



Dina Misener

- Manager of Application Development
 - 15+ years with the product
 - Wear many different hats
 - Deliver the best, highest quality product to help you achieve your business goals











Mirus Development Team

Thomas Mondelli

Front End Developer

7+ years

Sarah Danielson

Senior Java Developer

6+ years

Matthew Brock

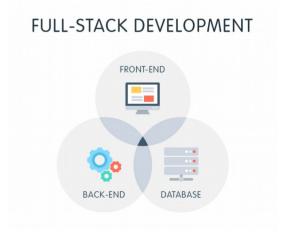
Full Stack Developer

3+ years





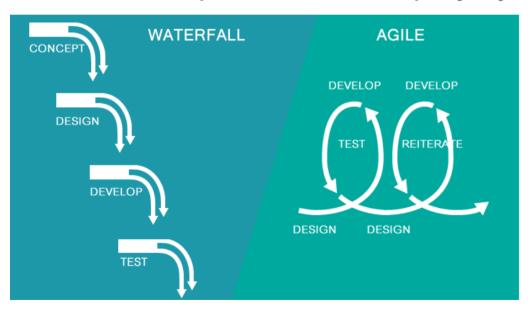






What do we do for you?

 We create, strengthen and broaden the UI/UX and middleware that manipulates and displays your data the way you want.







Dive Deeper

- Goals
- Direction
- What's coming soon...



Goals

- Expanding Mirus Feature Repository
- Invest and grow our technical expertise and usage





Feature Repository

- What gets you the most out of your data
- Where and How?
 - Account Management Team
 - MCON
 - What are you unable to do yourself?



Account Management

Client Calls



Observing Trends





Comp Value Arrangement - Before

O Comparison Layout 2 ♣

Time Selection	(1)Base Previous Day		(1)Comp Same Period Week Ago		(1) ActualDiff		(1) PctDiff	
Store Name	Gross Sales	Qty Sold	Gross Sales	Qty Sold	Gross Sales	Qty Sold	Gross Sales	Qty Sold
92nd & Gessner	4,155.37	3,041	4,086.85	2,928	68.52	113.00	1.7%	3.99
Airline	4,246.02	2,937	4,919.64	3,378	(673.62)	(441.00)	(13.7%)	(13.1%
Annco	3,965.56	2,593	4,230.18	2,755	(264.62)	(162.00)	(6.3%)	(5.9%
Aurora Ave S	3,616.49	2,672	3,751.13	2,638	(134.64)	34.00	(3.6%)	1.39
Barryknoll	2,976.09	2,059	2,788.14	1,904	187.95	155.00	6.7%	8.19
Beaumont	5,446.45	3,565	4,995.69	3,166	450.76	399.00	9.0%	12.69
E Division	4,009.43	2,630	4,022.31	2,591	(12.88)	39.00	(0.3%)	1.59
Fishers Landing	3,768.59	2,640	3,516.71	2,566	251.88	74.00	7.2%	2.99
Freeport Blvd	3,311.82	2,463	3,137.58	2,281	174.24	182.00	5.6%	8.0
Georgetown Crossing	8,129.74	5,616	8,163.60	5,425	(33.86)	191.00	(0.4%)	3.5



Comp Value Arrangement - After

6 Comparison Layout 2 - New Order

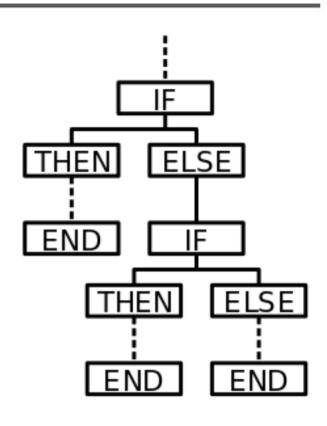
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Beaumont	9.0%	12.6%	450.76	399.00	4,995.69	3,166	5,446.45	3,5
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Freeport Blvd	5.6%	8.0%	174.24	182.00	3,137.58	2,281	3,311.82	2,4
Georgetown Crossing	(0.4%)	3.5%	(33.86)	191.00	8,163.60	5,425	8,129.74	5,6



MCON

- If / Then / Else
 - 2016
 - Update UI/UX
- Tooltip on Filter Buckets for N Step
 - 2017
- Your turn next...
 - Focus Group







