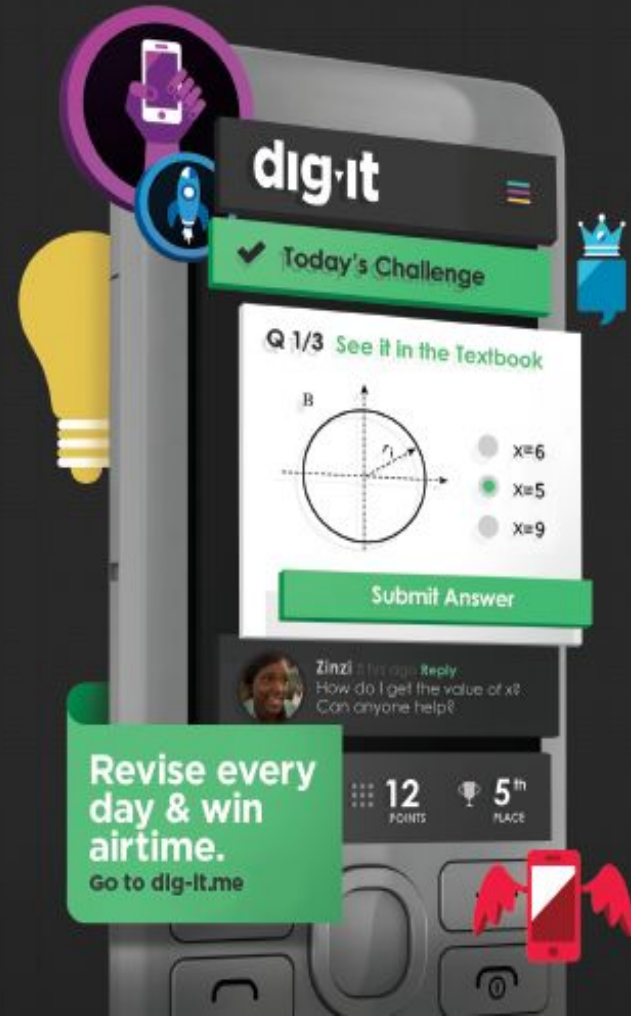


dig·it



dig-it 2.0

Agenda

- Explain the problem
- Explain how we've tried to solve the problem
- Show you what we've done
- Get you, the client, to explore what we've created
- Have you fill out a brief questionnaire to gauge client satisfaction

