

Growing an Edtech Startup

Our Mission

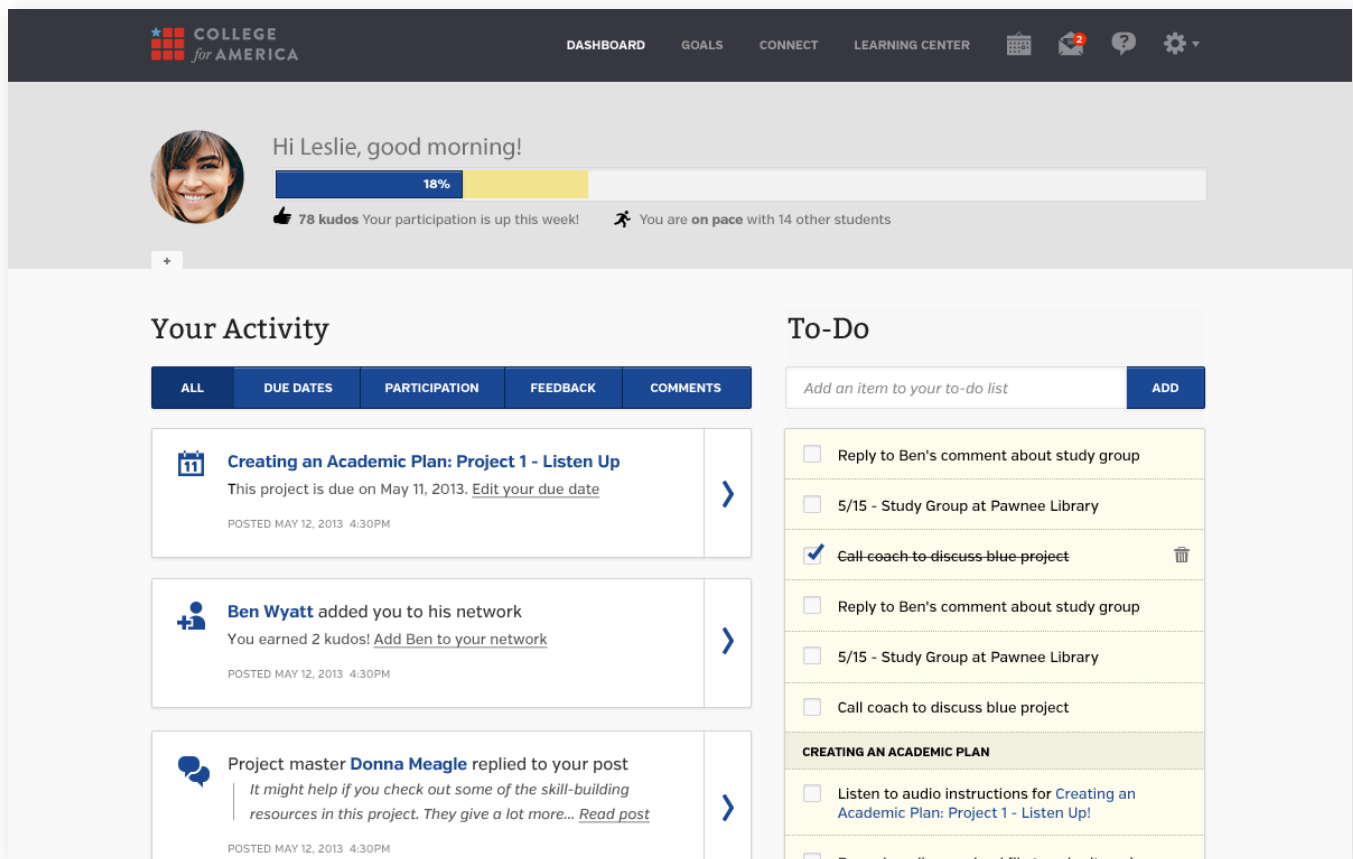
Motivis Learning was born from a pilot program at [Southern New Hampshire University](#). Our mission was to improve and scale the competency-based learning platform they built in-house, for commercial use in higher education and corporate training. In 18 months we had to deliver minimal viable products for educators, students and coaches.

My Role

As head of product design, I was responsible for hiring a UX/UI team, implementing a user-centered design process and delivering production ready front-end. While I was involved in the design process, the UI design in this case study was produced by designers on my team.

