

University of Alberta
Software Product Management



A Capstone Project by Regan Setter
July 31st, 2022

Created User Stories for Inukshuk Books

Inukshuk Books User Story Backlog
Software Product Management Specialization Capstone
University of Alberta



US#	USER STORY NAME
1	As a reader, I want the product to be mobile, so that I can use it anywhere
2	As a reader, I want the application to remotely access the book content, so that the application doesn't require a large amount of memory
3	As a reader, I want to be able to save selected reading material locally to the device, so that I can read without a wireless connection
4	As a reader, I want to be able to browse all available reading material, so that I can choose something to read
5	As a reader, I want to see the covers of the books while I'm browsing through them, so that I can judge a book by its cover
6	As a reader, I want to select reading material, so that I can read it
7	As a reader, I want to be able to sort reading material based on comprehension difficulty or genre
8	As a reader, I want to be able to search for reading material, so that I can find a specific piece of reading material that I have in mind
9	As a reader, I want to be able to rate reading material, so that it can be suggested to other readers
10	As a reader, I want to be able to create an account, so that I can save information about my activity for my reference later
11	As an account holder, I want to be able to log into my account, so that I can access my account
12	As an account holder, I want to be able to reset my password, so that I can increase security
13	As an account holder, I want to be able to browse the reading material that I have previously read, so that I can go back to that content that I really liked
14	As an account holder, I want to be able to add reading material to my To-Read list, so that I can read it later
15	As an account holder, I want to be able to delete reading material from my To-Read list, so that it is no longer found on the list
16	As an account holder, I want to be able to add reading material to my Favorites list, so that I have all my favorite reading material in one place
17	As an account holder, I want to be able to delete reading material from my Favorites list, so that it is no longer found on the list
18	As an account holder, I want material suggested to me based on reading material I have rated positively, so that I can find other books that I will like
19	As an account holder, I want reading material suggested to me based on the other reading material I have read, so that I can easily find new reading material
20	As an account holder, I want to have my reading fluency and reading comprehension level tested, so that I can use it to identify appropriate reading material
21	As an account holder, I want reading material suggested to me based on reading level, so that it is easy to find good reading material
22	As an account holder, I want the application to track my reading fluency and comprehension improvements, so that I can have material updated to my appropriate skill level
23	As a reader, I want the application to support reading fluency through voice recognition, so that the application can test reading fluency consistently and accurately

US#	USER STORY NAME
24	As a reader, I want the view of a page to look close to the fidelity of a page in an actual book, so that its full story impact is maintained regardless of the medium
25	As a reader, I want the background of books to be off-white (as opposed to bright-white), so that I don't strain my eyes when I'm reading
26	As a reader, I want to be able to read material without a partner, so that I can read and practice at my own pace
27	As a reader, I want the application to work in both portrait and landscape orientation, so that I can choose the way I view material
28	As a reader, I want any pictures associated with the content to appear with the text, so that they can supplement the reading material
29	As a reader, I want to be able to adjust font size, so that it is easier to read
30	As a reader, I want pages to be animated when I turn them, so that it feels like I'm reading an actual book
31	As a reader, I want to select unknown words to see their definition, so that I can learn the definition and pronunciation of new words
32	As a reader, I want to be able to connect with a remote user, so that I know if I have access to someone with whom I can read
33	As a reader, I want to read with a connected reader using audio, so that we can read together
34	As an account holder, I want to connect remotely with a friend that is also using the product, so that we can read together
36	As a reader, I want to be able to connect with a nearby device, so that we can read together on separate devices
37	As an account holder, I want to have a list of friends who also use the application, so that I can connect with them remotely to read together
38	As a reader, I want to be matched with a remote reader based on reading level, so that we both enjoy our time and feel equally challenged when reading together
39	As a reader, I want to read with a connected reader using video, so that I can see the person with whom I'm reading

Created a Basic Risk Management Plan

ID	Description	Likelihood	Impact	Category	Risk Indicators	Action Plan	Status
1.	Team Member Illness	Low	High	3.	This would delay the project meaning the six week	Use Git and GitHub to ensure all commits are accessible.	Open

					timeline will need to be extended.	Have the developers work together and cross train them so that the illness doesn't cause a large impact. Allow remote work for emergencies.	
2.	Plan changed by COO, Lisa T.	High	Med.	2.	Scope creep, delays the six week product release deadline.	Work closely with Lisa, ensure that I update her along the way consistently. Ask many questions and say NO if needed. Remind Lisa of Scope Creep.	Open
3.	Member of the team quits	Low	High	3.	This would delay the project meaning the six week timeline will need to be extended.	Use Git and GitHub to ensure all commits are accessible. Have the developers work together and cross train them so that the illness doesn't cause a large impact. Allow remote work for emergencies.	Open
4.	Definition highlight feature does not work	Medium	High	2.	Could take too long to develop meaning that the feature would not be included	Ask if this feature is 100% necessary? Is there an alternative? Can we release this feature later?	Open

					for the first release.	Contingency budget could allow for additional developers.	
5.	Adjust font size or line spacing does not work	Medium	Med.	2.	Could take too long to develop meaning that the feature would not be included for the first release.	Ask if this feature is 100% necessary? Is there an alternative? Can we release this feature later? Contingency budget could allow for additional developers.	Open
6.	User account profile issues (friends, history or favorites list is broken)	High	High	2.	If this feature causes too many issues it may extend the deadline. Cannot release without account creation. May take a long time to develop and implement with DB.	Contingency budget could allow for additional developers if we see issues arise implementing this feature.	Open
7.	Database malfunctions	Medium	High	1.	Unable to connect to the database or the database malfunctions. This would result in titles, filters and search	Test the database often. Verify it is working. Complete unit tests. Use Git and GitHub to access prior DB commits to ensure we can revert back if DB issues arise.	Open