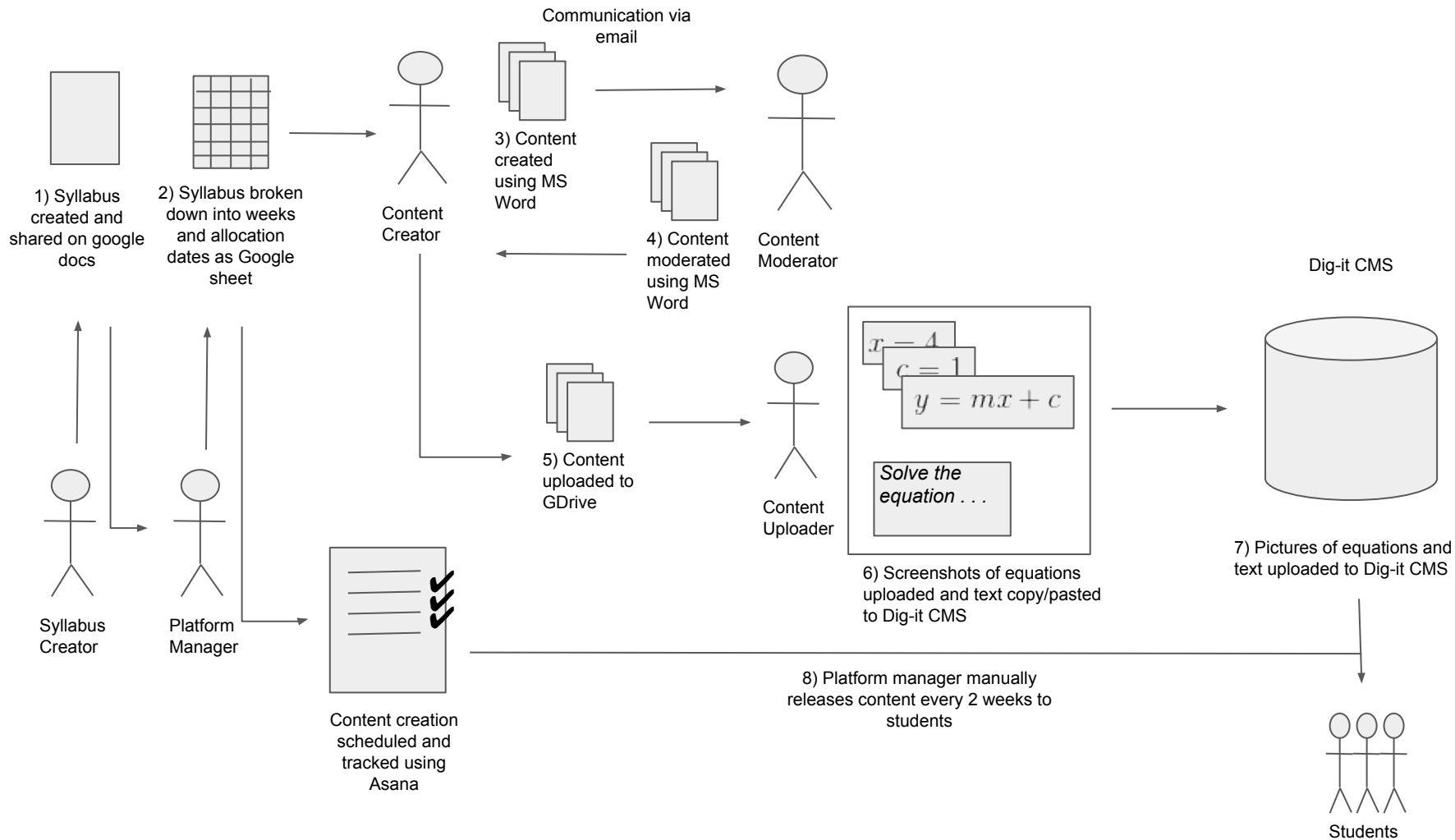
What's the problem?

