

What Makes a Great Product?

Avi Flombaum
[@aviflombaum](#)

Products make something hard to do easy.

Think about answering questions.

What's everyone saying?

What's everyone saying about something?

What are my friends saying?

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What's happening?

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Moments · View all

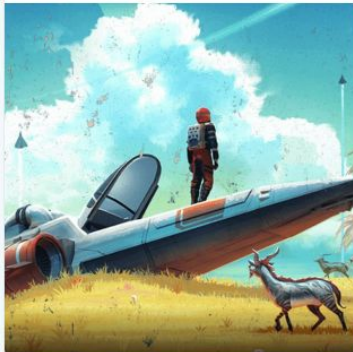
Military options are 'locked and...

Politics · 2 hours ago



No Man's Sky makes some big...

Gaming · 37 minutes ago



Congressional investigators want...

Politics · 11 minutes ago



New to Twitter?

Sign up now to get your own
personalized timeline!

[Sign up](#)

Find me anything on the internet.



Google Search

I'm Feeling Lucky

Is there a couch in Brooklyn I can rent tonight?

Airbnb

Book unique homes and
experience a city like a local.

Where Anywhere	When Anytime	Guests 1 guest ▾	Search
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Experiences

[See all >](#)



\$67 Drink with chatty
bartenders and chummy...

★★★★★ 108 reviews



\$72 Get a taste of authentic
tapas

★★★★★ 114 reviews



\$73 Taste unique French
cheeses with a...

★★★★★ 25 reviews



\$19 Live music with
Barcelonean musicians

★★★★★ 8 reviews



\$186 Market procurement
tour & Sushi class with...

★★★★★ 19 reviews



How can I get messages in front of my users who are doing certain things?