					functions to not work.		
8.	Compatibility issue with current iOS	High	High	1.	Current iOS that the user is on does not work with our application.	If we have compatibility issues the development team will have to work to resolve them. Additional developers could be hired. Work on updating application to work with newer or older iOS.	Open
9.	Remote connection issue	Medium	High	2.	Could take too long to develop meaning that the feature would not be included for the first release	Ask if this feature is 100% necessary? Is there an alternative? Can we release this feature later? Contingency budget could allow for additional developers.	Open
10.	Voice recognition malfunctioning	Medium	High	2.	Could take too long to develop meaning that the feature would not be included for the first release.	Ask if this feature is 100% necessary? Is there an alternative? Can we release this feature later? Contingency budget could allow for additional developers.	Open
11.	Bluetooth compatibility	Medium	Med.	2.	Could take too long to	Ask if this feature is 100%	Open

	ty malfunctioning				develop meaning that the feature would not be included for the first release. Bluetooth may cause errors if not properly integrated with updates.	necessary? Is there an alternative? Can we release this feature later? Contingency budget could allow for additional developers.	
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Added User Story Size Estimates and Dependencies

Inukshuk Books User Story Size Estimates and Dependencies
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#	Requirement	SP	Dependency
1	As a reader, I want the product to be mobile, so that I can use it anywhere	1	
2	As a reader, I want the application to remotely access the book content, so that the application doesn't require a large amount of memory	3	1
3	As a reader, I want to be able to save selected reading material locally to the device, so that I can read without a wireless connection	3	2
4	As a reader, I want to be able to browse all available reading material, so that I can choose something to read	2	2
5	As a reader, I want to see the covers of the books while I'm browsing through them, so that I can judge a book by its cover	2	4
6	As a reader, I want to select reading material, so that I can read it	2	
7	As a reader, I want to be able to sort reading material based on comprehension difficulty or genre	1	4
8	As a reader, I want to be able to search for reading material, so that I can find a specific piece of reading material that I have in mind	3	2
9	As a reader, I want to be able to rate reading material, so that it can be suggested to other readers	2	
10	As a reader, I want to be able to create an account, so that I can save information about my activity for my reference later	2	
11	As an account holder, I want to be able to log into my account, so that I can access my account	1	10
12	As an account holder, I want to be able to reset my password, so that I can increase security	1	10
13	As an account holder, I want to be able to browse the reading material that I have previously read, so that I can go back to that content that I really liked	3	10, 26, 32
14	As an account holder, I want to be able to add reading material to my To-Read list, so that I can read it later	1	10
15	As an account holder, I want to be able to delete reading material from my To-Read list, so that it is no longer found on the list	1	14
16	As an account holder, I want to be able to add reading material to my Favorites list, so that I have all my favorite reading material in one place	1	10
17	As an account holder, I want to be able to delete reading material to my Favorites list, so that it is no longer found on the list	1	16
18	As an account holder, I want material suggested to me based on reading material I have rated positively, so that I can find other books that I will like	2	9
19	As an account holder, I want reading material suggested to me based on the other reading material I have read, so that I can easily find new reading material	2	10,13
20	As an account holder, I want to have my reading fluency and reading comprehension level tested, so that I can use it to identify appropriate reading material	2	10
21	As an account holder, I want reading material suggested to me based on reading level, so that it is easy to find good reading material	3	20
22	As an account holder, I want the application to track my reading fluency and comprehension improvements, so that I can have material updated to my appropriate skill level	3	20
23	As a reader, I want the application to support reading fluency through voice recognition, so that the application can test reading fluency consistently and accurately	3	

Inukshuk Books User Story Size Estimates and Dependencies

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#	Requirement	SP	Dependency
24	As a reader, I want the view of a page to look close to the fidelity of a page in an actual book, so that its full story impact is maintained regardless of the medium	3	
25	As a reader, I want the background of books to be off-white (as opposed to bright-white), so that I don't strain my eyes when I'm reading	1	24
26	As a reader, I want to be able to read material without a partner, so that I can read and practice at my own pace	2	
27	As a reader, I want the application to work in both portrait and landscape orientation, so that I can choose the way I view material	3	1
28	As a reader, I want any pictures associated with the content to appear with the text, so that they can supplement the reading material	2	
29	As a reader, I want to be able to adjust font size, so that it is easier to read	2	
30	As a reader, I want pages to be animated when I turn them, so that it feels like I'm reading an actual book	3	24
31	As a reader, I want to select unknown words to see their definition, so that I can learn the definition and pronunciation of new words	3	
32	As a reader, I want to be able to connect with a remote user, so that I know if I have access to someone with whom I can read	3	
33	As a reader, I want to read with a connected reader using audio, so that we can read together	3	32
34	As an account holder, I want to connect remotely with a friend that is also using the product, so that we can read together	3	10, 32
36	As a reader, I want to be able to connect with a nearby device, so that we can read together on separate devices	3	
37	As an account holder, I want to have a list of friends who also use the application, so that I can connect with them remotely to read together	2	34
38	As a reader, I want to be matched with a remote reader based on reading level, so that we both enjoy our time and feel equally challenged when reading together	3	20, 32
39	As a reader, I want to read with a connected reader using video, so that I can see the person with whom I'm reading	3	32