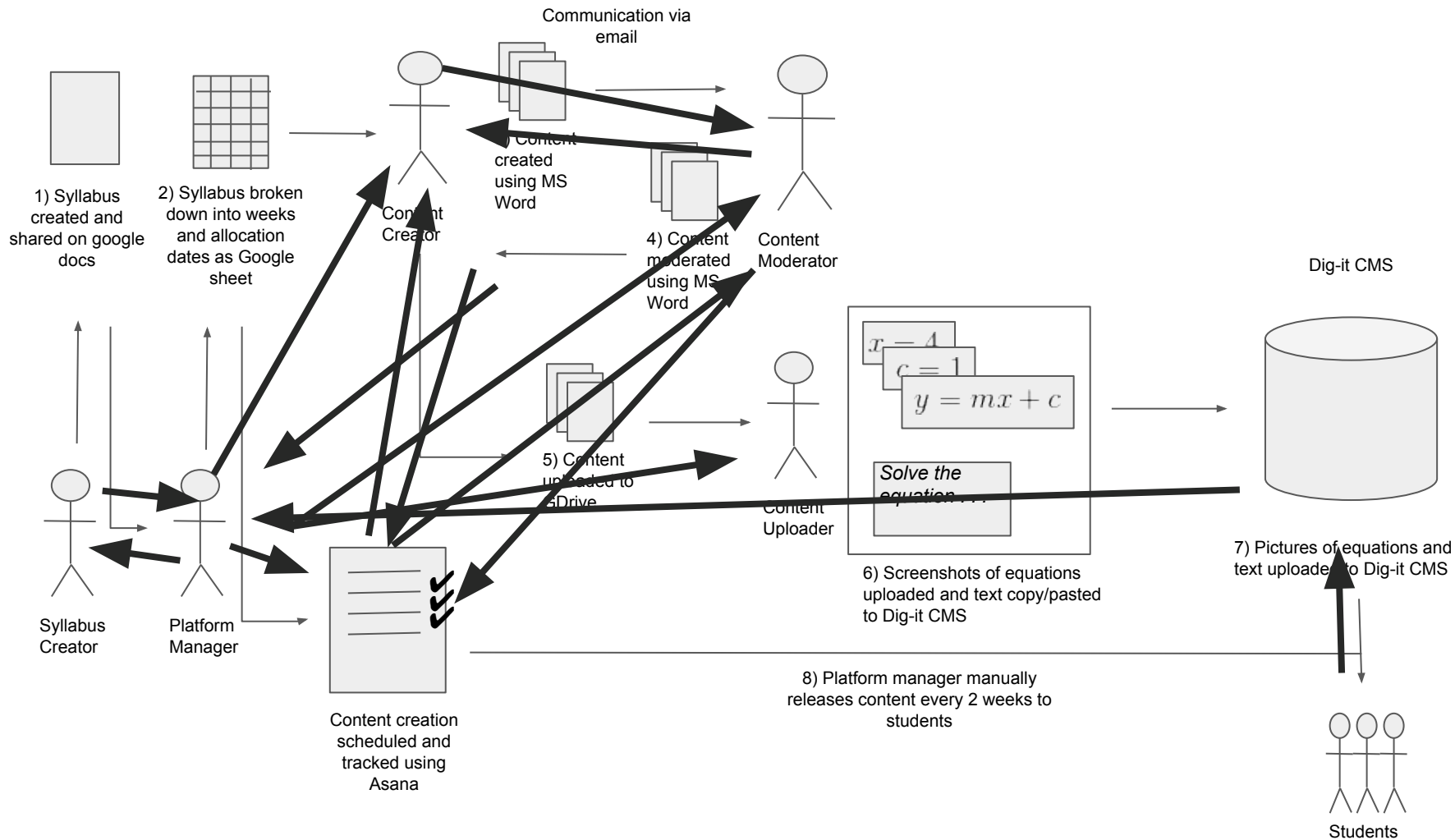
Problems that Dig-it currently faces

- Workflow issues
- External tools
- Manual Processes
- Usability

Problems that Dig-it currently faces

- Unnecessary manual uploads
- Storing images rather than information
- Unoptimised content





How did we analyse the problem?