INTERCOM

Products ▾

Resources ▾

Pricing

Blog

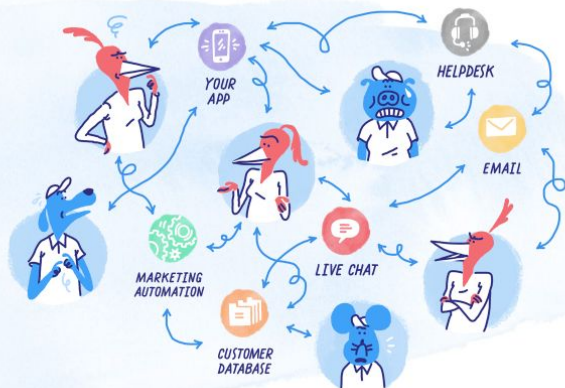
Log in

Enter your email

Get Started

Communicating with customers
shouldn't be this hard

THE OLD WAY



THE NEW WAY



With Intercom it's simple,
personal, and fun for everyone

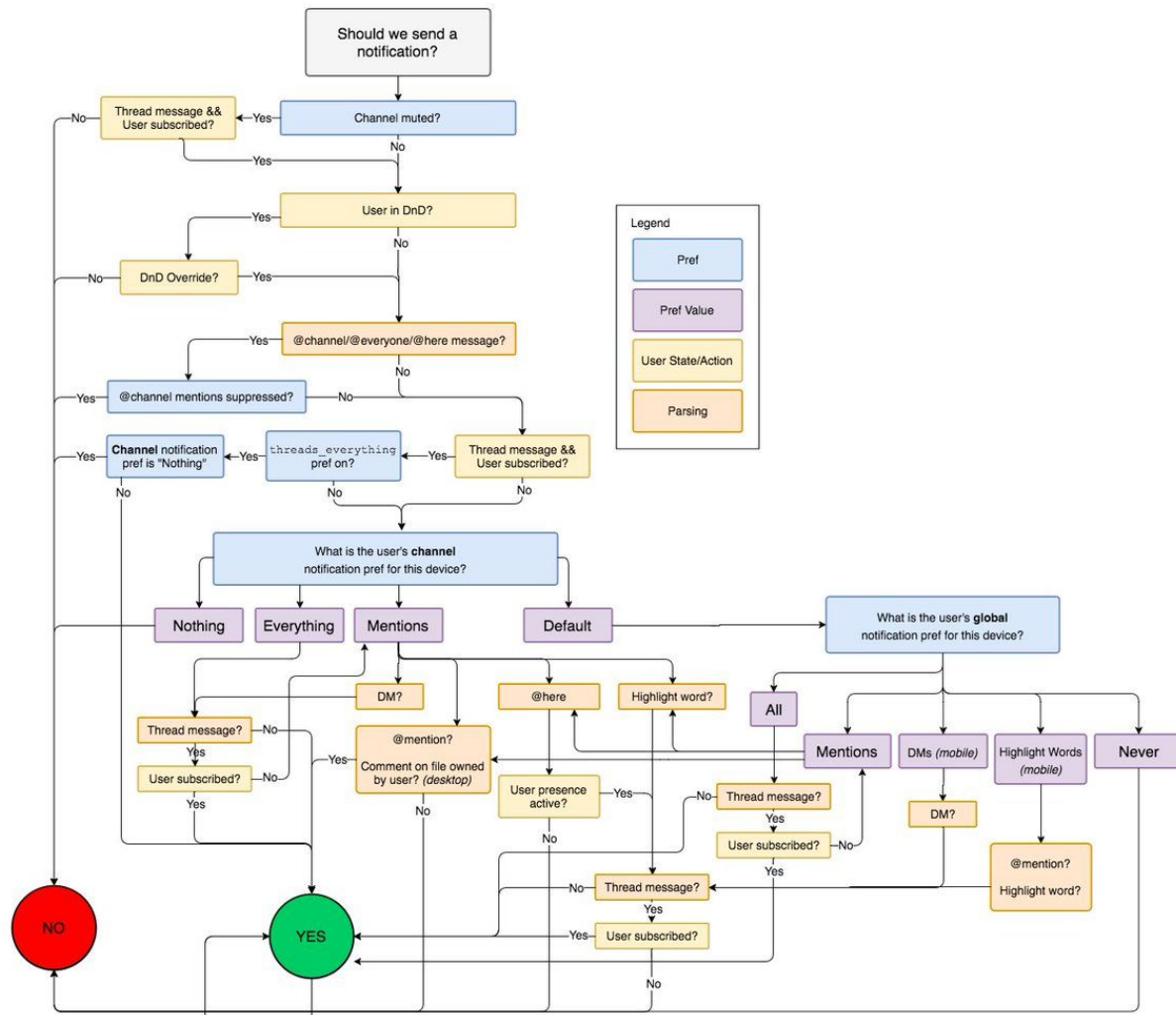
Enter your email

Get Started

Easy set-up • Free 14 day Trial • Cancel at any time

**Great software answers hard questions.
It makes work faster by providing what you
need, when you need it.**

Slack Notifications.



Everything is harder and more complex.
Hide stuff.



Great software takes a hard problem and hides the complexity of the implementation using technology.

It's an iceberg.

How Search Works in 2016



The User



Part of satisfying a search query is understanding the user to better serve their needs.

Search engines may do cross-device tracking to help personalize search results.

Language: People typically prefer results in their native language. Where there are few results search engines may return results in other languages.



Country: People typically prefer local results. Within different countries words like [football] may have different meanings. People often prefer to buy from local merchants.

Location: Many search queries have an implicit local intent. Search engines may return some results from the city the user is located in.



Device: Mobile phones are harder to use than desktop computers. Search engines may thus rank pages with mobile friendly designs higher and insert links to apps in the search results.

The User Intent



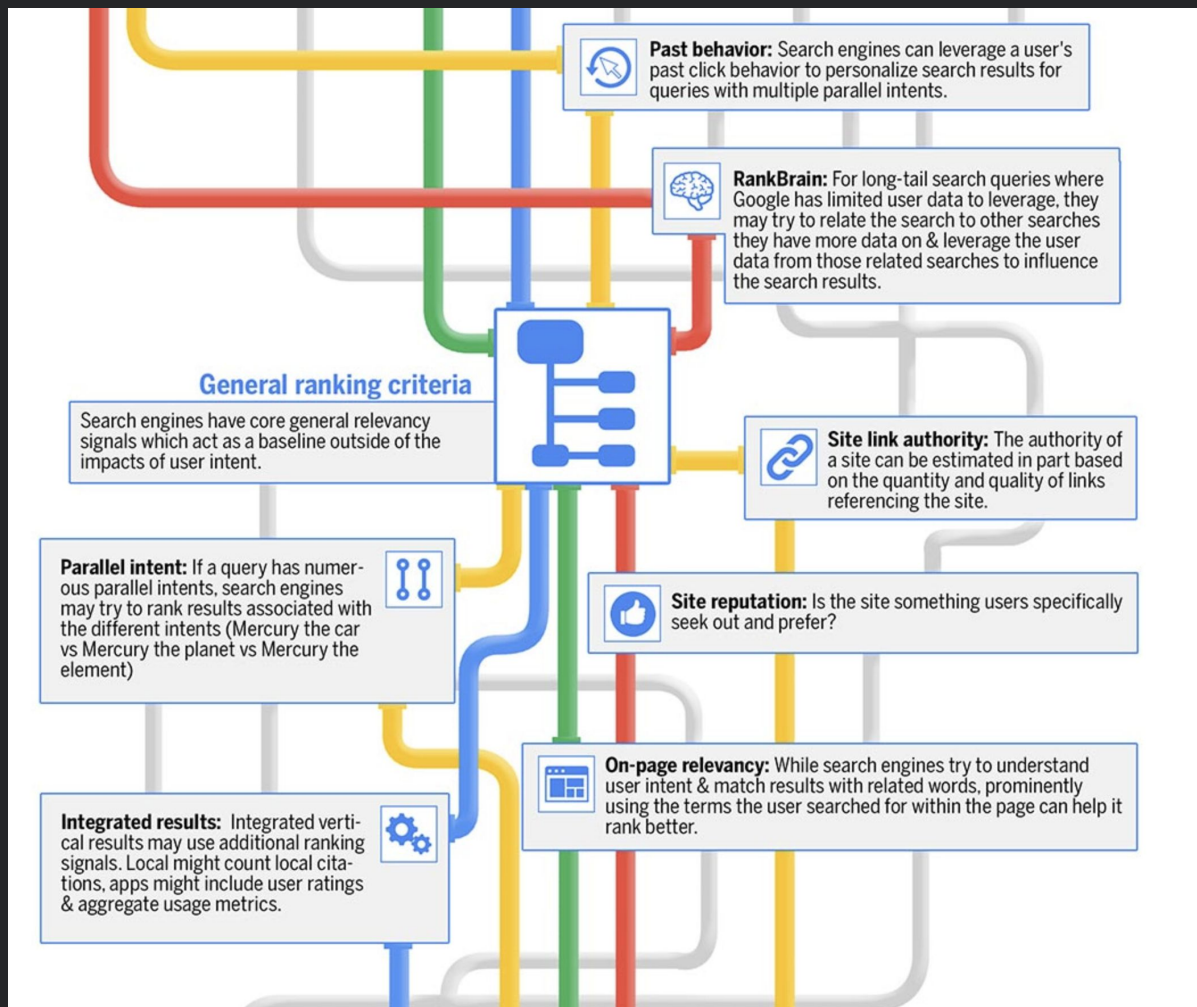
Rather than matching strings of words, search engines try to understand the intent behind the search query.