Getting Started

The existing product consisted of custom Salesforce pages cobbled together with native and custom components. Administrators and educators struggled to navigate the Salesforce back-end, enter course content, and track student progress. Coaches were also frustrated by the lack of student data and communication tools. While the product did expose an opportunity in the market, the front-end and back-end needed a complete overhaul to meet the needs of our pilot program users.



Screenshot of the existing student experience.

Product Roadmapping

Our goal was to redesign curriculum and course management features while hiring resources to increase velocity. Our long-term strategy was to run 3 cross-functional scrum teams, one for each persona – educators, students, and coaches.

Building a UX Practice

As employee 12, and the first designer, I started designing features while interviewing candidates. Dozens of candidates applied to job requisitions I posted on LinkedIn, although the best candidates came from my network at the University of Massachusetts Lowell and colleagues from previous employment.

EDUCATOR SCRUM TEAM



[Dudley Bryan](#)
Lead UX Designer



[Gregory Saras](#)
UI Developer

STUDENT SCRUM TEAM



[Corey Szepan](#)
UX Designer



[Kyle Soeltz](#)
Senior UI Developer



[Sarah Croughwell](#)
UX Researcher, Coaching

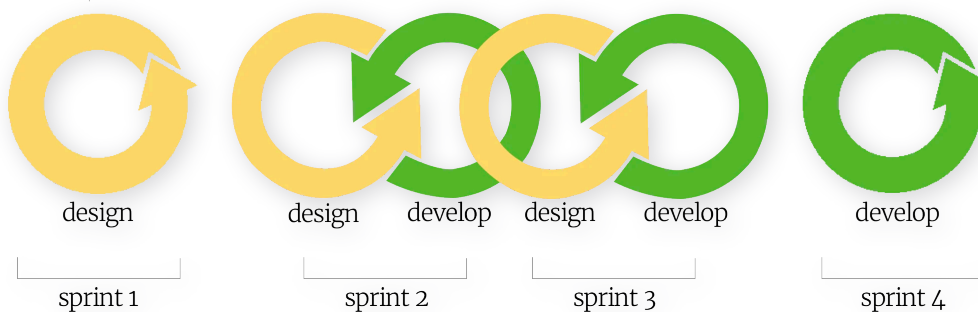


[Amanda Murrin](#)
UI Designer, Design System

Mixing Agile & Lean UX Methodology

Balancing the need to deliver product every 2 weeks with a user centered design process was challenging at first. As my team grew, I allocated more of my time to process improvements and planning.

Eventually the UI and UX lead from each scrum team worked a sprint ahead of the engineer. They supported the implementation of their design work from the previous sprint, while designing and testing prototypes in the current sprint. This staggered sprint approach worked well, eventually scaling to all 3 scrum teams.



A visual representation of our process by [Lauren Mulvehill](#).

Student MVP

- Home
- Calendar
- Stream
- Messages
- Courses
- Assignments
- My Progress
- My Program
- Discover
- Events
- Groups
- Documents
- My Account

Good Morning Mia

Notifications

Filter

- 14 new posts:** Social Media and Marketing
Sep 13, 8:23 AM, Group Discussion, Product Design
- View your grade:** Touch design patterns
Sep 13, 7:20 AM, Product Design
- Message from Mark:** Art, Philosophy, and History of the Renaissance
Sep 13, 6:38 AM, Art History

Yesterday

- Congratulations!**
You earned a badge for **Responsive Design**
Sep 12, 5:31 PM
- Resubmit assignment:** Touch Design Patterns
Sep 12, 4:18 PM, Product Design
- 2 new comments:** Comparative Analysis of the Renaissance and 20th Century Discussion
Sep 12, 10:08 AM, Art History
- Message from Ben:** Animated PSA/Informational Introduction
Sep 12, 8:38 AM, Motion Graphics

Last Week

- Quiz complete:** Society, Religion, and Art of the Renaissance

September

TODAY

Sun	Mon	Tue	Wed	Thu	Fri	Sat
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	1	2	3	4

Today, Sep 13th, 8:33 AM

- 9AM:** Product Design
- 10AM:** Motion Graphics
- 12PM:** Guest Speaker: Simon Sinek, How Great Leaders Inspire
- 3PM:** Weekly Coach Check-in

Due Today

- Mobile app design**
Submission, Product Design
- Motion Graphics PSA/ Informational Segment**
Submissions, Motion Graphics
- Comparative Analysis of the Renaissance and 20th Century**
Group Discussion, Art History

