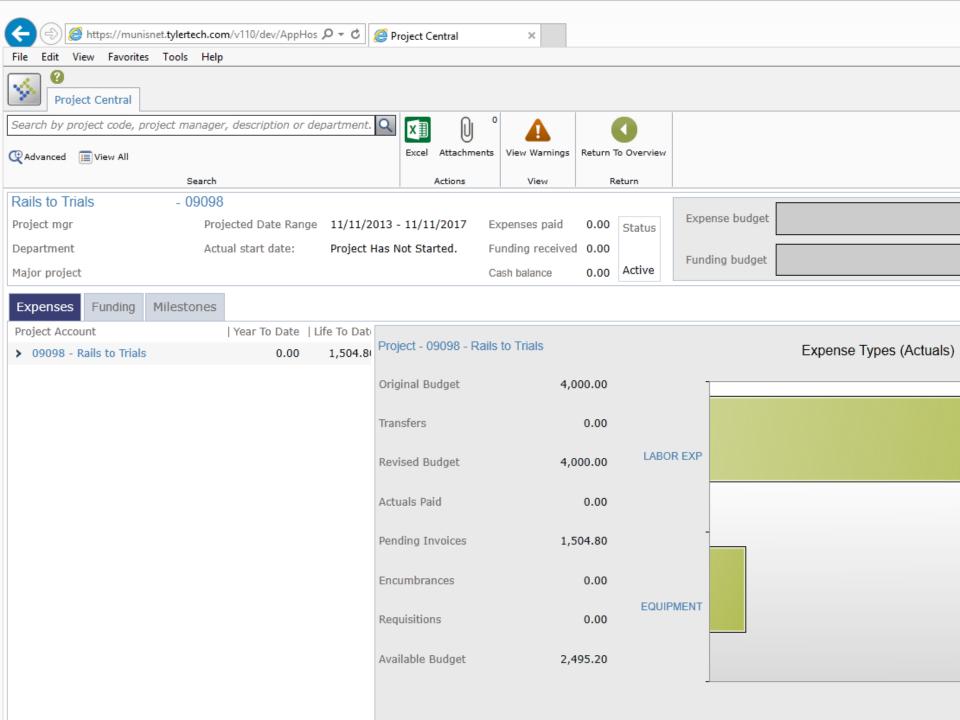


▼ Details



















Advanced II View All



Search by project code, project manager, description or department.

х∄ Attachments

Actions

View Warnings

View

Return To Overview

Return

X



Project Identification Number

Search

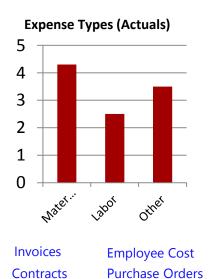
Summary

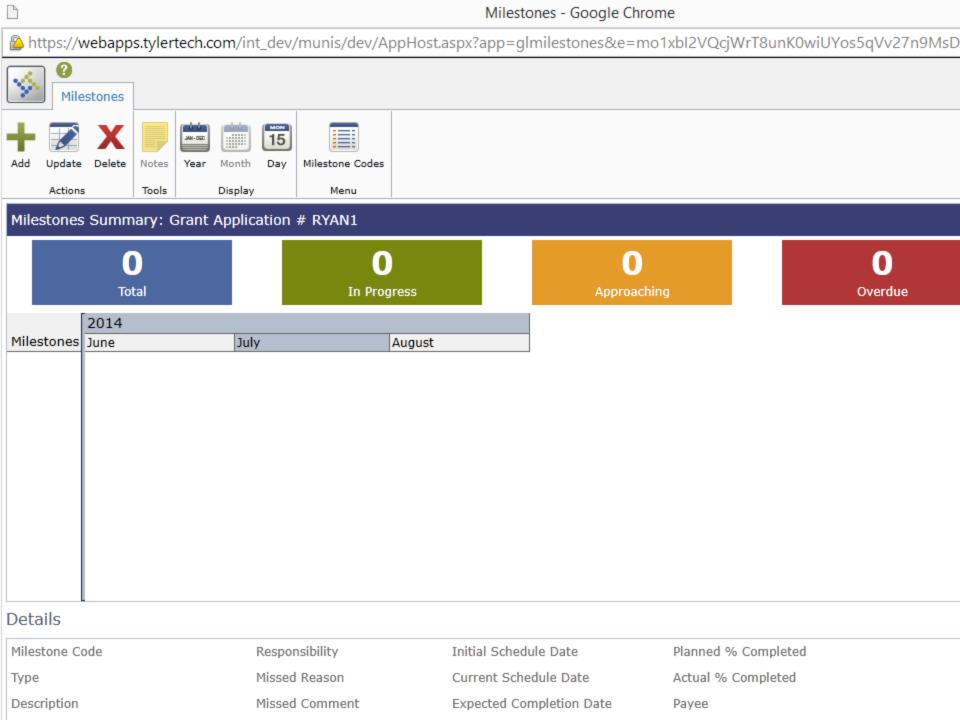
Project MGR Projected Data Range 09/01/2001-07/19/2012 **Expenses Paid** 14,209.95 Department Plan G **Actual Start Date** 09/01/2001 **Funding Received** 0.00 Cash Balance -14.209.95 Major Project 34930458490 Status Active