Analysis of Dig-it

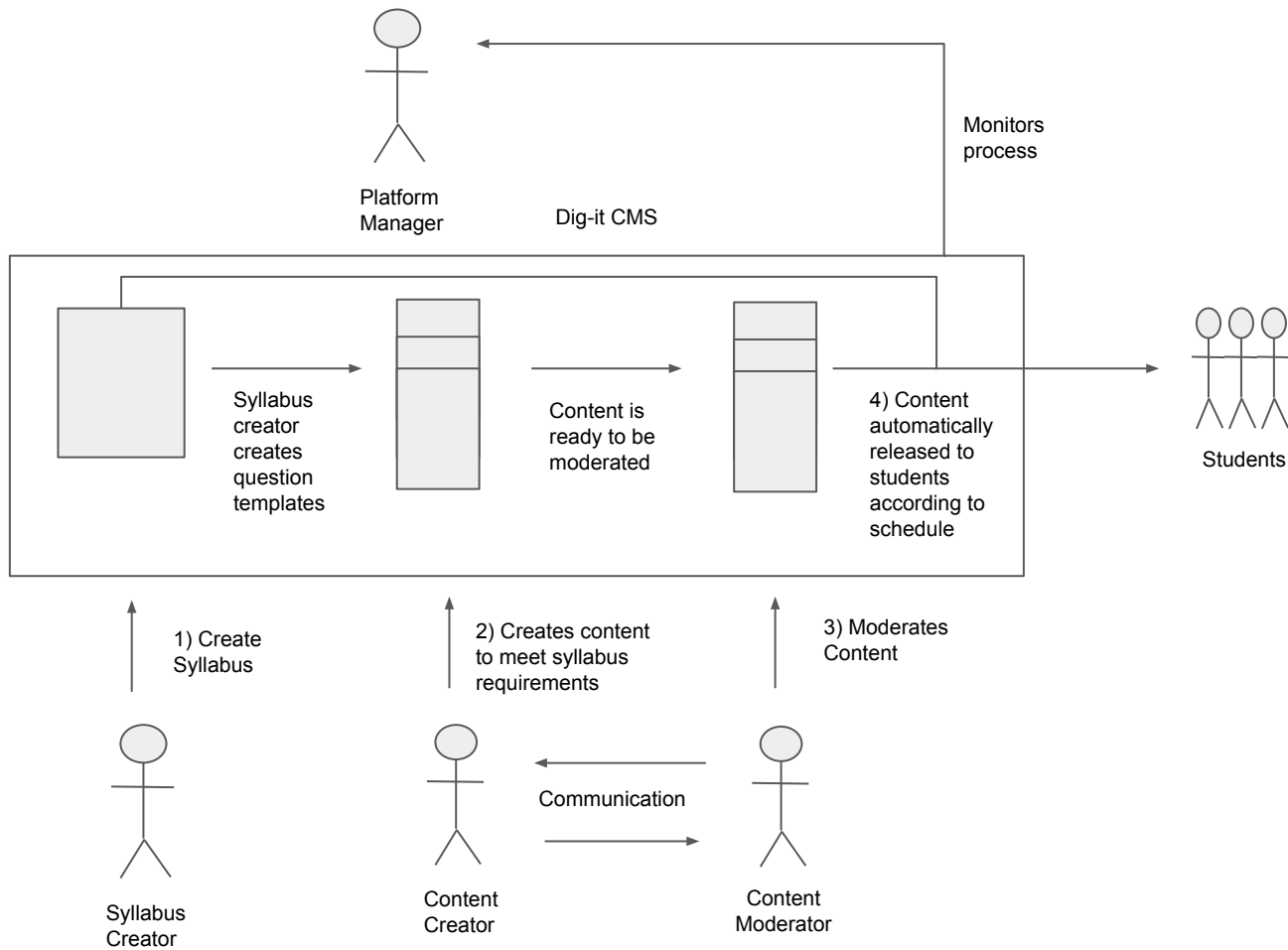
- Interviews with Dig-it team
- Defined existing roles on the platform
- Examining existing code

How did we address the problem?

Dig-it 2.0

- Examined why the current tools are used
- Internalised the core functionalities of these tools into Digit
- Optimised content management processes
- Integrated content creation with a WYSIWYG equation editor
- Created a prototype of how the system could operate

Content Management



Syllabus Creator

- Structure syllabi, topics and weeks
- Assign the creation/moderation of content

Dig-it

WELCOME, ETHAN | VIEW SITE / CHANGE PASSWORD / LOG OUT

Home | Topic Creation Wizard

Topic Creation Wizard

Syllabus:

Name:

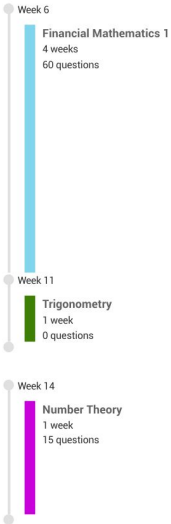
Description:

Year Overview:

Week Start:

Duration:

Save



VS

asana

Show Recents and more...

Team Conversations

Team Calendar

PROJECTS

dig-it

[Internal] Processes

UNICEF: UReport Nigeria

[product] Seed Maternal Health

[product] Vumil

More Projects...