Redesigned student dashboard

Web Design 101

Joseph Williams Instructor | Erin Teck Teaching Assistant

FEED ASSIGNMENTS COMPETENCIES

Introduction to Wireframing

Available 1/30/2017 - 2/16/2017

- Why Create Wireframes?** - Formative, Group Discussion
Due Date Set Due Date
- Create 3 Sets of Wireframes** - Summative, Submission
Due Date 2/6/2017
- Wireframe Review** - Formative, Quiz
Due Date 3/14/2017
- The Principles of Wireframes**
PDF
- Design a Responsive Website** - Formative, Submission
Due Date 4/30/2017
- Peer Review of Your Website Designs** - Group Discussion
Due Date 5/10/2017

Due Dates

FEB 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	1	2	3	4

Assignment

Create 3 Sets of Wireframes

ASSIGNMENT DETAIL FEED MY SUBMISSIONS

Status: Open
Due Date 2/6/2017
Open and close dates: 1/30/2017 - 4/10/2017
Course: Web Design Basics
Educator: Joseph Tormasi

Description

Wireframing is an important step in any screen design process. It primarily allows you to define the information hierarchy of your design, making it easier for you to plan the layout according to how you want your user to process the information. If you've yet to use wireframing, it's time to get your feet wet. You will need to create 3 sets of wireframes. Each set should have wireframes for mobile, tablet and desktop screens. You will need a minimum of 2 pages per set.

Resources

- Example Wireframe 1**
A website wireframe, also known as a page schematic or screen blueprint, is a visual guide that represents the skeletal framework of a website. Wireframes are created for the purpose of arranging elements to best accomplish a particular purpose.
PDF
- Mobile Wireframing**
Mobile application design can be a long process, and wireframes play a key role. Here's how to design wireframes for mobile.
PDF

Evaluation Criteria

Submission History

Submission 2/4/2017 4:32PM


- PDF
- PDF
- PDF

SUBMIT ASSIGNMENT

Course assignments

Assignment detail

Educator MVP



Home

Calendar

Stream

Message Center

Courses

Evaluations

Curriculum

Discover

Events

Groups

Documents

My Account

Web Design 101

Joseph Williams

Instructor

Erin Teck

Teaching Assistant

FEED

ROSTER

ASSIGNMENTS

PROGRESS REPORT

COMPETENCIES

Filter by keyword

Filter

STUDENT A-Z	SUBMISSION HOMEWORK	DISCUSSION HOMEWORK	DISCUSSION UNCATEGORIZED	QUIZ QUIZZES	DISCUSSION HOMEWORK	SUBMISSION HOMEWORK
STUDENTS (10)	Out of 25 Points	Out of 25 Points	Out of 30 Points	Out of 25 Points	Out of 50 Points	Out of 100 Points
85% Denise Allen	18	15	25	-	-	83
73% Benjamin Chapman	-	20	24	23	-	97
80% Virginia Daniels	13	-	29	18	-	-
85% Ethan Davidson	14	18	-	-	-	83
85% Samantha Fernand...	16	19	22	Evaluate	-	86
38% Raymond Graham	18	-	n/a	24	-	-
73% Lorde Kelley	23	22	n/a	-	48	83
93% Harriett Stephens	-	20	-	24	50	88
79% Donald Thompson	Evaluate	22	24	25	-	83
95% Malcolm Wallace	25	24	26	25	46	81
93% Harriett Stephens	-	20	-	24	50	81
79% Donald Thompson	Evaluate	22	24	25	-	81

Grade book

Web Design 101

Joseph Williams

Instructor

Erin Teck

Teaching Assistant

FEED

ROSTER

ASSIGNMENTS

PROGRESS REPORT

COMPETENCIES

Has the ability to create functional wireframes

★ 17 of 30 Students Mastered

STUDENT NAME	PERFORMANCE INDICATORS	STATUS	PROFICIENCY LEVEL
Mia Wallace	★★★★★	Mastered	Mastered
Donald Thompson	★★★★★	Mastered	Emerging Expert
Samantha Fernandez	★★★★★	In Progress	Strategic Learner
Dennis Allen	★★★★★	Mastered	Emerging Expert
Virginia Daniels	★★★★★	In Progress	Beginner
Raymond Graham	★★★★★	Inactive	N/A
Harold Stephens	★★★★★	In Progress	Emerging Expert
Lori Kelley	★★★★★	In Progress	Strategic Learner
Ethan Davidson	★★★★★	In Progress	Beginner
Benjamin Chapman	★★★★★	Inactive	N/A