Proposed Weekly Release Plan (All Sprints)

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#	Description	SP	Priority	Risk	Sprint	Dependant on User Story ID#	Short Name
1	As a reader, I want the product to be mobile, so that I can use it anywhere	1	1	Moderate	1		Mobile Product
24	As a reader, I want the view of a page to look close to the fidelity of a page in an actual book, so that its full story impact is maintained regardless of the medium	3	1	High	1		Page maintain fidelity
25	As a reader, I want the background of books to be off-white (as opposed to bright-white), so that I don't strain my eyes when I'm reading	1	2	Low	1	24	Off-white background
26	As a reader, I want to be able to read material without a partner, so that I can read and practice at my own pace	2	1	Moderate	1		Read alone
27	As a reader, I want the application to work in both portrait and landscape orientation, so that I can choose the way I view material	3	2	Moderate	1	1	Portrait and landscape
28	As a reader, I want any pictures associated with the content to appear with the text, so that they can supplement the reading material	2	1	High	1		Pictures
29	As a reader, I want to be able to adjust font size, so that it is easier to read	2	2	Moderate	1		Adjustable font size
32	As a reader, I want to be able to connect with a remote user, so that I know if I have access to someone with whom I can read	3	1	High	1		Connect with remote user
33	As a reader, I want to read with a connected reader using audio, so that we can read together	3	1	High	1	32	Read with audio
2	As a reader, I want the application to remotely access the book content, so that the application doesn't require a large amount of memory	3	1	Moderate	2	1	Remotely access content
3	As a reader, I want to be able to save selected reading material locally to the device, so that I can read without a wireless connection	3	2	Moderate	2	2	Save selected material locally
4	As a reader, I want to be able to browse all available reading material, so that I can choose something to read	2	1	Moderate	2	2	Browse all material
5	As a reader, I want to see the covers of the books while I'm browsing through them, so that I can judge a book by its cover	2	2	Low	2	4	Book covers
6	As a reader, I want to select reading material, so that I can read it	2	1	Low	2		Select material
7	As a reader, I want to be able to sort reading material based on comprehension difficulty or genre	1	2	Moderate	2	4	Sort material
8	As a reader, I want to be able to search for reading material, so that I can find a specific piece of reading material that I have in mind	3	2	Moderate	2	2	Search for material
10	As a reader, I want to be able to create an account, so that I can save information about my activity for my reference later	2	2	Low	2		Create an account

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#	Description	SP	Priority	Risk	Sprint	Dependant on User Story ID#	Short Name
10	As a reader, I want to be able to create an account, so that I can save information about my activity for my reference later	2	2	Low	2		Create account
11	As an account holder, I want to be able to log into my account, so that I can access my account	1	2	Low	2	10	Log into account
12	As an account holder, I want to be able to reset my password, so that I can increase security	1	2	Low	2	10	Reset Password
13	As an account holder, I want to be able to browse the reading material that I have previously read, so that I can go back to that content that I really liked.	3	2	Moderate	3	10, 26, 32	Browse previously read
14	As an account holder, I want to be able to add reading material to my To-Read list, so that I can read it later	1	2	Moderate	3	10	Add To-Read list
15	As an account holder, I want to be able to delete reading material from my To-Read list, so that it is no longer found on the list	1	2	Low	3	14	Delete from To-Read list
16	As an account holder, I want to be able to add reading material to my Favorites list, so that I have all my favorite reading material in one place	1	2	Moderate	3	10	Add to Favorites List
17	As an account holder, I want to be able to delete reading material to my Favorites list, so that it is no longer found on the list	1	2	Low	3	16	Delete from Favorites List
19	As an account holder, I want reading material suggested to me based on the other reading material I have read, so that I can easily find new reading material	2	3	Moderate	3	10, 13	Suggest material based on previously read
31	As a reader, I want to select unknown words to see their definition, so that I can learn the definition and pronunciation of new words	3	2	Moderate	3		Definitions
34	As an account holder, I want to connect remotely with a friend that is also using the product, so that we can read together	3	2	Moderate	3	10, 32	Connect with a friend (aka Remote Connection)
36	As a reader, I want to be able to connect with a nearby device, so that we can read together on separate devices	3	3	Moderate	3		Connect nearby
37	As an account holder, I want to have a list of friends who also use the application, so that I can connect with them remotely to read together	2	3	Moderate	3	34	Friends list
9	As a reader, I want to be able to rate reading material, so that it can be suggested to other readers	2	3	Moderate	4		Rate material
18	As an account holder, I want material suggested to me based on reading material I have rated positively, so that I can find other books that I will like	2	3	Moderate	4	9	Suggest material based on previously rated
20	As an account holder, I want to have my reading fluency and reading comprehension level tested, so that I can use it to identify appropriate reading material	2	3	Moderate	4	10	Test fluency and comprehension
21	As an account holder, I want reading material suggested to me based on reading level, so that it is easy to find good reading material	3	3	Moderate	4	20	Suggest material based on reading level

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#	Description	SP	Priority	Risk	Sprint	Dependant on User Story ID#	Short Name
22	As an account holder, I want the application to track my reading fluency and comprehension improvements, so that I can have material updated to my appropriate skill level	3	3	Moderate	4	20	Track improvements
23	As a reader, I want the application to support reading fluency through voice recognition, so that the application can test reading fluency consistently and accurately	3	3	High	4		Support voice recognition
30	As a reader, I want pages to be animated when I turn them, so that it feels like I'm reading an actual book	3	3	Moderate	4	24	Animated pages
38	As a reader, I want to be matched with a remote reader based on reading level, so that we both enjoy our time and feel equally challenged when reading together	3	3	Moderate	4	20, 32	Reading level matches
39	As a reader, I want to read with a connected reader using video, so that I can see the person with whom I'm reading	3	3	High	4	32	Voice connections
Total Story Points		84					

Explanation Of The Proposed Weekly Release Plan

We will begin by looking at the high risk user stories. We have 6 user stories marked as a high risk (US#23, 24, 28, 32, 33, 39). Four of those user stories (US#24, 28, 32, 33) are marked as a high priority. High risk and high priority user stories should be placed in the early stages of the product development. If they are not going to work, or cause issues, you want to know that early on. This is why I have placed four of the high risk user stories within the first release plan.