Search and click data: Search engines leverage aggregate click data for spelling correction & measuring user satisfaction with the results. Quick bounces back to the search result page coupled with a click on a different listing may indicate a poor user experience.



Recent searches: Search engines can look at chains of search queries to help relate terms to one another & to rank authoritative results from later into the chain in earlier related search queries.



Everything which is trusted & weighted is something people may attempt to abuse. Search engines have manual and algorithmic penalties to discourage such efforts.



Penalties & filters (welcome to the zoo, webmasters)

Are Search Engines Putting Users First?

Google has been accused by the EU and others of serving inferior results because they promote their own verticals.

Are answers even accurate?

Google's knowledge graph has been reported to be wrong up to 20% of the time.

Are they too powerful?

Google engages in massive lobbying efforts of both US and foreign officials to circumvent regulatory issues.



Panda: calculated off-line periodically, based on factors like user experience. Well-known sites like Amazon rank better, shallow sites like eHow rank worse.



Penguin: calculated off-line, based largely on link quality & anchor text



Age: New sites may have their ability to rank capped for a period of time. Older results which are stale may also have their rankings dampened.



Ads: Ad heavy pages may get ranked lower



Mobile: Mobile friendly sites with large interstitial app install ads or hard to read content may rank lower on mobile.



Pirate: sites with many DMCA complaints against them may get ranked lower



Duplicate content: Search engines usually want to show a diverse set of results rather than listing the same article numerous times



Repetition: Excessive keyword repetition may get a page filtered



Manual penalties: applied granularly or site-wide. Can be for user generated spam on a specific page, or a site-wide penalty for lack of value add, link spam, or other forms of spam.

The results page has seen some of the biggest changes. Results are often integrated into specific verticals or abstracted out from the underlying result.



Search Interface and Results

Search



Commercial searches get ads.

Ad Advertisers bid per click. Google adjusts auction prices based on numerous factors.

These ads appear at the top

Ad of the page, the bottom of the page and less frequently in the right rail.

Up to 4 ads appear at the top

Ad and may have a variety of extensions: site links, ratings, reviews, location, click to call, etc.

Ad labeling frequently changes

Many searchers are unaware they are clicking on ads.

Easy-to-answer

queries get instant answers or featured snippets. The goal is to answer the user's query without requiring the user to leave the search result page.

Informational Searches

Knowledge graph results

Pulling information from freely available and licensed sources including the CIA World Factbook, Freebase and Wikipedia; the knowledge base displays quick info on individuals, places, organizations, sports teams, works of art, movies

Facts: Over 18 billion facts.

How to make your problems into products.