Expenses **Funding** Milestones

Project Account	Year to Date	Life to Date
- 09097-Waterfront Development	0.00	16,497,234
■ 100-Planning	0.00	16,497,234
+ 10-Permits	0.00	16,497,234
- 010-Drawings	0.00	16,497,234
09097 .100 .010	0.00	16,497,234
+ 10-Permits - 010-Drawings	0.00	16,497,234 16,497,234

Task 09097 .100	.010
Original Budget	7,500.00
Transfers	0.00
Revised Budget	7,500.00
Actuals Paid	0.00
Pending Invoices	5,530.80
Encumbrances	0.00
Requisitions	0.00
Available Budget	1,962.20







Welcome, Kaila Manca





Actions









Display











In Progress

Approaching

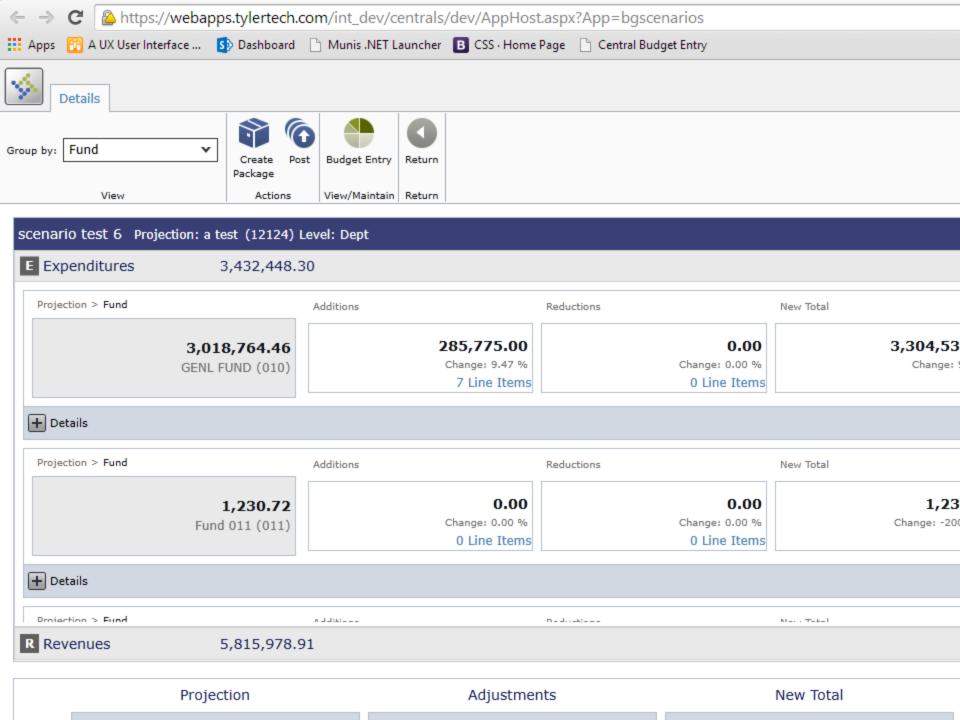
Overdue

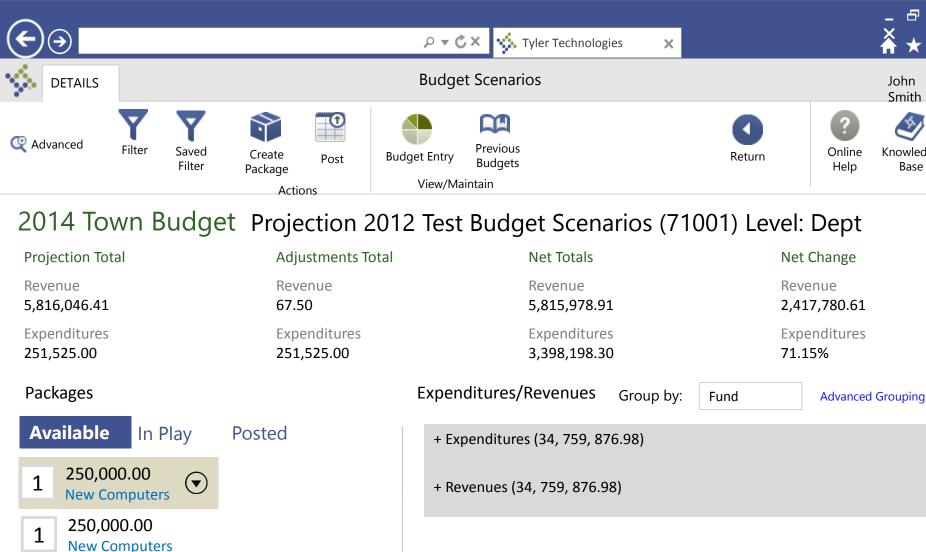
Future

< December 2014 >

	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Milestones	1	2	3	4	5	6	7
#90 STRT	8	9	10	11	12	13	14
#91- STRT Test	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31				