Has the ability to create functional wireframes

★ 30 of 30 Students Mastered

Competency progress report

Evaluations

Create 3 Sets of Wireframes

SUBMIT EVALUATION

SAVE EVALUATION

MIA WALLACE

ASSIGNMENT DETAILS

SUBMISSION 7/14/2017, 3:34PM

Wireframe-Set-1.pdf

PDF

Wireframe-Set-1.pdf

PDF

Wireframe-Set-1.pdf

PDF

Preview

Wireframe-Set-1.pdf

Preview

EVALUATION

Has the ability to create interactive wireframes for desktop

1 of 6 Completed

Understands the process of wireframing

Is able to document data for creating the wireframes

Beginning

Needs help with documenting the correct data that would be needed to create wireframes.

Developing

Has some data but could use a little more depth in the type of information before documentation.

Meets

Has the proper data although needs minor help in documenting it.

Mastered

Has the proper data and has documented it with no issues.

Is able to create a sitemap that has all levels of pages for website.

Is able to provide sketches of wireframes as a part of documentation for review

Created 3 functional prototypes

COMMENTS

Assignment grading

Coach MVP

- Home
- Calendar
- Stream
- Message Center
- News
- My Students
- Events
- Groups
- Resources
- Joseph T.

My Students

COMPETENCIES ASSIGNMENTS **CHECK-INS**

Check-Ins

[CREATE](#)

Filter

STUDENT NAME	LAST CHECK-IN	NEXT CHECK-IN	LAST SUBMISSION	LAST LOGIN
Fay Perkins	None	None: Create check-in	12/01/2017 10:04AM	12/01/2017 10:04AM
Jack Davidson	None	None: Create check-in	12/01/2017 12:00PM	12/01/2017 12:00PM
Ethan May	02/02/2017 12:03PM	02/11/2017, 5:09 PM	12/02/2017 12:03PM	12/02/2017 12:03PM
Jane Smith	02/02/2017 2:34PM	None: Create check-in	12/02/2017 2:34PM	12/02/2017 2:34PM
Josh Butterfield	02/02/2017 3:34AM	None: Create check-in	12/02/2017 3:34AM	12/02/2017 3:34AM
Joelle McNally	02/03/2017 8:25AM	None: Create check-in	12/03/2017 8:25AM	12/03/2017 8:25AM
Rodrigues Altmann	02/03/2017 11:35AM	None: Create check-in	12/03/2017 11:35AM	12/03/2017 11:35AM
Wayne Benchimol	02/03/2017 4:02PM	02/11/2017, 5:09 PM	12/03/2017 4:02PM	12/03/2017 4:02PM
Taylor Buckley	02/04/2017 6:34PM	None: Create check-in	12/04/2017 6:34PM	12/04/2017 6:34PM
Jane Cruise	02/04/2017 6:34PM	None: Create check-in	N/A	12/04/2017 8:59PM
Timothy Cusnir	02/01/2017 10:04AM	None: Create check-in	12/01/2017 10:04AM	12/01/2017 10:04AM
Marcus Diesel	02/01/2017 12:00PM	None: Create check-in	12/01/2017 12:00PM	12/01/2017 12:00PM
Presten Doorey	02/02/2017 12:03PM	None: Create check-in	12/02/2017 12:03PM	12/02/2017 12:03PM
Maria Figueiredo	02/02/2017 2:34PM	None: Create check-in	12/02/2017 2:34PM	12/02/2017 2:34PM
Katherine Harper	02/02/2017 3:34AM	None: Create check-in	12/02/2017 3:34AM	12/02/2017 3:34AM
Christine Heisenburg	02/03/2017 8:25AM	None: Create check-in	12/03/2017 8:25AM	12/03/2017 8:25AM
Presten Doorey	02/03/2017 8:25AM	None: Create check-in	N/A	12/03/2017 11:35AM
Maria Figueiredo	02/03/2017 4:02PM	None: Create check-in	12/03/2017 4:02PM	12/03/2017 4:02PM

Managing communication with students

Mia Wallace
STUDENT

FOLLOW

FEED ABOUT FOLLOWERS FOLLOWING

Welcome, what would you like to share?

UPLOAD LINK POLL POST

Mia Wallace posted a comment.
16 hours ago | [Web Design Basics](#)

Is there going to be a critique review for web design this Thursday? Need to figure out if I need to do a couple versions of my wireframes.