Problem: We need to grade code challenges.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Email Address	Which of the following is the best choice for the following task?	Which of the following is the best choice for the following task?	Which of the following is the best choice for the following task?	Which of the following is the best choice for the following task?	Which of the following is the best choice for the following task?	Which of the following is the best choice for the following task?	Which of the following is the best choice for the following task?	Which of the following is the best choice for the following task?	Which of the following is the best choice for the following task?	Which of the following is the best choice for the following task?	Which of the following is the best choice for the following task?	Which of the following is the best choice for the following task?	Which of the following is the best choice for the following task?	Which of the following is the best choice for the following task?	Which of the following is the best choice for the following task?
2		ketchup	eat	my_sandwich	d	get loaf-of-bread get block-of-cheese make cheese_slice from-slice block-of-cheese make btm_bread from-slice loaf-of-bread	3add pancake-4	get pancake from pancake-stack spread butter on pancake	e. None of the above	spread nutella on toast	make bowl-stack	get skewers get onion get green-pepper get red-pepper	make salad from-take bowl-stack	testing		
3	georgechen1338@gmail.com	ketchup	eat	my_sandwich	d	get loaf-of-bread get block-of-cheese make top_slice from-slice loaf-of-bread make bottom_slice from-slice loaf-of-bread make cheese_slice from-slice block-of-cheese make sandwich from-combine (bottom_slice, cheese_slice, loaf sandwich)	3add pancake-4	get infinite-pancake-stack get butter make my-stack a collection make pancake-1 from-take infinite-pancake-stack spread butter on pancake-1	e. None of the above	spread nutella on toast	make bowl-stack	get skewers get onion get green-pepper get red-pepper make sad_dinner from-take skewers make onion_slice from-slice onion make pepper_slice from-slice green-pepper make another_pepper_slice from-slice red-pepper add onion_slice to sad_dinner add pepper_slice to sad_dinner add another_pepper_slice to sad_dinner	make salad from-take bowl-stack If lettuce-head is-fresh? make lettuce_slice from lettuce-head add lettuce_slice to salad If avocado is-fresh? make avocado_slice from avocado add avocado_slice to salad If tomato is-fresh? make tomato_slice from tomato add tomato_slice to salad If olive-oil is-fresh? make dressing from olive-oil add dressing to salad		12/13	
4	yyunqingchen@gmail.com	ketchup	eat	my_sandwich	d	get loaf-of-bread get block-of-cheese make top_slice from-slice loaf-of-bread make bottom_slice from-slice loaf-of-bread make cheese_slice from-slice block-of-cheese spread cheese_slice on bottom_slice make my_grilled_cheese from-combine (top_slice, bottom_slice) toast my_grilled_cheese	3add pancake-4	spread butter on new-pancake spread butter on pancake-1 get new-pancake get butter	e. None of the above	spread nutella on toast	make bowl-stack	get skewers get onion get green-pepper get red-pepper make skewers a collection make skewer1 from-take skewers add onion to skewer1 add green-pepper to skewer1 add red-pepper to skewer1	make salad from-take bowl-stack If lettuce-head is-fresh? add lettuce_slice to bowl If avocado is-fresh? add avocado_slice to bowl If tomato is-fresh? add tomato_slice to bowl add olive-oil to bowl		9.5/13	
5	elizabeth.michael.karen@gmail.com	ketchup	eat	my_sandwich	d	get block-of-cheese get loaf-of-bread make bottom_slice from-slice loaf-of-bread make top_slice from-slice loaf-of-bread spread block-of-cheese on bottom_slice spread block-of-cheese on top_slice toast my_grilled_cheese from-combine (bottom_slice, top_slice)	3add pancake-4	make pancake-5 from-take infinite-pancake-stack spread butter on pancake-5 toast pancake-5 to my-stack	e. None of the above	spread nutella on toast	make bowl-stack	get skewers get onion get green-pepper get red-pepper make skewers a collection make skewer1 from-take skewers add onion to skewer1 add green-pepper to skewer1 add red-pepper to skewer1	make salad from-take bowl-stack If lettuce-head is-fresh? add lettuce_slice to salad else discard If tomato is-fresh? add tomato to salad else discard add olive-oil to sandwich		12/13	

← Back to Assignments Dashboard

Rails Code Challenge – Web-092617

PUBLISHED

GENERATE REPORT ...

24 Students

There are 24 students in this assignment.

Assigned on

10/15/17 at 9:30am

Due on

10/16/17 at 11:30am

☐	Student Name	Reviewer	GitHub Link	Status	Avg Grade	Routes	Models	Controllers	Active Record - Validations	Form Helpers	Internal N
☐	 Victoria Murphy @victoriamura	Alex Griffith	View	Complete	2.5	2	3	2.5	2.5	2.5	Add your
☐	 Arthur Ramos @arthurramos	Unassigned	--	Not Started							Add your
☐	 Trevor Romero @trevorromero	Unassigned	View	Feedback Sent	4.5	2	5	4	4	4	Add your
☐	 Carrie Fowler @carriefowler	Alex Griffith	View	In progress	2.9	4	2.5	3	3	3	Add your
☐	 Brandon Mathis @brandonmathis	Joe Burgess	View	Needs Review							Add your
☐	 Nora May @noramay	Ian Candy	--	Not Started							Add your
☐	 Steven McDonald @noramay	Unassigned	--	Not Started							Add your

CREATE NEW ASSIGNMENT

Problems:

1. Giving out the code challenge.
2. Students taking it.
3. Instructors monitoring it.
4. Students submitting it.
5. **Grading.**
6. Instructors giving feedback.
7. Students getting feedback.
8. Students taking it again.
9. Silos of information.

Instead of thinking about problems, think about narratives.

Narratives: A-Z of a Workflow

1. As an instructor, I have a code challenge I need to give to a batch.
2. I find the batch of students to assign a code challenge too.
3. I create the challenge they have to do.
4. The student then needs to do the challenge and submit it.
5. As submissions come in I need to monitor the status of submissions.
6. Once the submission deadline has happened, I need to grade them.
7. I need to convey feedback back to the student.
8. Some students need to retake it.

And it should be fast and easy.

I tell myself the story over and over and over
and over again until I can see it.

I try to see the story and
the people and the
problems and the
information from every
angle and every facet.



I think about products and workflows all day every day.

For an Immersive, at the end of every mod

September 6, 2017 at 11:38 PM

For an Immersive, at the end of every module an assessment must be assigned.

As an instructor, I can add an assessment to a batch.

Once an assessment is added to a batch, every student now has that requirement

The instructor can assign a due date for each assessment attempt, so the instructor and says everyone's first attempt is assigned on X date and due on Y date.

Students can see their assessment requirements and assignments.

Students can submit an assessment attempt.