MY TASKS

INBOX

DASHBOARD

Search

List

Conversations

Calendar

Progress

Files

Unassigned

LUKE URBIE

Grade 10 Content Loading Schedule:

Grade 10 March Vacation (21 Mar - 4 April)

Grade 12 Content Loading Schedule:

Grade 12 Term 4: Week 7, 8 & 9 (21 Nov - 7 Dec)

CE's:

PRK.CE1006 dig-it Scale-Up x 2 Provinces

OnePlus Phase 4 CE595

OnePlus Phase 3 CE553

dig-it WPs

Monthly Recurring Tasks:

Investec Internal Launch brief

Important Docs/Links:

dig-it

Grade 12 Content Loading Schedule

Grade 12 Term 4: Week 7, 8 & 9 (21 Nov - 7 Dec)

Description

CREATED - Term 4: Week 7, 8 & 9

CHECKED - Term 4: Week 7, 8 & 9

CORRECTED & ON GDRIVE - Term 4: Week 7, 8 & 9

LOADED - Term 4: Week 7, 8 & 9

PUBLISHED - Term 4: Week 7, 8 & 9

Write a comment...

Followers

Follow task

Term 1: January 21 – April 1 (11 weeks)				
Week	Working days	Date	Work	Specific recommendation
1	3	Wednesday 21 Jan – Friday 23 Jan	Algebraic Expressions	Understanding of rational and irrational numbers Understand between which two integers a simple surd lies Rounding of real numbers appropriately
2	5	Monday 26 Jan – Friday 30 Jan		Multiplication of binomial and trinomial Factorising including what was taught in grade 9 <ul style="list-style-type: none">trinomialsgrouping in pairssum and difference of two cubes
3	5	Monday 2 Feb – Friday 6 Feb		Simplification of algebraic fractions using factorization with denominators of cubes (limited to sum and difference of cubes)
4	5	Monday 9 Feb - Friday 13 Feb	Exponents	Revise laws of exponents learnt in Grade 9 Revise definitions of grade 9
5	5	Monday 16 Feb - Friday 20 Feb		Use the laws of exponents to simplify expressions And solve equations
6	5	Monday 23 Feb - Friday 27 Feb	Number patterns	Patterns: Investigate number patterns leading to those where there is a constant difference between consecutive terms, and the general term (without using a formula-see content overview) is therefore linear.

Content Creator

- View assigned tasks
- Fill-in content for questions
- Make questions “Ready for Review”
- Commenting on questions

Content Moderator

- View assigned tasks
- Moderating questions
- Marking questions as “Complete”
- Commenting on questions

Financial Mathematics 1 Task

Assigned by: Ethan Marrs

Assigned to: admin

Moderator: moderator

This is a module that discusses finance and accounting.

☒ Open

Make Live

FILTER

By state

All

Incomplete

Ready for Review

Needs Reworking

Complete

Flagged

Financial Mathematics 1 Block 1

Question 990b59f2	Offline	Review Ready	1	2	3	4	Edit
Question 3b92ef04	Offline	Incomplete	1	2	3	4	Edit
Question ec6e2e4e	Offline	Incomplete	1	2	3	4	Edit
Question dd87d90c	Offline	Incomplete	1	2	3	4	Edit

Introduction Week

- Introduce simple interest formula
- Questions on nominal interest rate
- Introduce Compound interest formula!