For the other two high risk user stories (US#23, 39) are marked as low priorities. Since these stories have a high potential to cause issues and they don't add much value to the project I have chosen to leave them on the backlog currently.

We've determined that we want our velocity to be 20 story points. So far, with our high risk-high priority user stories we've used 11 story points. So we have 9 available story points to fill in sprint 1.

Let's next look at our high priority user stories. We have the Mobile product user story (#1), the Read alone user story (#26), the Pictures user story (#28), the Remotely access content user story (#2), the Browse material user story (#4), and the Select material user story (#6).

I've chosen the Mobile product user story (#1) for sprint 1. I think it fits really well with the first sprint because we'll need to set up the mobile environment. So now we've got 8 available story points for the first sprint.

Since we have already added the Page maintains fidelity user story (#24) and the Pictures user story (#28) to sprint 1, I'm going to place associated high priority user stories in sprint 1 as well. If we have the page set-up, then the user should be able to read alone--since all they need is the page. So I've added the Read alone user story (#26). So now we have 6 remaining story points in sprint 1. I am trying to create a general theme throughout each weekly sprint and closely relate each of the tasks for the developers sake. I want to choose stories that allow us to build a better product for the demo to impress our stakeholders each week, month, etc.

So going back to our page fidelity user stories. If we add the Off-white background user story (#25), the Portrait and landscape user story (#27) and the Adjustable font size user story (#29), then we keep with the theme of page fidelity. This also gives us a good working product where

the user can read a book and use all those features. It also fills up our sprint 1--we now have reached 20 story points.

On to sprint 2! Like I just said, we placed our other three high priority user stories into this sprint (US# 2, 4, 6). That takes up 7 story points, so we have 13 story points remaining in sprint 2. Based on these user stories, the theme of this sprint is getting the functionality set up so that a user can browse and choose reading material. Based on that theme, I've added the Book covers user story (#5), the Sort material user story (#5), and the Search material user story (#8). These are all medium priority user stories so that fits well. We've now used up 13 story points, so we have 7 remaining.

I think it makes sense to add the Save selected material locally user story (#3), since that goes along with the Remotely access content user story (#2). That's a 3 point user story, so we now have 4 remaining story points.

There aren't any other user stories that go along with our theme, so our choices are pretty open. I've chosen to add the account-related user stories (US# 10, 11, 12) since it would be nice to have those set-up for many of the user stories still on the backlog. Conveniently, those user stories add up to 4 story points, which brings us to 20 story points in sprint 2.

For sprint 3, I think it would be best to get all the priority 2 user stories into the sprint before we start looking at priority 3 user stories. There are seven priority 2 user stories that have not been placed in a sprint. These include the Browsing previously read user story (#13), the Favorites and To-read lists (US# 14, 15, 16, 17), the Definitions user story (#31), and the Connect with a friend user story (#34). These take up a total of 13 story points. So we have 7 story points remaining to fill with priority 3 user stories.

At this point, it doesn't really matter which user stories are chosen. I would say that many of the priority 3 user stories in sprint 3 will change by the time you get to that point in development. I have chosen to add the Friends list user story (#37) because it makes sense to add that along with the Connect with a friend user story (#34). We now have 5 remaining story points.

Iteration Plan For Sprint 1

- Pair programming may slow down development. I would suggest that pair programming only be completed for more difficult development tasks. Simple tasks and smaller story points should be completed solo.
- Larger tasks on the other hand could find pair programming incredibly useful. Team collaboration could greatly reduce the time required to code longer tasks or. This is a common practice in software engineering.
- The development team should not self-assign tasks up front.Tasks should be put onto a scrum or kanban board. This would allow the developers to choose what tasks they are most comfortable with at the beginning of the day.
- The work is estimated in hours. This should be estimated in story points instead.
- There is no information or USID regarding coding and connecting the database for the application which is a high priority issue.
- The development team is very cross functional. Each developer is participating in various tasks that each involve writing code, testing code, performing unit and acceptance tests and reviewing code etc.
- Kat has 40 hours available however she only has 35.25 hours of work assigned to her sprint. The other two developers have nearly no buffer time available. It would be much better to split up the total buffer time (6.25 hours) amongst the three developers leaving each developer with approximately 2 hours of buffer time. This evens out the workload and provides each developer with a few hours of buffer time if they run into a roadblock.

- There are three task dependencies during Sprint 1. The task dependencies are as follows: USID 1 followed by USID 27, USID 24 followed by USID 25, and finally USID 32 followed by USID 33.
- USID 24 does not include any unit tests. This must be a mistake as we will need unit tests written and performed for USID 24 to ensure that the page layout and the functionality of the page layout works as it is supposed to.
- USID 33 has mistakenly noted that it will take 16 hours to write the unit tests for connecting with audio. The 16 hours should be allotted to writing the source code to connect to audio and approximately 0.5 hours for writing the unit tests for connecting with audio.