Details: Milestone Name #90 STRT





250,000.00 **New Computers**

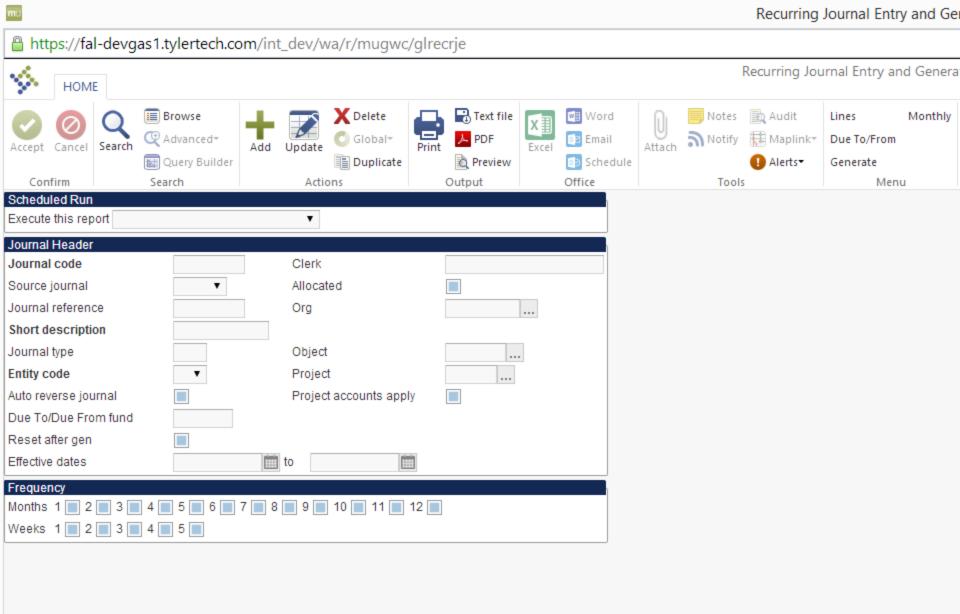
250,000.00 **New Computers**

Apply Package

John Smith

Knowledge

Base













Recurring Journal Entries

John Smith

Search instruction/hint





Tools









X









Q Advanced

Filter Delete

Excel Add

Output

Monthly Due To/From

Alerts

Lines Generate Columns

Help Base Help

Search

Browse Journals

Journal Code	Effective Date	Source	Description	Total Debits	Total Credits	Date Created	Actions
75677	01/14/2013-09/29/2015	GEN	Test	0.00	0.00	09/29/2015	\bigcirc
12222	01/14/2013-09/29/2015	AE	more data	90.00	90.00	09/29/2015	
94840	01/14/2013-09/29/2015	GEN	Information here	1,987,000.00	1,987,000.00	09/29/2015	
2222	01/14/2013-09/29/2015	BS	test	0.00	0.00	09/29/2015	
11	01/14/2013-09/29/2015	GEN	Test	90.00	90.00	09/29/2015	
1678	01/14/2013-09/29/2015	AE	more data	1,987,000.00	1,987,000.00	09/29/2015	
0809078	01/14/2013-09/29/2015	GEN	Information here	0.00	0.00	09/29/2015	
12222	01/14/2013-09/29/2015	BS	test	90.00	90.00	09/29/2015	
94840	01/14/2013-09/29/2015	GEN	Test	1,987,000.00	1,987,000.00	09/29/2015	
2222	01/14/2013-09/29/2015	AE	more data	0.00	0.00	09/29/2015	
11	01/14/2013-09/29/2015	GEN	Information here	90.00	90.00	09/29/2015	