11

Kathy Hudson | will I have used sketch for 2 years and love it!
3 hours ago | Like 2

Write a comment...

Mia Wallace posted a comment.
16 hours ago | [Environmental Science Club](#)

Hey @David Lopez that is a great article on [chemistry](#). You should share your findings at our next meeting.

Followers (1,450)

Following (1,853)

Message Center [CREATE](#)

Search by name...

Mia Wallace
I am struggling with one question...
Last Activity: 2/8/17

Aaron Dunn
Thanks for the help!
Last Activity: 2/5/17

Kathy Hudson
You are welcome
Last Activity: 2/7/17

Lisa Carlson
Don't hesitate to reach out!
Last Activity: 2/4/17

Henry Richardson
The assignments are due tomorrow
Last Activity: 2/2/17

Christopher Gutierrez
Be sure to bring a note
Last Activity: 2/8/17

Rose Adams
Keep up the great work!
Last Activity: 2/2/17

Mia Wallace (Student)

Mia Wallace
Good afternoon, Professor.
Jan 28 2016 @ 8:05 PM

Joseph T.
Good afternoon, Mia!
How are you doing today?
Jan 28 2016 @ 8:06 PM

Mia Wallace
I am doing great!
I am struggling with one question in our book. Can you help me work through #2?
Jan 28 2016 @ 8:06 PM

Write a reply...

REPLY

Student profiles

Private messaging

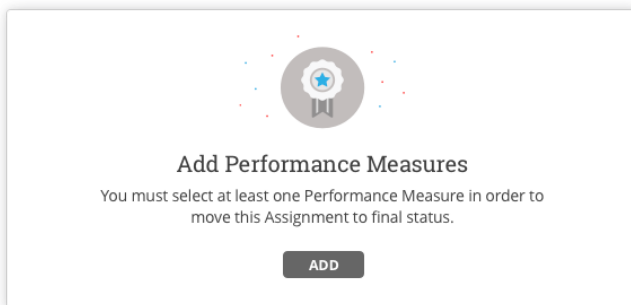
Increasing Product Adoption

With core functionality in beta, our focus turned to UX debt that accumulated during the first several months of product development. Findings from usability studies along with a heuristic analysis informed a long list of prioritized improvements that would increase product adoption and customer satisfaction.

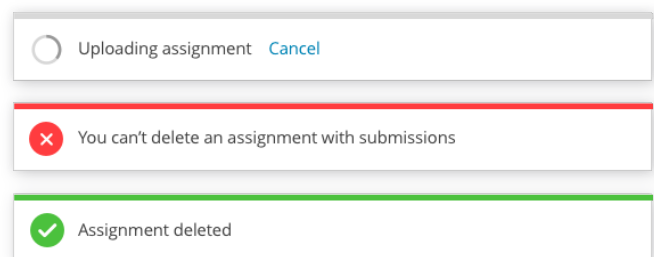
Contextual Help

The lack of confirmation and acknowledgment between the product and user caused many usability issues. We identified over 60 instances lacking alerts, dialogs, snackbars, and empty states. This design effort became the start of our design system documentation.