Task Breakdown Chart

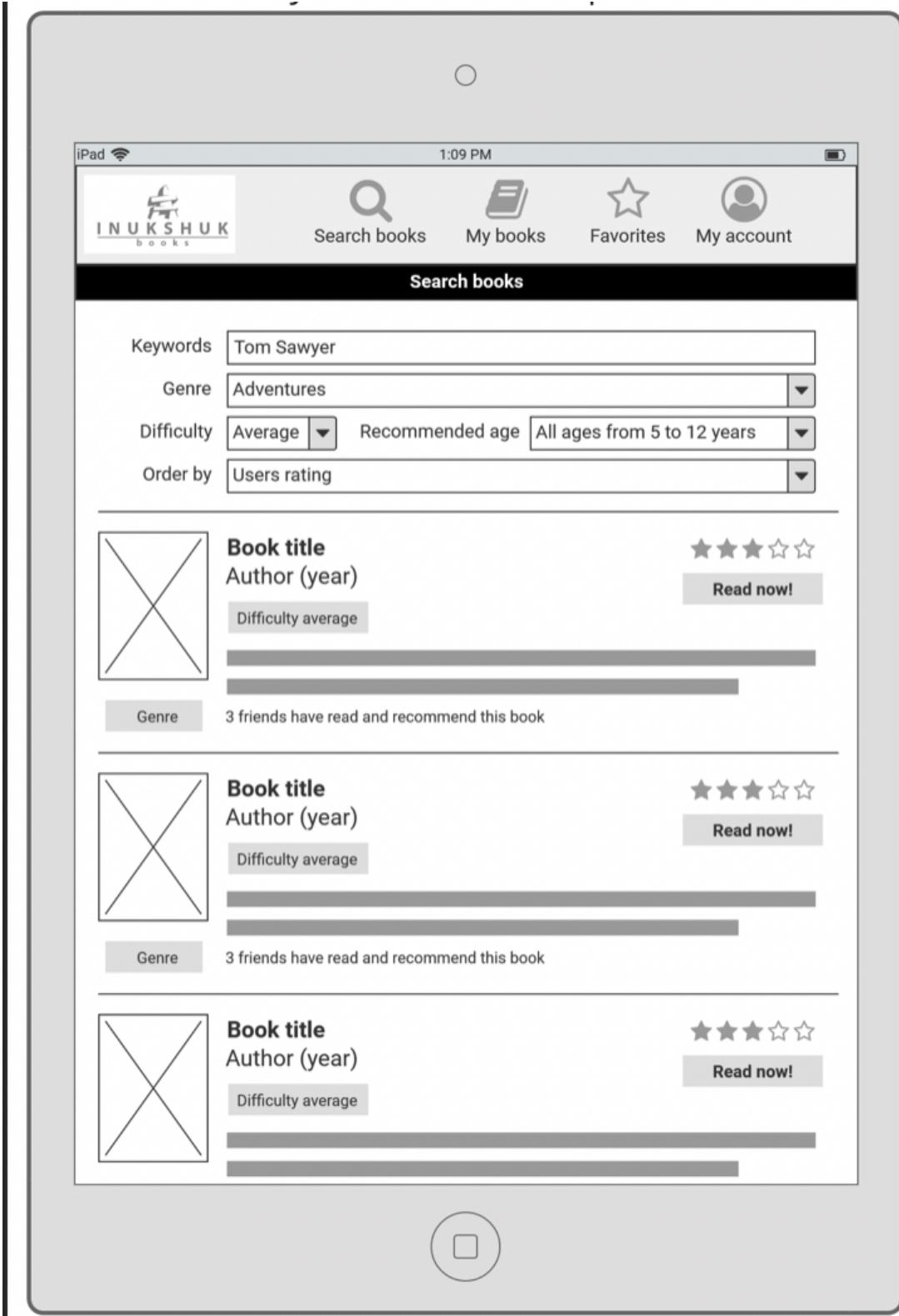
Task Breakdown

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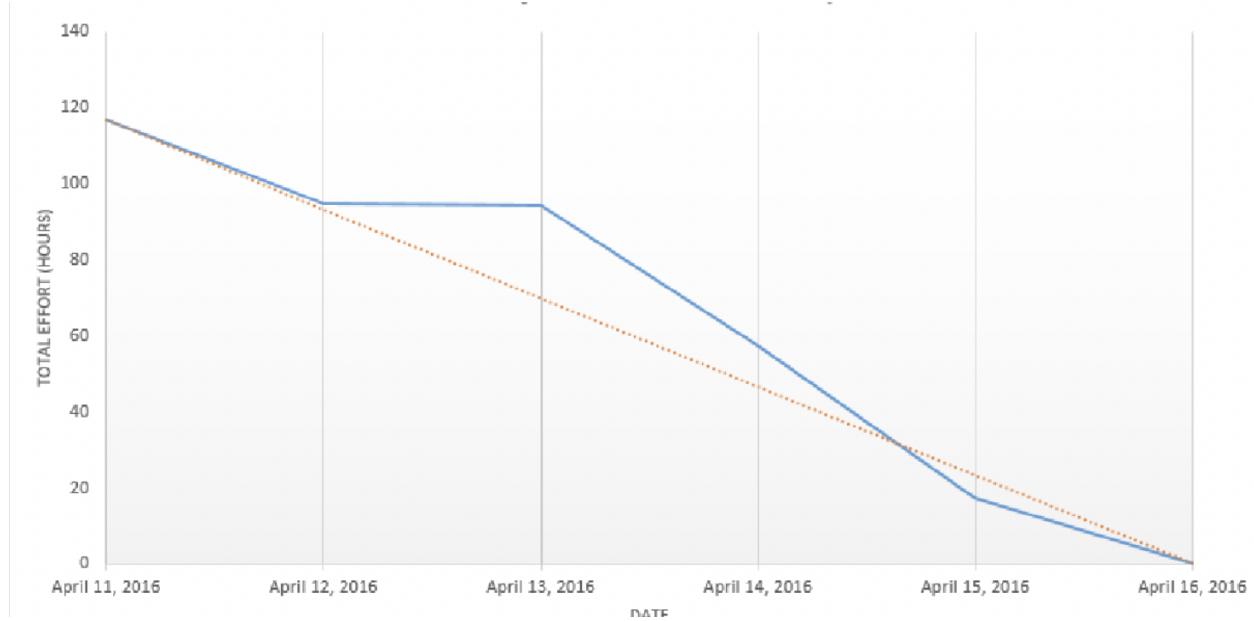