1678	01/14/2013-09/29/2015	BS	test	1,987,000.00	1,987,000.00	09/29/2015	

Step 3: Development

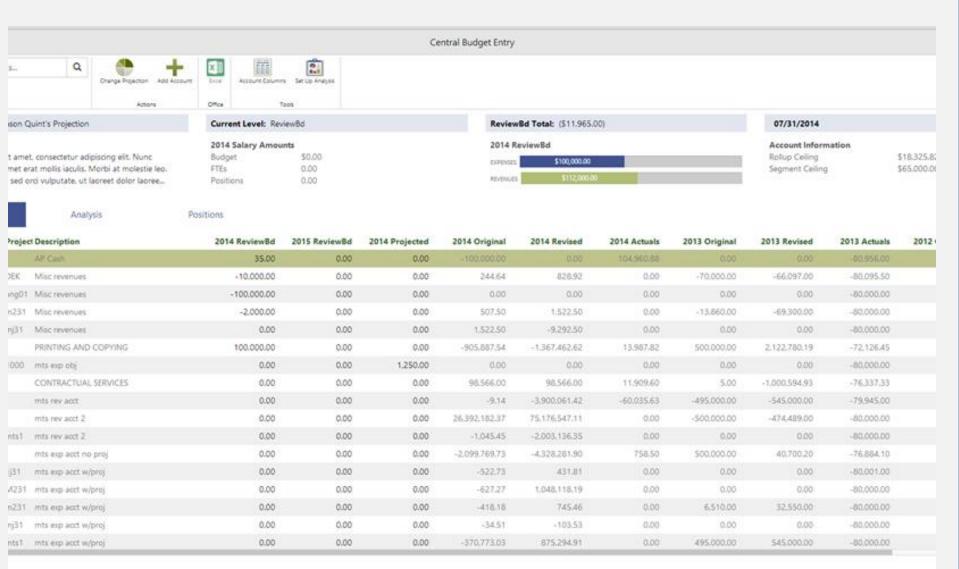


Chart of Accounts Builder



Chart of Accounts Builder

Home

5 of 34 questions complete.

Questionnaire	Analysis questions used to determine	best business practice recomme	endations.		
Task List	Assignee	Status	Due Date	Last Modified	
GL Settings	John Jenusaitis	Complete	07/15/2014	07/23/2014 14:15	
Funds	Vivien Gray	Complete	08/01/2014	07/17/2014 10:36	
Segments	Vivien Gray	Overdue	04/04/2014	04/01/2014 15:17	
Objects	John Jenusaitis	Complete	07/18/2014	07/18/2014 10:32	
Projects		Overdue	07/19/2014	07/09/2014 16:11	
Accounts		Overdue	07/18/2014	07/10/2014 12:58	
Organizations		Not Started			
Character Codes	John Jenusaitis	In Progress	08/15/2014	07/23/2014 10:10	
Rollup Codes	John Jenusaitis	In Progress	07/31/2014	07/10/2014 10:40	
Due To/Due From	John Jenusaitis	Complete	07/03/2014	07/03/2014 09:52	
Validation		Not Started			
Export		■ Not Started			



















Actions

Account Columns Set Up Analysis

➤ Projection 1010 - Jason Quint's Projection

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc

porttitor magna sit amet erat mollis iaculis. Morbi at molestie leo.