Do it Yourself

- Repetitive request to our teams
 - Importing dimensional data
 - DimensionMaintenance
 - Enhancement





Tech Stack

"Combination of programming languages, tools and frameworks that

developers use to create web applications"

- Huh?
- Why?
 - Influence the scalability of the product
 - Speed
 - Throughput





Current and Future Investment

- Library Updates
 - POI (XLS)
- Technology Updates

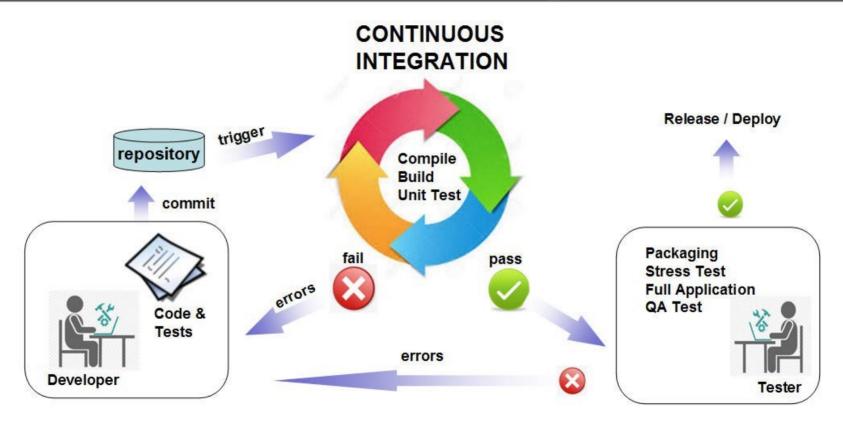


- Gives developers more tools to find issues and enhance the product
- October Build
 - JAR updates
 - Charts rendering to PDF





Continuous Integration





Benefits

- Set stage for future enhancement
- Quicker turn around and response
- Slimming the code base
- One version of the truth
 - Less Problems
 - More Consistency
 - Richer Application





Direction

Report Writer Renovation Process

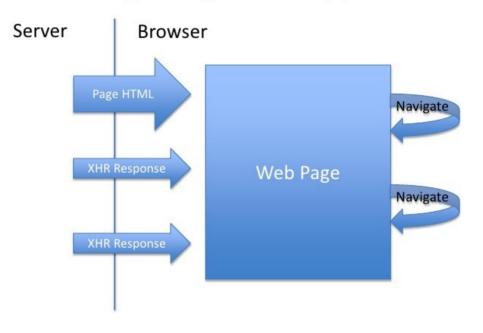




Report Writer Renovation

- Improve the overall design, interaction, quality and usability of each feature and function available.
- How?
 - SPA (Single Page Application) Model
 - Eliminating Edit Pages
- Why?
 - To help you get the most out of your data

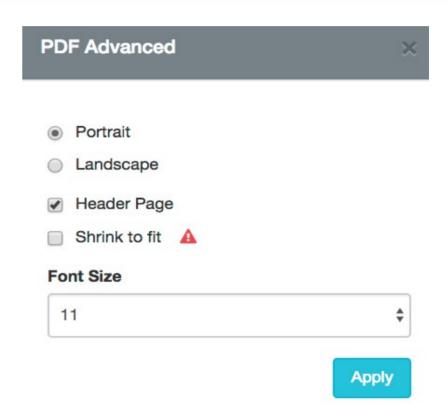
Single Page WebApp





Report Writer Renovation

- Since MCON17
 - Update UI/UX
 - PDF Advanced
 - Elimination from edit pages
 - New Features
 - Text Wrapping and Alignment





Recap

- More interactivity with your data
- More modern UI/UX
- More feature and functionality



Questions?





Sneak Peek









Dina Misener

- Manager of Application Development
 - 15+ years with the product
 - Wear many different hats
 - Deliver the best, highest quality product to help you achieve your business goals











- I manage the development team at Mirus. I coordinate projects, fixes, enhancements from requirements to implementations and the many facets in between
- I am also hands on programmer, designer, Q&A, mentor and coach
- My main responsibility to you, our clients, to ensure we are delivering the best product experience to help you achieve your goals
- I'm also a Firefighters wife and my passion is being a mom to my now 4 year old.