Edit Description

Content Loading Schedule - Grade 12

File Edit View Insert Format Data Tools Add-ons Help

View only

	A	C	D	E	F	G	H	I	J	K
1		Created By:	Checked By:	Checked and on G	Uploaded By:	Published On:				
2	Grade 12 Term 1: Week 5 & 6 (8 - 19 Feb)									
3	Grade 12 Term 1: Week 7 & 8 (22 Feb - 4 Mar)	11-Feb	18-Feb	20-Feb	21-Feb	21-Feb				
4	Grade 12 Term 1: Week 9 & 10 (7 - 18 Mar)	19-Feb	26-Feb	28-Feb	6-Mar	6-Mar				
5	Grade 12 March Vacation (21 Mar - 4 April)	29-Feb	7-Mar	9-Mar	16-Mar	20-Mar				
6	Grade 12 Term 2: Week 1 & 2 (5 - 15 April)	9-Mar	16-Mar	18-Mar	25-Mar	4-Apr				
7	Grade 12 Term 2: Week 3 & 4 (18 - 29 April)	18-Mar	25-Mar	27-Mar	3-Apr	17-Apr				
8	Grade 12 Term 2: Week 5 & 6 (2 - 13 May)	27-Mar	3-Apr	5-Apr	12-Apr	1-May				
9	Grade 12 Term 2: Week 7 & 8 (16 - 27 May)	5-Apr	12-Apr	14-Apr	21-Apr	15-May				
10	Grade 12 Term 2: Week 9 & 10 (30 May - 10 June)	14-Apr	21-Apr	23-Apr	30-Apr	29-May				
11	Grade 12 Term 2: Week 11 & 12 (13 - 24 June)	23-Apr	30-Apr	2-May	9-May	12-Jun				
12	Grade 12 Term 3: Week 1 & 2 (18 - 29 July)	2-May	9-May	11-May	18-May	17-Jul				
13	Grade 12 Term 3: Week 3 & 4 (1 - 12 Aug)	11-May	27-Jul	29-Jul	31-Jul	13-Jul				
14	Grade 12 Term 3: Week 5 & 6 (15 - 26 Aug)	20-May	27-May	29-May	5-Jun	14-Aug				
15	Grade 12 Term 3: Week 7 & 8 (29 Aug - 9 Sept)	29-May	5-Jun	7-Jun	14-Jun	18-Aug				
16	Grade 12 Term 3: Week 9 & 10 (12 - 23 Sept)	7-Jun	14-Jun	16-Jun	23-Jun	11-Sep				
17	Grade 12 Term 3: Week 11 (26 - 30 Sept)	16-Jun	23-Jun	25-Jun	2-Jul	25-Sep				
18	Grade 12 Sept Vacation (3 - 7 Oct)	25-Jun	2-Jul	4-Jul	11-Jul	2-Oct				
19	Grade 12 Term 4: Week 1 & 2 (10 - 21 Oct)	4-Jul	11-Jul	13-Jul	20-Jul	9-Oct				
20	Grade 12 Term 4: Week 3 & 4 (24 Oct - 4 Nov)	13-Jul	20-Jul	22-Jul	29-Jul	23-Oct				
21	Grade 12 Term 4: Week 5 & 6 (7 - 18 Nov)	22-Jul	29-Jul	31-Jul	7-Aug	6-Nov				
22	Grade 12 Term 4: Week 7, 8 & 9 (21 Nov - 7 Dec)	31-Jul	7-Aug	9-Aug	14-Aug	20-Nov				
--										

Sheet1

Explore

VS

Back and forth emails with attachments

Ethan Marrs4 minutes ago

I think the phrasing is a bit confusing. Perhaps put "Simplify" in the beginning.

Nathan Begbie45 seconds ago

I've changed it, is that better?

Ethan Marrsnow

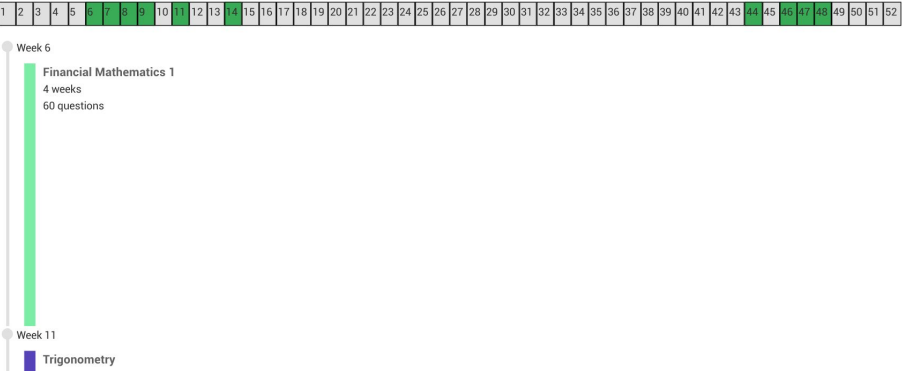
Great, thanks! Marking as complete.