Instructors can see students with submitted assessments attempts that are pending.

An instructor can review an assessment, giving it a grade, taking notes, marking it

If an assessment attempt is failed, the instructor should provide the student with a date, effectively another attempt. This process can be repeated as many times as

In theory, after X failures, an instructor should be able to "hold the student back" from that is currently starting the assessments related module...

- Immersives use a Track for each Module.
- The assessment generally corresponds to a GitHub repo.

Instructor Assessment Assignment Workflow

Student Assessment Receiving Workflow

Instructor Assessment Assignment Reporting

Student Assessment Submission Workflow

Once an instructor has a list of all students that have completed the assignment for they can proceed to creating the

Assignments are unique, no clear benefit for creating them separately maintained for ease of creation.

The instructor adds the assignment details

Due date - Friday, Sep 15th, 5pm

Mandatory - Yes

Graded - Yes

Pass / fail - Yes

Submission type / requirement - GitHub Repo

? Multiple - Blog, Video...

Title - Module 1 Assessment: CLI Gem - Web 09031

Description - Etc..... This can pull from the RE

Alert / notification settings - In-App, Blocking/ Dashboard Widget can be a Batch Setting?)

Assignment Menu Item with Bug?

GitHub repo - the assignment can correspond to a GitHub repo it basically as a lab or readme to the student?

<https://github.com/Benjamin-Coleman/object-relation>

Assignments Spec

Problem Statement

Instructors and coaches need a mechanism to track arbitrary work assignments for a variety of use-cases and workflows. For example, in order to maintain compliance with educational law, instructors must give students graded assessments similar to Portfolio Projects for online students but with more detailed feedback and grading, and other requirements such as Due Dates. Online instructors should be able to provide "Feedback Forward" to students after Study Groups or Pairing sessions with recommendations. Coaches need to be able to assign career tasks to students. All these must be trackable from an instructor/coach in order to create accountability.

Goals

Rather than see each of these use-cases and needs as separate features or implementations, we propose designing an Task Assignment feature in Learn that can serve these use-cases and provide flexibility going forward to create even more accountability and structure outside of the taxonomy of curriculum. ([Jump to User Stories](#))

The most immediate Goal is to serve Immersive Assessment Requirements.

- Be in compliance that student assessments are logged in Learn
- Save instructor time
- Built tools that support scale and quality control

Success Metrics

This sprint

1. All Immersive Code Challenges are conducted through Learn.
2. Grading and reporting of Immersive Code Challenges is completed through Learn.

Future

3. Online Instructors create X Assignments a Week
4. Online students complete X Assignments a Week
5. Online students who complete Assignments progress X faster (or engage more)
6. Instructors who give Assignments have better efficacy.

CREATE ASSIGNMENT FOR 23 STUDENTS

BASICS	TITLE: MODULE 1: CO RELATIONS - 2020/21
TASKS	DESCRIPTION:
SUBMISSIONS	
INSTRUCTORS	
NOTIFICATIONS	NOTIFICATIONS: ☐ DASHBOARD ☐ MOODLE ANNOUNCEMENT ☐ MOODLE ANNOUNCE LANDING ☐ MOODLE CHECKOUT ☐ BASKING CHECKOUT MOODLE ☐ BASKER ☐ EMAIL ANNOUNCEMENT ☐ EMAIL LANDING ☐ EMAIL CHECKOUT

CREATE ASSIGNMENT FOR 23 STUDENTS

BASICS	ADD IS TASK TO ASSIGNMENT:
TASKS	TASK TYPE: LOO
1. REW OFFICE + DOD	LOO URL:
	SUBMISSION: ☒ FORK / PR ☐ REPO
	REVIEW TYPE: GRADED
	RUBRIC: 1. RATES 2. MODELS + ADD A RUBRIC

4

YOUR ASSIGNMENTS

FILTER: RECENT, UPCOMING, OVERDUE, DONE	
☐ MOO 2 RAIL STATUS: STARTED	DUE IN 2 DAYS ▾
☒ READ 4016 TUTORIAL STATUS: DRAFTING PLEASE READ THE ARTICLE	DUE IN 10 DAYS ▴
SUBMIT GET HELP EXTENSION	
☒ ATTEND US STUD GROUP STATUS: STARTED	ASSIGNED 4 WEEKS AGO
☒ KATILLO LO LECTURE	OVERDUE IN 3 DAYS

http://

A Web Page

Students for New Assignment

Batch

☒ Web-092617

☐ Web-091117

Student

Maybe this filter column is available as a sub-section only available in Students

All students in Batch Web-092617

All

None

	Name	Batch	Track	Last Login	
☐	Student Longname	Web-092617	Module 2: Rails	an hour ago	☒
☐	John Paul Something	Web-092617	Module 2: Rails	an hour ago	☒
☐	Grace Hopper	Web-092617	Module 2: Rails	an hour ago	☒
☐	Ada Lovelace	Web-092617	Module 2: Rails	an hour ago	☒
☐	Tim Berners-Lee	Web-092617	Module 2: Rails	an hour ago	☒

You can filter students by Batch, making it easy to find all students in an immersive batch to create an assignment for.

How useful is knowing Last Login when generating a new Assignment/Code Challenge?