Mirus Development Team

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6+ years

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Full Stack Developer
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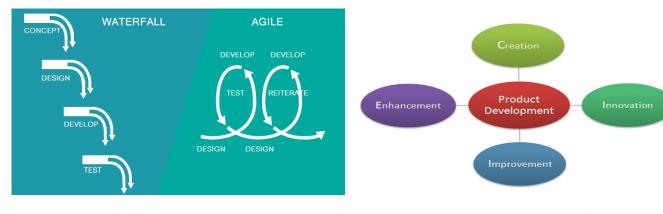




- Thomas
 - Adds the elements and content you see and interact with daily
 - Fun Fact
 - Enjoys podcast Beautiful Anonymous and the The Nod.
- Sarah
 - Backend business logic and the systems that run Mirus BI
 - Multiple programming languages and technologies
 - Fun Fact
 - Gamer and she does beta testing in her free time.
 - · Kayak fishing in the Gulf
- Matt
 - Math, Science, History, he is not a fiction person

What do we do for you?

 We create, strengthen and broaden the UI/UX and middleware that manipulates and displays your data the way you want.



- As a team we are constantly working to improve the product for you.
- We do this through Agile Development versus a Waterfall Development
 - This allows us to to do more frequent, smaller changes. Nothing earth shattering. You experience this in our monthly build.
 - Example is Windows 10 waterfall, everything was different.
- Creation of new feature and functions
- Innovation pushing the envelope trying to find new ways
- Improvement always room
- Enhancement building on what we have

Dive Deeper

- Goals
- Direction
- What's coming soon...



In this presentation I'm going to dive into our goals, the direction of Mirus BI and then give you a sneak peek of what is coming soon.

Goals

- Expanding Mirus Feature Repository
- Invest and grow our technical expertise and usage





- Two Buckets
 - Feature and function
 - Tech Stack / Infrastructure

Feature Repository

- What gets you the most out of your data
- Where and How?
 - Account Management Team
 - MCON
 - What are you unable to do yourself?



- Features N Step (talked about early) those items that get you the most out of your data
- Where and How
 - Several ways we don't sit in a silo and hope we pick the right one.

Account Management

Client Calls



Observing Trends





- Client Calls that you participate in with your coordinator
- Then the Acct. Mgmt watches for trends, is this being reported frequently? This seems to be a hot topic what can we do to help our clients, can we add to the repository?
- Dev Team, eyes open and ears to the ground based on what we have heard, how is the app being used, how can we improve.

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Georgetown Crossing	8,129.74	5,616	8,163.60	5,425	(33.86)	191.00	(0.4%)	3.5



- One trend that was observed was the usage of comparison for display and layout
- How many of you have done this on your reports?
 - Trying to get one column of data in a particular position?
- Let's take a look
 - Base, Comp, ActualDiff, PctDiff in order as defaults
 - PctDiff, ActualDiff, Comp, then Base
- More to come on how you will be able to accomplish this.

Comp Value Arrangement - After

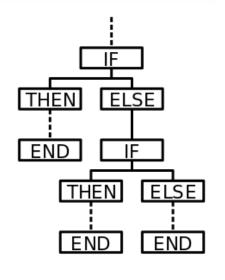
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MCON

- If / Then / Else
 - 2016
 - Update UI/UX
- Tooltip on Filter Buckets for N Step
 - 2017
- Your turn next...
 - Focus Group







COMPLEX

- If / Then / Else
 - IF, IF ELSE and IF THIS AND THAT feature of Excel
 - Brought to us in 2016
 - Mock and wire-framing to create a UI/UX experience that covered all angles
 - Requirements, interface document
 - · Investigating our backend
 - UI/UX review / update

SIMPLE

- Tooltip
- PLUG
 - Focus Groups your turn to tell us your desires, needs.