Comment

Platform Manager

- Monitor processes
- View student scores
- Manage classes

Grade 12 Syllabus



VS

Task List

ID	ASSIGNED BY	ASSIGNED TO	TOPIC	DESCRIPTION	DUE DATE	STATUS	
6	ethan	ethan	Test Topic	Hey	2016/11/20	Open	View Task
4	ethan	admin	Financial Mathematics 1	This is a module that discusses finance and accounting.	2016/11/19	Open	View Task
2	tester	booooo	Algebra	Test	2016/11/30	Open	View Task
1	booooo	ethan	Financial Mathematics 1	This is a module that discusses finance and accounting.	2016/11/30	Open	View Task

ADD TASK +

FILTER

By status

All

Open

Closed

By assignment

All

Ethan Marrs

Site administration

Auth

Course Managers

+ Add

≡ Change

Course Mentors

+ Add

≡ Change

Groups

+ Add

≡ Change

Learners

+ Add

≡ Change

Teachers

+ Add

≡ Change

School Managers

+ Add

≡ Change

System Administrators

+ Add

≡ Change

Communication

Bans

+ Add

≡ Change

Chat Groups

+ Add

≡ Change

Chat Messages

+ Add

≡ Change

Discussions

+ Add

≡ Change

Messages

+ Add

≡ Change

Moderations

+ Add

≡ Change

Post comments

+ Add

≡ Change

Posts

+ Add

≡ Change

Profanities

+ Add

≡ Change

Queued Smses

+ Add

≡ Change

Report Responses

+ Add

≡ Change

Reports

+ Add

≡ Change

Smses

+ Add

≡ Change

Recent Actions

My Actions

+ Equations (G10) Question

45

Test Question

+ Equations (G10) Question

44

Test Question

+ Equations (G10) Question

43

Test Question

+ Equations (G10) Question

42

Test Question

+ Equations (G10) Question

41

Test Question

+ Equations (G10) Question

40

Test Question

+ Equations (G10) Question

39

Test Question

+ Equations (G10) Question

38

Test Question

+ Equations (G10) Question

37

Test Question

+ Equations (G10) Question

36

Test Question

Content

Definitions

+ Add

≡ Change

Event Participant Relations

+ Add

≡ Change

Event Question Answers

+ Add

≡ Change

Event Question Relations

+ Add

≡ Change

Events

+ Add

≡ Change

Golden Egg Reward Logs

+ Add

≡ Change

Golden Eggs

+ Add

≡ Change

Learning Chapters

+ Add

≡ Change

Mathmls

+ Add

≡ Change

Minor Features

- Automated notifications and warnings
- Markdown instructions in tasks
- Role-specific admin screens

Content Creation

Content Misery

- Can't optimise workflow without onboarding content creation
- But the tools didn't exist to create this content in the browser, and store data as latex
- Content that exists cannot be optimised because we're not dealing with actual data

So I Built that Tool . . .

Content Delivery/Optimisation

Structured, Meaningful Content can be Optimised

- Data is currently stored as a blob of HTML, with references to images of equations
- Investigated KaTeX and images for representing equations
- Store equations as latex, convert to images and send images
- Optimise and resize uploaded images of graphs, tables etc for phones

Cut Page Size in Half*

*52%

Deliverables

What Will You Get for the low, low price of free?

- Code for a completely functional prototype
 - Test Coverage > 80%
 - Documentation
- Meeting notes and findings on current system
- 2 detailed academic reports explaining our methodology, software decisions and findings

Questions?

Interactive Time

Please fill out the questionnaire . . .