Aliquam facilisis diam sed orci vulputate, ut laoreet dolor laoree...

Office

Tools

Current Level: ReviewBd

2014 Salary Amounts

Budget 0.00 FTEs 0.00 Positions

ReviewBd Total: (\$11,965,00) 2014 ReviewBd

07/31/2014 Account Information

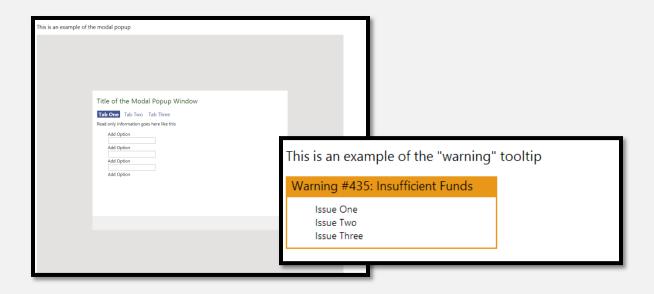
Rollup Ceiling Segment Ceiling \$18,325,829.03 \$65,000,00

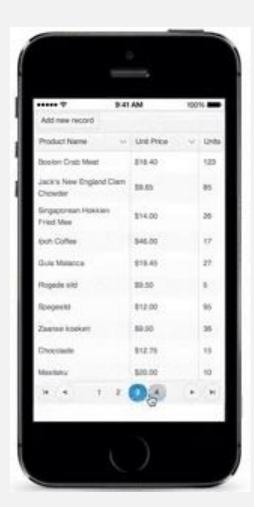
A	ccounts (50)		Analysis	Positions										
Org	Object	Proje	ct Description	2014 ReviewBd	2015 ReviewBd	2014 Projected	2014 Original	2014 Revised	2014 Actuals	2013 Original	2013 Revised	2013 Actuals	2012 Original	2012 Ac
+ 1101	101111		AP Cash	35.00	0.00	0.00	-100,000.00		104,960.88			-80,956.00		
+ 111	011	DEK	Misc revenues	-10,000.00	0.00	0.00	244.64	828.92	0.00	-70,000.00	-66,097.00	-80,095.50	0.00	
+ 111	011	ang01	Misc revenues	-100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-80,000.00	0.00	
■ 111	011	m231	Misc revenues	-2,000.00	0.00	0.00	507.50	1,522.50	0.00	-13,860.00	-69,300.00	-80,000.00	0.00	
+ 111	011	mj31	Misc revenues	0.00	0.00	0.00	1,522.50	-9,292.50	0.00	0.00	0.00	-80,000.00	0.00	
■ 111	0111		PRINTING AND COPYING	100,000.00	0.00	0.00	-905,887.54	-1,367,462.62	13,987.82	500,000.00	2,122,780.19	-72,126.45	0.00	6,0
+ 111	0111	1000	mts exp obj	0.00	0.00	1,250.00	0.00	0.00	0.00	0.00	0.00	-80,000.00	0.00	
+ 111	02101		CONTRACTUAL SERVICES	0.00	0.00	0.00	98,566.00	98,566.00	11,909.60	5.00	-1,000,594.93	-76,337.33	0.00	
+ 111	111		mts rev acct	0.00	0.00	0.00	-9.14	-3,900,061.42	-60,035.63	-495,000.00	-545,000.00	-79,945.00	0.00	
+ 111	1110		mts rev acct 2	0.00	0.00	0.00	26,392,182.37	75,176,547.11	0.00	-500,000.00	-474,489.00	-80,000.00	0.00	
+ 111	1110	mts1	mts rev acct 2	0.00	0.00	0.00	-1,045.45	-2,003,136.35	0.00	0.00	0.00	-80,000.00	0.00	
+ 111	1111		mts exp acct no proj	0.00	0.00	0.00	-2,099,769.73	-4,328,281.90	758.50	500,000.00	40,700.20	-76,884.10	0.00	-1,0
+ 111	1111	1j31	mts exp acct w/proj	0.00	0.00	0.00	-522.73	431.81	0.00	0.00	0.00	-80,001.00	0.00	
+ 111	1111	M231	mts exp acct w/proj	0.00	0.00	0.00	-627.27	1,048,118.19	0.00	0.00	0.00	-80,000.00	0.00	
+ 111	1111	m231	mts exp acct w/proj	0.00	0.00	0.00	-418.18	745.46	0.00	6,510.00	32,550.00	-80,000.00	0.00	
+ 111	1111	mj31	mts exp acct w/proj	0.00	0.00	0.00	-34.51	-103.53	0.00	0.00	0.00	-80,000.00	0.00	
+ 111	1111	mts1	mts exp acct w/proj	0.00	0.00	0.00	-370,773.03	875,294.91	0.00	495,000.00	545,000.00	-80,000.00	0.00	