#	User Story	Tasks
1	As a reader, I want the product to be mobile, so that I can use it anywhere	<ul style="list-style-type: none"> • Design wireframe for the application • Setup iOS development environment
24	As a reader, I want the view of a page to look close to the fidelity of a page in an actual book, so that its full story impact is maintained regardless of the medium	<ul style="list-style-type: none"> • Design page layout • Generate wireframe for page layout • Write source code for page layout • Review source code for page layout • Write acceptance criteria for page layout • Write acceptance tests for page layout • Execute acceptance tests for page layout • Write internal documentation for page layout
25	As a reader, I want the background of books to be off-white (as opposed to bright-white), so that I don't strain my eyes when I'm reading	<ul style="list-style-type: none"> • Write source code for off-white backgrounds • Review source code for off-white backgrounds • Write unit tests for off-white backgrounds • Write acceptance criteria for off-white backgrounds • Write acceptance tests for off-white backgrounds • Execute acceptance tests for off-white backgrounds
26	As a reader, I want to be able to read material without a partner, so that I can read and practice at my own pace	<ul style="list-style-type: none"> • Write source code for solo reading • Review source code for solo reading • Write unit tests for solo reading • Write acceptance criteria for solo reading • Write acceptance tests for solo reading • Execute acceptance tests for solo reading • Write internal documentation for solo reading • Write user manual for solo reading
27	As a reader, I want the application to work in both portrait and landscape orientation, so that I can choose the way I view material	<ul style="list-style-type: none"> • Write source code for portrait and landscape modes • Review source code for portrait and landscape modes • Write unit tests for portrait and landscape modes • Write acceptance criteria for portrait and landscape modes • Write acceptance tests for portrait and landscape modes • Execute acceptance tests for portrait and landscape modes • Write internal documentation for portrait and landscape modes
28	As a reader, I want any pictures associated with the content to appear with the text, so that they can supplement the reading material	<ul style="list-style-type: none"> • Write source code for pictures in content • Review source code for pictures in content • Write unit tests for pictures in content • Write acceptance criteria for pictures in content • Write acceptance tests for pictures in content • Execute acceptance tests for pictures in content • Write internal documentation for pictures in content
29	As a reader, I want to be able to adjust font size, so that it is easier to read	<ul style="list-style-type: none"> • Write source code for adjustable font sizes • Review source code for adjustable font sizes • Write unit tests for adjustable font sizes • Write acceptance criteria for adjustable font sizes • Write acceptance tests for adjustable font sizes • Execute acceptance tests for adjustable font sizes • Write internal documentation for adjustable font sizes • Write user manual for adjustable font sizes
32	As a reader, I want to be able to connect with a remote user, so that I know if I have access to someone with whom I can read	<ul style="list-style-type: none"> • Write source code for connecting with remote user • Review source code for connecting with remote user • Write unit tests for connecting with remote user • Write acceptance criteria for connecting with remote user • Write acceptance tests for connecting with remote user • Execute acceptance tests for connecting with remote user • Write internal documentation for connecting with remote user • Write user manual for connecting with remote user
33	As a reader, I want to read with a connected reader using audio, so that we can read together	<ul style="list-style-type: none"> • Write source code for connecting with audio • Review source code for connecting with audio • Write unit tests for connecting with audio • Write acceptance criteria for connecting with audio • Write acceptance tests for connecting with audio • Execute acceptance tests for connecting with audio • Write internal documentation for connecting with audio • Write user manual for connecting with audio

Created A Basic Wireframe Mockup for iPad



Burndown Chart For Sprint 1



Meeting Minutes Sprint 1



Retrospective Meeting Minutes

Sprint 1

What Went Well:

- Team got all the expected user stories completed.
- Team had a standup everyday.
 - Weren't always first thing in the morning but they always occurred.
- In the end, all the user stories met the team's definition of done.
- Team created a working product.
- Story points were accurate this sprint.
 - Want to re-evaluate after next sprint to know for sure.

What We Could've Done Better:

- Unit tests weren't done before writing source code for Josh's features.
- Should have written our acceptance tests and criteria before we started developing.

What We Can Improve On:

- The use of the task board.
 - Was not always an accurate representation of the progress.
- Write acceptance tests and unit tests early.
- Pair program more often.
 - Happened a bit, but could do it more.
- Improve communication.
 - Pair programming should help.
 - More face-to-face conversations.