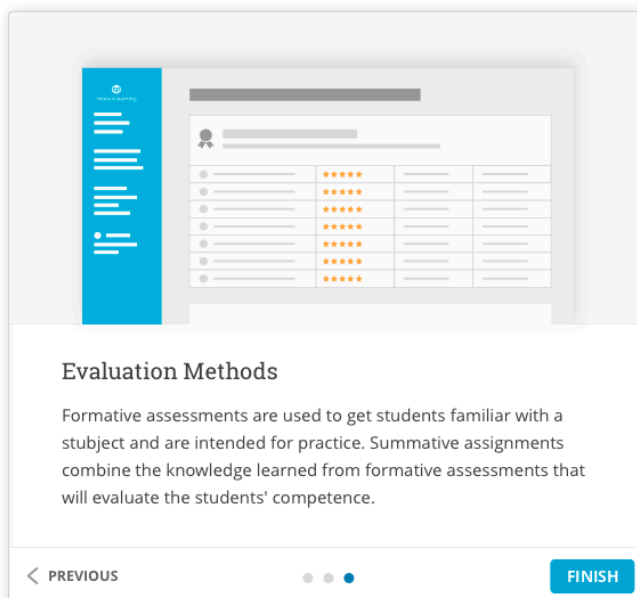
EMPTY STATES



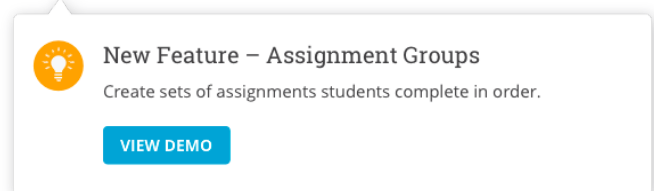
SNACKBARS



FEATURE TOURS



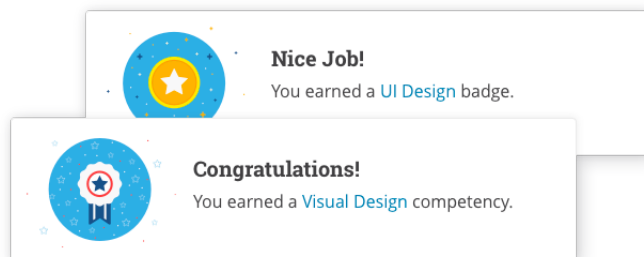
TOAST MESSAGES



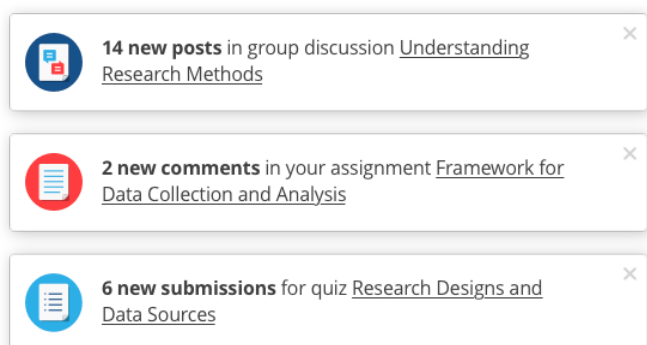
Notification System

It was difficult for students and instructors to track assignments and activity across multiple courses. They needed a centralized view of assignments, course activity and achievements. We designed a new homepage with a notification system that empowered students and instructors to actively manage their course work and stay up to date.

PROGRESS NOTIFICATIONS

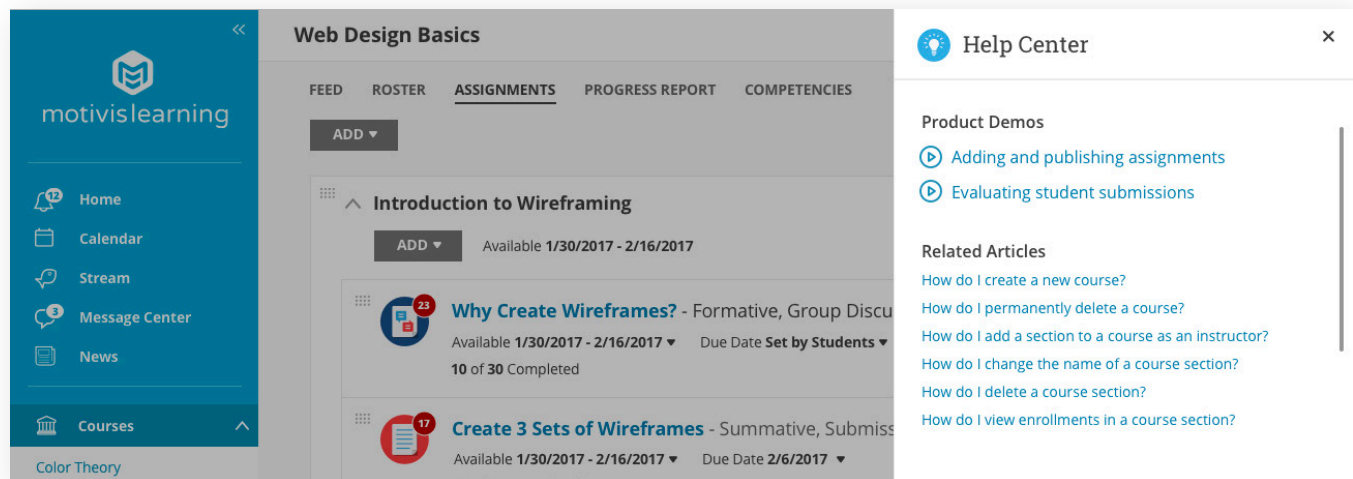


ASSIGNMENT NOTIFICATIONS




Customer Support Integration

We merged product documentation and the knowledge base into a unified customer support experience that integrated in the product. A well defined taxonomy system mapped product pages to articles and how-to articles when and where a customer needed access to it.