Central Budget Entry

UX Step 3: Development

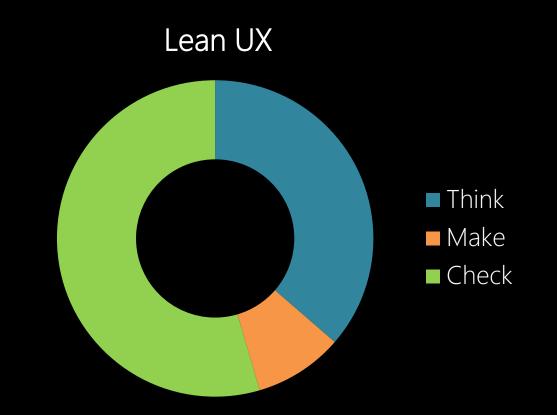
- Code for Tyler PL
- Ionic mobile app
- Financial team design implementation





Three Approaches to UX Design

3. The "Lean UX" Approach Roll/Factor Merge (and Budget Scenarios)

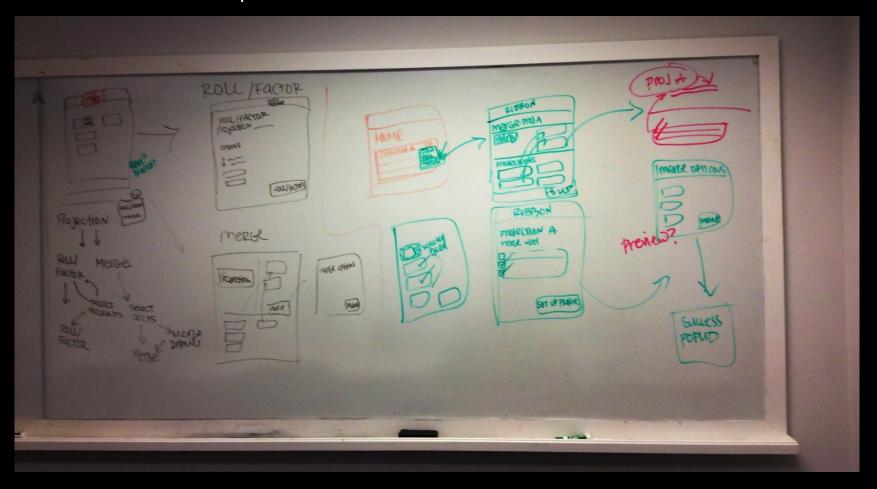


Step One: Research

- Minimal Thinking comes later
 - No interaction with previous program
 - No personal UI design implemented
- Presented with functionality of program
 - Purpose/what does it do?
 - What does the user expect to gain from it?