Is there a more useful column like - last activity or last completed ReadMe?

the can om the

A Web Page

←

→

✕

🏠

http://

🔍

Create an Assignment for 22 Students

Students

Details

Tasks

Title

Rails Code Challenge - Web-092617

Description

It's time to put our Rails know-how to the test with the Rails Module 2 Code Challenge.

Assign On

10/15/17

📅

9:30 AM

Due On

10/15/17

📅

11:30 AM

Mandatory

☒

Instructors

Instructors

▼

Ian Candy

Alex Griffith

☒ Joe Burgess

// FLATIRON
SCHOOL



Create an Assignment for 22 Students

[Students](#)[Details](#)[Tasks](#)[Add a Task](#)

This is a hanging action, do we need this here when there's a button already?

Add a Task

Type

Title

Description

Lab URL

Submission

☐ enable comments

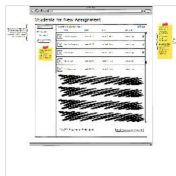
Review

Rubric

1. Routes
2. Models
3. Controllers
4. Views
5. Forms
6. Associations
7. Validations
8. Search

This is the Canonical Lab URL. Automate cloning, naming, removing solution branch

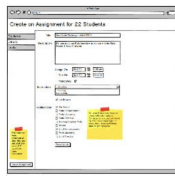
Code Challenge Assignment Flow



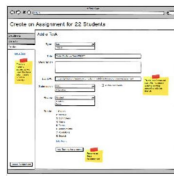
1 - Find Students



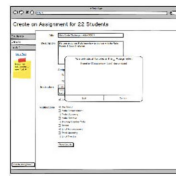
2 - Create Assignment - Students



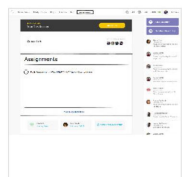
3 - Create Assignment - Details



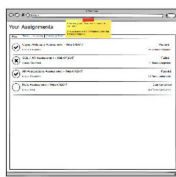
4 - Create Assignment - Lab Task



5. Create Assignment - Final Review



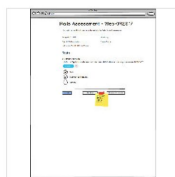
6. Student View - Assignments on Dashboard



7. Student View - Your Assignments



8. Student View - Submit Assignment



9. Student View - Submit Assignment checks



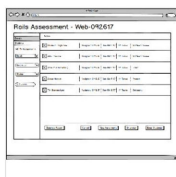
10. Student View - Awaiting Review



11. Instructor Assignments Dashboard



12. Instructor Assignments Dashboard - Needs Review



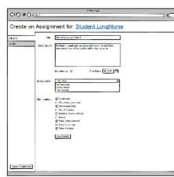
13. Instructor Assignments Dashboard - Individual Students



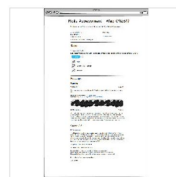
14. Instructor Review Individual Assignment



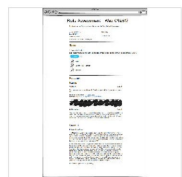
Instructor Review Assignment copy



Create Assignment Details



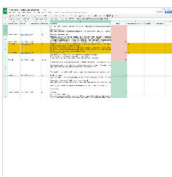
Submit Immersive Assessment copy 2



Submit Immersive Assessment copy 4



Instructor Assignment copy 2



New Mockup 18



Instructor Assignment copy

Specs

Updating Coaching Journey Steps - Spec

Problem Statement

1. **Fixed Career Journey:** The [Career Services platform](#) currently presents a fixed coaching journey where student and coach work together through the 9 steps. It's a linear progress where each step needs to be completed by the student, confirmed by the coach before the next step is 'unlocked' for the student. While these steps remain important, coaches have reported that these steps may sometimes not flow in this fixed order. For example, sometimes students get a job interview opportunity before they've finalized their resume, or need to complete their mock interviews before graduation so they're ready to hit the ground running when they complete the educational program.
2. **New Career Journey Steps:** After running this process for several months, the coaching team have identified 2 new steps to add to the career journey.
 1. **Pre-Graduation Meeting Step** - Review requirements for Career Services Commitment, set expectations for what will be required of students during their job search, start thinking about job-search start date & whether you will job-seek with us (or not)
 2. **Exit Interview Step**

Goals/Non Goals

1. Create a process that encourages good hygiene & adherence by 1) reflecting reality & 2) adding value. (Especially in consideration of our future goals to collect more critical data like job-search start date & job-placement data through Learn, and wean off of out-of-band, Rebekah-driven data collection & storage in google spreadsheets.)

Success Metrics

By unlocking and updating the steps, we will aim to get 100% adherence and accuracy of job-search start dates in the platform with these changes.

Feature Requirements

To address the 2 problems above we need to:

1. **Unlock the career coaching steps**
 - o Instead of the current workflow where a coach must acknowledge a step before the student can unlock the subsequent step, all coaching steps are available for the student to start.
 - o State changes
 - i. Before a student starts a step, the circle is gray (not started)

← Back to Assignments Dashboard

Rails Code Challenge – Web-092617

PUBLISHED

GENERATE REPORT ...

24 Students

There are 24 students in this assignment.