Design System Documentation

The fast lane to beta often felt like we were building the car while driving it. Now with a larger team and beta out the door, we had time and resources to document UI patterns and controls by creating a proper design system.

**motivislearning**

UX DOCUMENTATION

Structure

Utilities

Action Menu

Modals

Remove

Toasts

Accordians

Drag and Drop Lists/Modules

Inline Editing

WYSIWYG

Dynamic Utility Bar

Loaders

Simple Filter

Character Counter

Components

Guidelines

Icon Library

Category: Drag and Drop Lists/Modules

Overview

For our drag and drop, we use [jQuery UI](#).

To activate it, you will need to wrap the content you want to be draggable in a `div.jquery-sortable`. Then within each element that can be dragged, you will need a `.jquery-sort-handle` as a direct child of that element.

DEMO

Item #1

Item #2

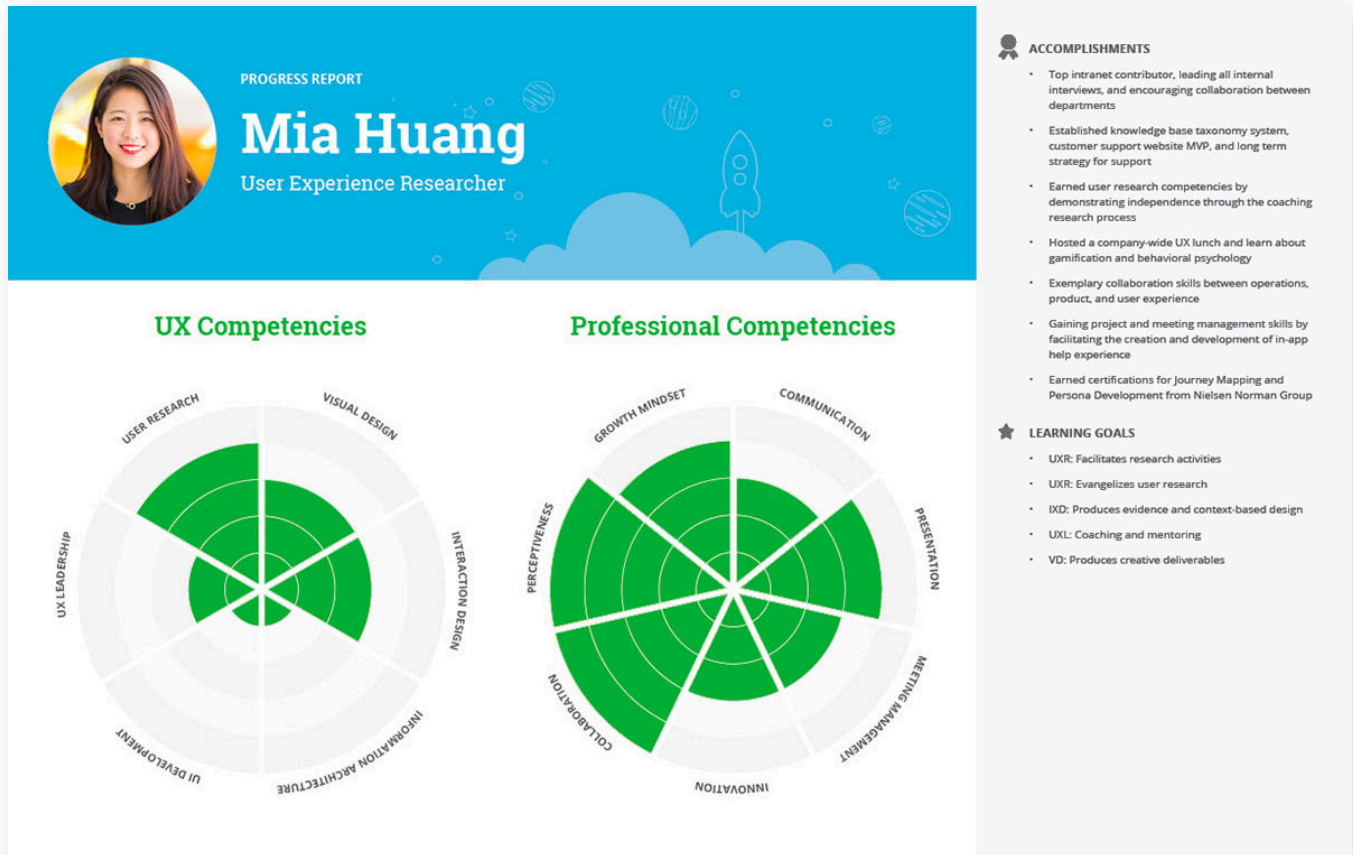
Item #3

EXAMPLE

```
<div class="jquery-sortable ui-sortable">
  <article class="card divide-content">
    <div class="jquery-sort-handle ui-sortable-handle" tabindex="0"><i alt="Click and Hold to Sort" title="Click and Hold to Sort">
      <section>
        Item #1
      </section>
    </div>
  </article>
  <article class="card divide-content">
    <div class="jquery-sort-handle ui-sortable-handle" tabindex="0"><i alt="Click and Hold to Sort" title="Click and Hold to Sort">
      <section>
        Item #2
      </section>
    </div>
  </article>
  <article class="card divide-content">
    <div class="jquery-sort-handle ui-sortable-handle" tabindex="0"><i alt="Click and Hold to Sort" title="Click and Hold to Sort">
      <section>
        Item #3
      </section>
    </div>
  </article>
</div>
```

Career Planning