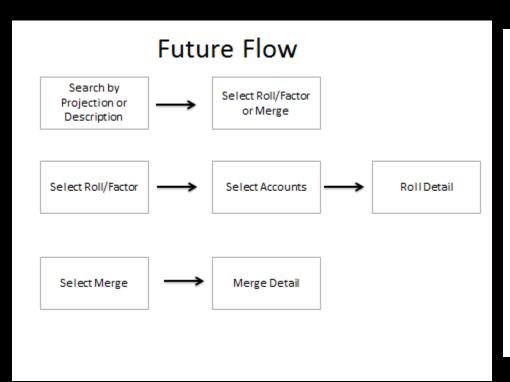
Step Two: Prototyping & Testing

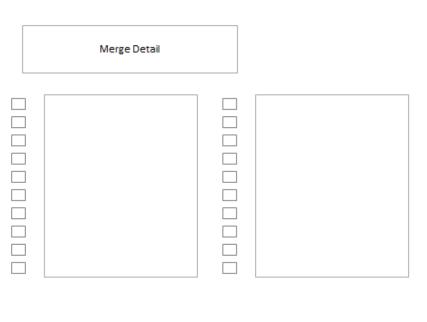
Quick Mockup: Version One



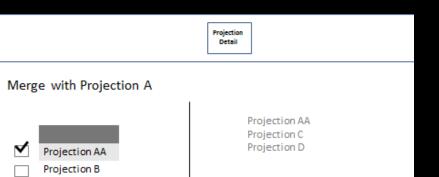
Step Two: Prototyping & Testing

Quick Mockup: Version Two





Version Three

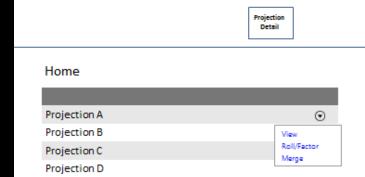


Next

Projection C Projection D

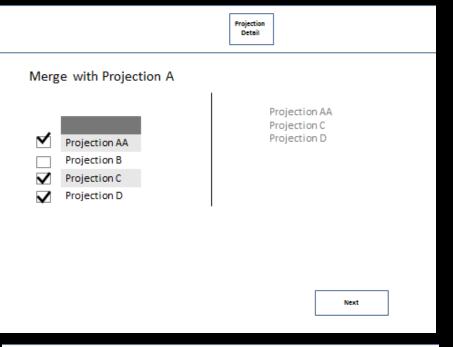
Roll/Factor
Projection A

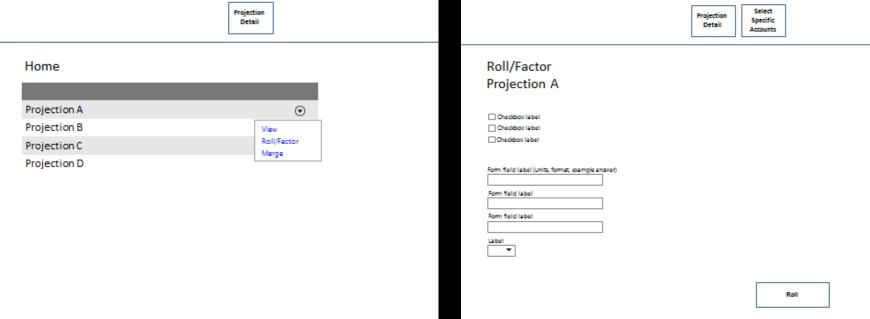
| Checkbox label | Checkbox lab



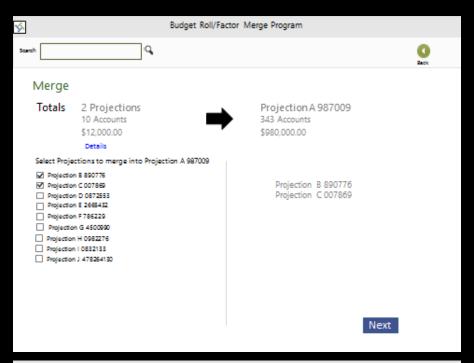
Version Three

User Quote:
"It feels like it needs a lot of work."