Assigned on

10/15/17 at 9:30am

Due on

10/16/17 at 11:30am

☐	Student Name	Reviewer	GitHub Link	Status	Avg Grade	Routes	Models	Controllers	Active Record - Validations	Form Helpers	Internal N
☐	 Victoria Murphy @victoriamura	Alex Griffith	View	Complete	2.5	2	3	2.5	2.5	2.5	Add your
☐	 Arthur Ramos @arthurramos	Unassigned	--	Not Started							Add your
☐	 Trevor Romero @trevorromero	Unassigned	View	Feedback Sent	4.5	2	5	4	4	4	Add your
☐	 Carrie Fowler @carriefowler	Alex Griffith	View	In progress	2.9	4	2.5	3	3	3	Add your
☐	 Brandon Mathis @brandonmathis	Joe Burgess	View	Needs Review							Add your
☐	 Nora May @noramay	Ian Candy	--	Complete	4	4	4	4	4	4	Add your
☐	 Steven McDonald @noramay	Unassigned	--	Not Started							Add your

CREATE NEW ASSIGNMENT

Design

[← Back to Assignments Dashboard](#)

Rails Code Challenge – Web-092617

IN PROGRESS

Assigned on
10/15/17 at 9:30am

Due on
10/16/17 at 11:30am

24 Students

There are 24 students in this assignment.

Order by Name ↓ | ▼

Arthur Ramos Reviewer: Alex Griffith Complete	Grade 4.5
Brandon Mathis Reviewer: Unassigned Needs Review	Grade --
Carrie Fowler Reviewer: Unassigned In progress	Grade --
Nora May Needs Review Reviewer: Alex Griffith	Grade --
Steven McDonald Reviewer: Alex Griffith Needs Review	Grade --
Trevor Romero Reviewer: Unassigned Complete	Grade 2.5
Victoria Murphy Reviewed by Alex Griffith	Grade 3.7

**Arthur Ramos**
@arthurramos

Avg Grade
4.5

Assigned on	Due on	Submitted on	Reviewer	Status
10/15/17 at 9:30am	10/16/17 at 11:30am	10/16/17 at 11:02am	Alex Griffith ▼	Complete

Tasks

Code Challenge Web-092617

It's time to put our Rails know-how to the test with the Rails Module 2 Code Challenge.

 Lab URL: <https://github.com/learn-co-curriculum/mod-2-first-round-primary-assessment>

Rubric

1 Routes

Grade 1 ▼

Student Feedback

Internal Feedback

Your notes were not created properly. You should have had the following in your route file:

Product influences process.



Ryan Singer

@rjs

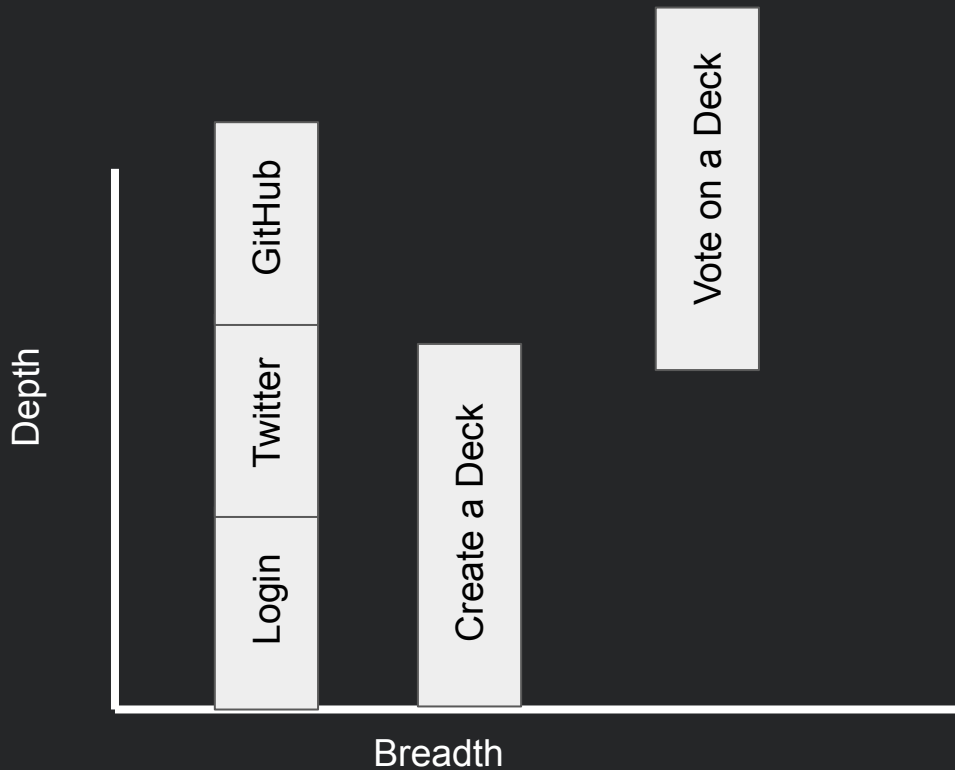
Follow



When product managers are downstream of requirements they become project managers. To impact the product you need to influence requirements.

2:52 PM - 28 Sep 2017

Build Evenly



I can login via 3 different auths.