Do it Yourself

- Repetitive request to our teams
 - Importing dimensional data
 - DimensionMaintenance
 - Enhancement



- Repeat request
 - Importing dimensional update

Tech Stack

 "Combination of programming languages, tools and frameworks that developers use to create web applications"

- Huh?
- Why?
 - Influence the scalability of the product
 - Speed
 - Throughput

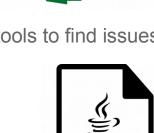




- Invest and Grow
 - Simply a collection of different technologies that work together for a purpose, usually the foundation the the application is built on.
 - Like building a house
 - You don't start by laying the foundation
 - Lots of preparation grading, site preparation, soil testing
 - What's this mean for you?
 - Scalability = Flexibility / Expandability
 - Meet the growing demands and client base
 - Speed
 - Constantly fixing their software reducing their bugs
 gives more back to us by staying on latest.
 - Throughput new ways to code, improved methodologies

Current and Future Investment

- Library Updates
 - POI (XLS)
- Technology Updates
 - Gives developers more tools to find issues and enhance the product
 - October Build
 - JAR updates
 - · Charts rendering to PDF

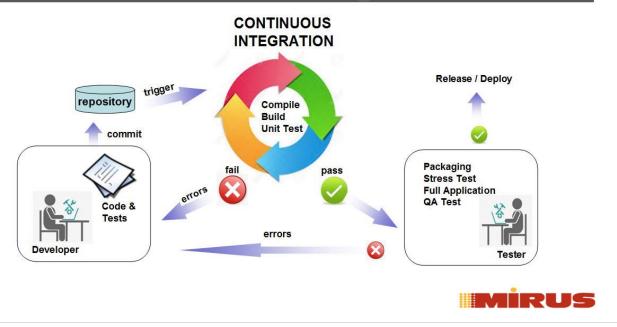


Java APACHE



- Examples
 - Library POI (XLS) output
 - Various issues, not all data was being pushing
 - We were outdated and the library allowed us to get better logging and create more efficient code
 - Technology
 - JAR Java Archive package file that puts lots of java classes together
 - Upcoming Build in October to distribute to our systems and get them up to date
 - Continuous Integration

Continuous Integration



- Process of automating the build and testing of code every time a developer makes a change.
- Big initiative over 2018 for development.
- We currently do a lot of manual review and testing and the build is very hands on

Benefits

- Set stage for future enhancement
- Quicker turn around and response
- Slimming the code base
- One version of the truth
 - Less Problems
 - More Consistency
 - Richer Application





- What's this mean for you?
 - One version of truth
 - Quicker turnaround newer tools and capabilities allow our developers more avenues to address your needs

Direction

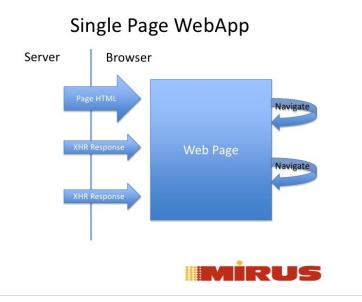
Report Writer Renovation Process





Report Writer Renovation

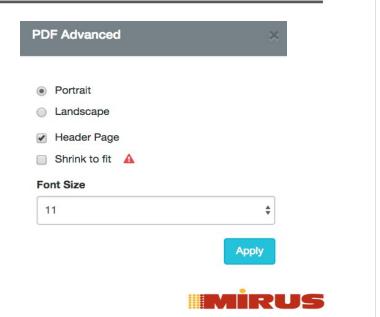
- Improve the overall design, interaction, quality and usability of each feature and function available.
- How?
 - SPA (Single Page Application) Model
 - Eliminating Edit Pages
- · Why?
 - To help you get the most out of your data



- On-going initiative
- We do this by improving our tech stack and architecture
 - Single Page Application
 - Web application that fits on a single page
 - Entire page does not reload days of ole…
 - Gives a richer user experience
 - Application is more responsive provide feedback
 - Eliminating the edit pages
- Why?
 - So, you can have the best Mirus experience possible
 - Improve interactivity between the person creating the report and data.

Report Writer Renovation

- Since MCON17
 - Update UI/UX
 - PDF Advanced
 - Elimination from edit pages
 - New Features
 - Text Wrapping and Alignment



- Updated UI/UX
 - PDF Advanced trend situation
 - Mentioned last conference and through discovery and understanding from you, we made this a personalization as well as brought it out from the edit pages
- New Feature
 - Text Wrapping and Alignment
 - Measure Based Only
 - Delivered in July and August
 - Moving towards more display controls on reports.

Recap

- More interactivity with your data
- More modern UI/UX
- More feature and functionality



 By continue to move to a Single Page Application, keeping our infrastructure and tech stack updated, we can concentrate on our goals of adding feature to bring you better interactivity with your data and a modern UX.

Questions?





Sneak Peek