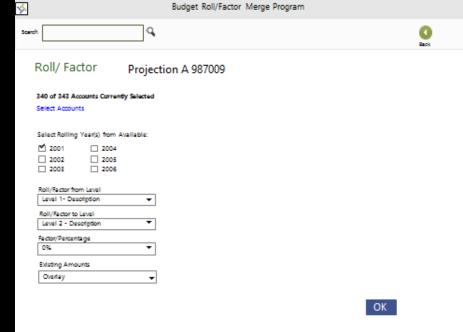




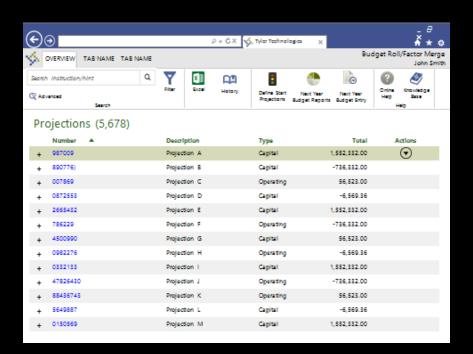
Version Six

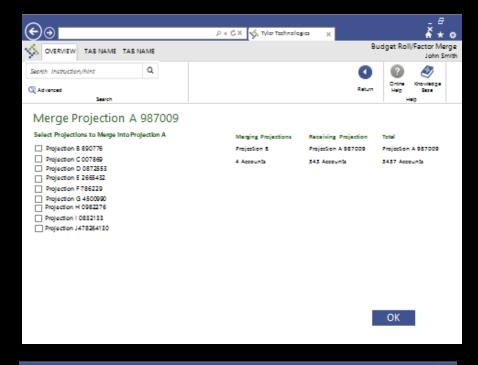


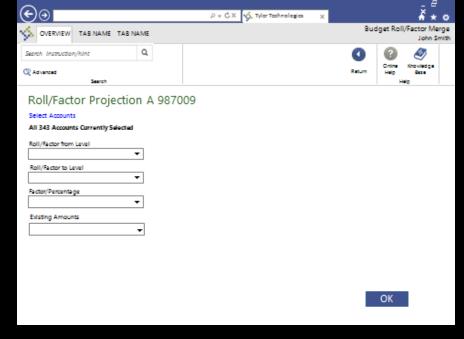
3							
	carch		Q				
	Pr	ojections					
		Number	Description	Туре	Total	Year	Actions
	<u>±</u>	987009	Projection A	Capital	1,552,332.00	2002	€
		Celling Percent	ing Percent Created From Projec		Current Access Level	Fund Renges In Pr	rojection
		90 %	7867		4	Rund Range 1	1 to 1
						Rund Range 2	2 to 3
						Rund Range 3	3 to 3
		View accounts				Rund Range 4	1 to 5
	+	890776)	Projection B	Capital	-736,332.00	2012	
	+	007869	Projection C	Operating	56,523.00	2013	
	+	0872553	Projection D	Capital	-6,569.36	2011	
	+	2665432	Projection E	Capital	1,552,332.00	2009	
	+	786229	Projection F	Operating	-736,332.00	2005	
	+	4500990	Projection G	Capital	56,523.00	2013	
	+	0982276	Projection H	Operating	-6,569.36	2013	
	+	0332133	Projection I	Capital	1,552,332.00	2014	
	+	47826430	Projection J	Operating	-736,332.00	2016	
	+	88436743	Projection K	Operating	56,523.00	2002	



Version Eight



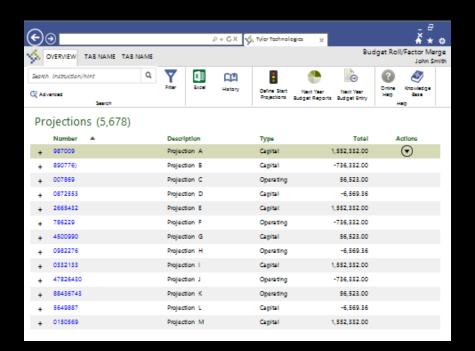


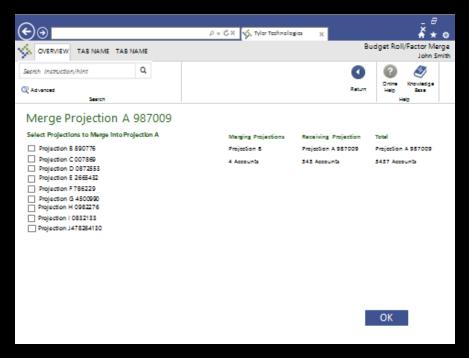


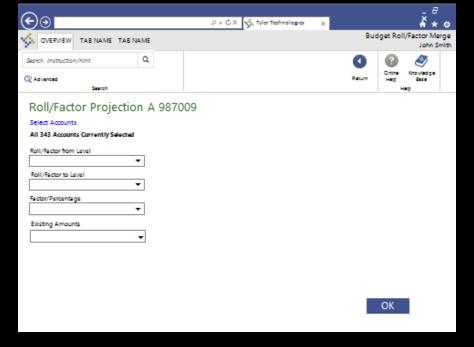
Version Eight

User Quote:

After looking at this... yeah. This is good."









Lessons from Tyler & My Summer

My Goals:

- Involvement in a variety of UX areas
- Independence, Career-focus
- Potential future workplace
- Opportunity to learn
- Opportunity to build skillset
- Actual, real, applicable... work

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Tyler Tech & all of you, for a fantastic summer!

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