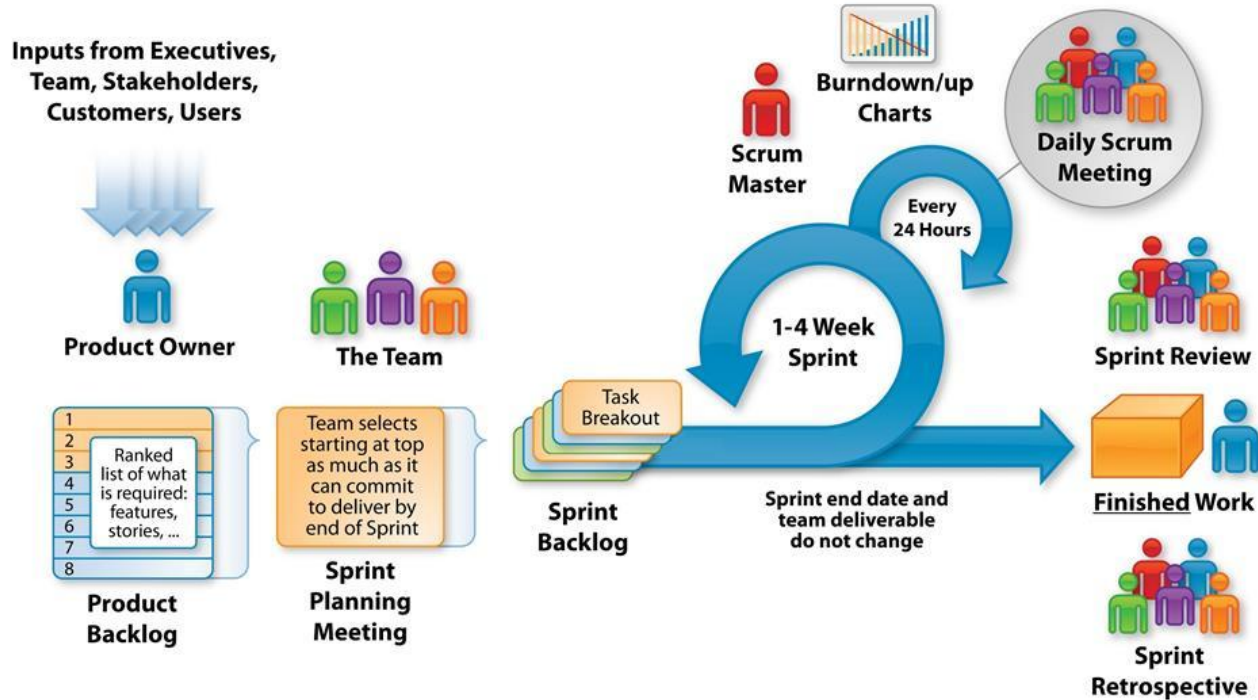
I can create a Deck.

And I can vote on a Deck.

Can I create a tournament?

Build evenly across your features in terms of breadth and depth.

The Agile - Scrum Framework



The Agile - Scrum Framework

Inputs from Executives,
Team, Stakeholders,
Customers, Users



Product Owner



The Team



Product
Backlog



Sprint
Backlog



Scrum Master

4 Week
Sprint

Every
24 Hours



Daily Scrum
Meeting



Sprint Review



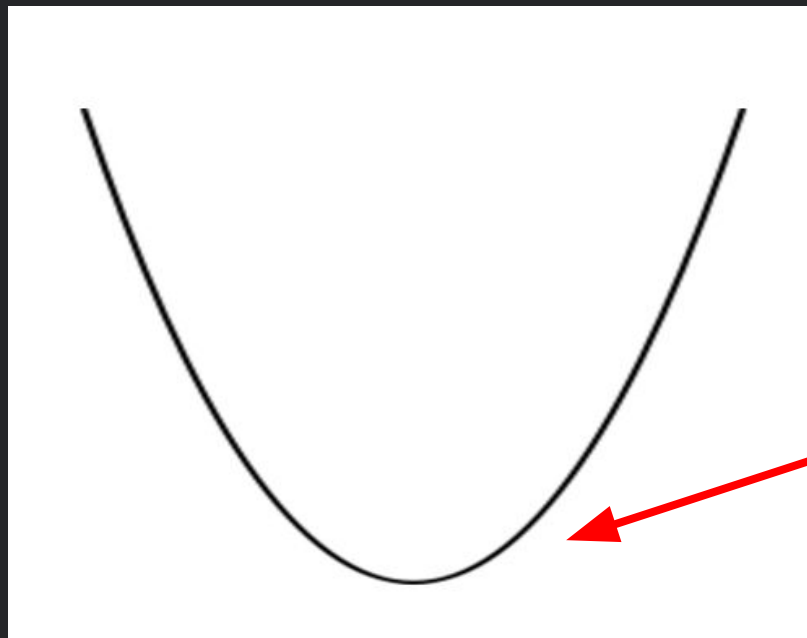
Finished Work



Sprint
Retrospective

Process: finding the right balance.

Pain



Try to maximize:

- Communication
- Efficiency
- Quality outcome
- Flexibility
- Team happiness



Not enough process

Too much process

Thanks!