User Story Backlog For Sprint 2 or Week 4

Inukshuk Books User Story Backlog
 Software Product Management Specialization Capstone
 University of Alberta



#	Description	SP	Priority	Risk	Sprint	Dependant on User Story ID#	Short Name
1	As a reader, I want the product to be mobile, so that I can use it anywhere	1	1	Moderate	1		Mobile Product
24	As a reader, I want the view of a page to look close to the fidelity of a page in an actual book, so that its full story impact is maintained regardless of the medium	3	1	High	1		Page maintain fidelity
25	As a reader, I want the background of books to be off-white (as opposed to bright-white), so that I don't strain my eyes when I'm reading	1	2	Low	1	24	Off-white background
26	As a reader, I want to be able to read material without a partner, so that I can read and practice at my own pace	2	1	Moderate	1		Read alone
27	As a reader, I want the application to work in both portrait and landscape orientation, so that I can choose the way I view material	3	2	Moderate	1	1	Portrait and landscape
28	As a reader, I want any pictures associated with the content to appear with the text, so that they can supplement the reading material	2	1	High	1		Pictures
29	As a reader, I want to be able to adjust font size, so that it is easier to read	2	2	Moderate	1		Adjustable font size
32	As a reader, I want to be able to connect with a remote user, so that I know if I have access to someone with whom I can read	3	1	High	1		Connect with remote user
33	As a reader, I want to read with a connected reader using audio, so that we can read together	3	1	High	1	32	Read with audio
2	As a reader, I want the application to remotely access the book content, so that the application doesn't require a large amount of memory	3	1	Moderate	2	1	Remotely access content
3	As a reader, I want to be able to save selected reading material locally to the device, so that I can read without a wireless connection	3	2	Moderate	2	2	Save selected material locally
4	As a reader, I want to be able to browse all available reading material, so that I can choose something to read	2	1	Moderate	2	2	Browse all material
5	As a reader, I want to see the covers of the books while I'm browsing through them, so that I can judge a book by its cover	2	2	Low	2	4	Book covers
6	As a reader, I want to select reading material, so that I can read it	2	1	low	2		Select material
7	As a reader, I want to be able to sort reading material based on comprehension difficulty or genre	1	2	Moderate	2	4	Sort material
8	As a reader, I want to be able to search for reading material, so that I can find a specific piece of reading material that I have in mind	3	2	Moderate	2	2	Search for material
40	As a reader, I want my place in a book to be saved, so that I can return to that place at a later time	3	2	Moderate	2		Bookmarks

Inukshuk Books User Story Backlog
 Software Product Management Specialization Capstone
 University of Alberta



#	Description	SP	Priority	Risk	Sprint	Dependant on User Story ID#	Short Name
10	As a reader, I want to be able to create an account, so that I can save information about my activity for my reference later	2	2	Low	3		Create account
11	As an account holder, I want to be able to log into my account, so that I can access my account	1	2	Low	3	10	Log into account
12	As an account holder, I want to be able to reset my password, so that I can increase security	1	2	Low	3	10	Reset Password
13	As an account holder, I want to be able to reset my password, so that I can increase security	3	2	Moderate	3	10, 26, 32	Browse previously read
14	As an account holder, I want to be able to add reading material to my To-Read list, so that I can read it later	1	2	Moderate	3	10	Add To-Read list
15	As an account holder, I want to be able to delete reading material from my To-Read list, so that it is no longer found on the list	1	2	Low	3	14	Delete from To-Read list
16	As an account holder, I want to be able to add reading material to my Favorites list, so that I have all my favorite reading material in one place	1	2	Moderate	3	10	Add to Favorites List
17	As an account holder, I want to be able to delete reading material to my Favorites list, so that it is no longer found on the list	1	2	Low	3	16	Delete from Favorites List
31	As a reader, I want to select unknown words to see their definition, so that I can learn the definition and pronunciation of new words	3	2	Moderate	3		Definitions
34	As an account holder, I want to connect remotely with a friend that is also using the product, so that we can read together	3	2	Moderate	3	10, 32	Connect with a friend (aka Remote Connection)
37	As an account holder, I want to have a list of friends who also use the application, so that I can connect with them remotely to read together	2	3	Moderate	3	34	Friends list
9	As a reader, I want to be able to rate reading material, so that it can be suggested to other readers	2	3	Moderate	4		Rate material
18	As an account holder, I want material suggested to me based on reading material I have rated positively, so that I can find other books that I will like	2	3	Moderate	4	9	Suggest material based on previously rated
19	As an account holder, I want reading material suggested to me based on the other reading material I have read, so that I can easily find new reading material	2	3	Moderate	4	10, 13	Suggest material based on previously read
20	As an account holder, I want to have my reading fluency and reading comprehension level tested, so that I can use it to identify appropriate reading material	2	3	Moderate	4	10	Test fluency and comprehension
21	As an account holder, I want reading material suggested to me based on reading level, so that it is easy to find good reading material	33	3	Moderate	4	20	Suggest material based on reading level
22	As an account holder, I want the application to track my reading fluency and comprehension improvements, so that I can have material updated to my appropriate skill level	3	3	Moderate	4	20	Track improvements

Inukshuk Books User Story Backlog
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 University of Alberta