Some of the designers I hired were just starting their career. They needed help identifying learning opportunities and guidance applying what they learned. This was a fantastic opportunity to eat our own dog food by putting our product to use internally.



UXD Competencies

Starting from a set of competency statements by [David Travis](#), I refined his work and developed performance indicators for each sub-competency. In doing so, a scale emerged with performance descriptors for each level.

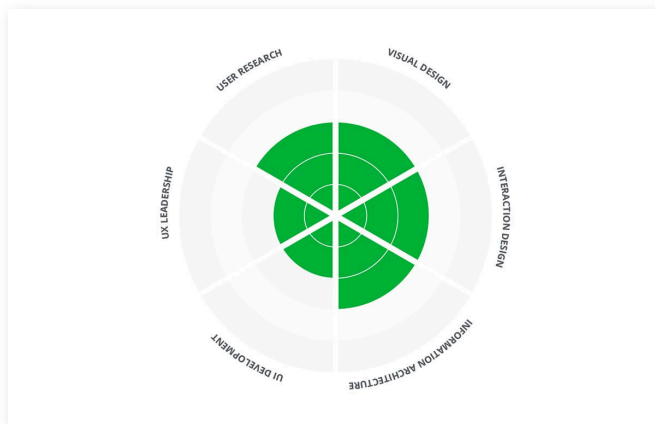
It was finicky work, continuously assessing competency statements while considering how to measure performance for each level. Based on feedback from my team and other department leads, additional performance indicators were added and criteria for each level were clarified.

Measuring Performance

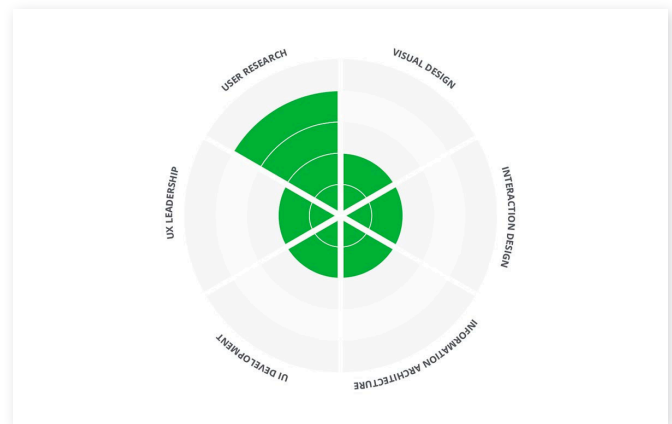
The process started with a self-evaluation. Levels for each performance indicator were selected using the scale menu in Google Sheets.

A beginner is familiar with the criteria statement, but has no working experience, until they grow to advanced beginner. Once they complete work independently they achieve competence. Emerging experts oversee and mentor junior work, becoming expert by demonstrating thought leadership and process innovation.

Evaluations for each criteria statement are ranked 1 through 5, then averages are summed to the competency statement. Averages from all the performance indicators displays on the competency wheel making generalists, specialists and career paths easily identifiable.



Generalist competency map



Specialist competency map

Work in Progress

While this was a huge success, work continues clarifying the relationship between sub-competencies and performance indicators, and defining a hiring process with self-evaluations.

[View UX competency self assessment.](#)