#	Description	SP	Priority	Risk	Sprint	Dependant on User Story ID#	Short Name
23	As a reader, I want the application to support reading fluency through voice recognition, so that the application can test reading fluency consistently and accurately	3	3	High	4		Support voice recognition
30	As a reader, I want pages to be animated when I turn them, so that it feels like I'm reading an actual book	3	3	Moderate	4	24	Animated pages
36	As a reader, I want to be able to connect with a nearby device, so that we can read together on separate devices	3	3	Moderate	4		Connect nearby
38	As a reader, I want to be matched with a remote reader based on reading level, so that we both enjoy our time and feel equally challenged when reading together	3	3	Moderate	4	20, 32	Reading level matches
39	As a reader, I want to read with a connected reader using video, so that I can see the person with whom I'm reading	3	3	High	4	32	Voice connections
41	As a reader, I want to be able to highlight text from a book, so that I can remember important aspect of the book	1	3	Low	4		Highlight text
42	As a reader, I want the highlights I created to be saved after I exit the book, so that I can review them when I return to the book	2	3	Moderate	4	41	Save highlights
	Total Story Points	90					

Iteration Plan For Sprint 2

- There are no task dependencies mentioned in the Iteration Plan for Sprint Number 2.
- We have found ourselves burning across previously. I would recommend members of the project reach out for help if needed so we do not experience any blockage for long periods of time.
- USID 6 Does not include any materials stating how the reader selects reading materials. This should be included.
- Nobody assigned to the following tasks for Sprint 2:
 - Review source code
 - Write acceptance tests
 - Write acceptance criterion
- There is a 13 hour discrepancy between the total development hours of 118 and the total allotted hours of 105. This creates the risk of not being able to finish sprint 2 unless some developers work over time or I am allotted all of the extra hours. We could remove stories if necessary or fix the hours issue.

User Story Backlog For Sprint 3 or Week 5

Inukshuk Books User Story Backlog
 Software Product Management Specialization Capstone
 University of Alberta



#	Description	SP	Priority	Risk	Sprint	Dependant on User Story ID#	Short Name
1	As a reader, I want the product to be mobile, so that I can use it anywhere	1	1	Moderate	1		Mobile Product
24	As a reader, I want the view of a page to look close to the fidelity of a page in an actual book, so that its full story impact is maintained regardless of the medium	3	1	High	1		Page maintain fidelity
25	As a reader, I want the background of books to be off-white (as opposed to bright-white), so that I don't strain my eyes when I'm reading	1	2	Low	1	24	Off-white background
26	As a reader, I want to be able to read material without a partner, so that I can read and practice at my own pace	2	1	Moderate	1		Read alone
27	As a reader, I want the application to work in both portrait and landscape orientation, so that I can choose the way I view material	3	2	Moderate	1	1	Portrait and landscape
28	As a reader, I want any pictures associated with the content to appear with the text, so that they can supplement the reading material	2	1	High	1		Pictures
29	As a reader, I want to be able to adjust font size, so that it is easier to read	2	2	Moderate	1		Adjustable font size
32	As a reader, I want to be able to connect with a remote user, so that I know if I have access to someone with whom I can read	3	1	High	1		Connect with remote user
33	As a reader, I want to read with a connected reader using audio, so that we can read together	3	1	High	1	32	Read with audio
2	As a reader, I want the application to remotely access the book content, so that the application doesn't require a large amount of memory	3	1	Moderate	2	1	Remotely access content
3	As a reader, I want to be able to save selected reading material locally to the device, so that I can read without a wireless connection	3	2	Moderate	2	2	Save selected material locally
4	As a reader, I want to be able to browse all available reading material, so that I can choose something to read	2	1	Moderate	2	2	Browse all material
5	As a reader, I want to see the covers of the books while I'm browsing through them, so that I can judge a book by its cover	2	2	Low	2	4	Book covers
6	As a reader, I want to select reading material, so that I can read it	2	1	low	2		Select material
8	As a reader, I want to be able to search for reading material, so that I can find a specific piece of reading material that I have in mind	3	2	Moderate	2	2	Search for material
40	As a reader, I want my place in a book to be saved, so that I can return to that place at a later time	3	2	Moderate	2		Bookmarks

Inukshuk Books User Story Backlog

Software Product Management Specialization Capstone
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#	Description	SP	Priority	Risk	Sprint	Dependant on User Story ID#	Short Name
10	As a reader, I want to be able to create an account, so that I can save information about my activity for my reference later	2	2	Low	3		Create account
11	As an account holder, I want to be able to log into my account, so that I can access my account	1	2	Low	3	10	Log into account
14	As an account holder, I want to be able to add reading material to my To-Read list, so that I can read it later	1	2	Moderate	3	10	Add To-Read list
15	As an account holder, I want to be able to delete reading material from my To-Read list, so that it is no longer found on the list	1	2	Low	3	14	Delete from To-Read list
16	As an account holder, I want to be able to add reading material to my Favorites list, so that I have all my favorite reading material in one place	1	2	Moderate	3	10	Add to Favorites List
17	As an account holder, I want to be able to delete reading material to my Favorites list, so that it is no longer found on the list	1	2	Low	3	16	Delete from Favorites List
20	As an account holder, I want to have my reading fluency and reading comprehension level tested, so that I can use it to identify appropriate reading material	2	3	Moderate	3	10	Test fluency and comprehension
22	As an account holder, I want the application to track my reading fluency and comprehension improvements, so that I can have material updated to my level	3	3	Moderate	3	20	Track improvements
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38	As a reader, I want to be matched with a remote reader based on reading level, so that we both enjoy our time and feel equally challenged when reading	2	3	Moderate	3	20, 32	Reading level matches
7	As a reader, I want to be able to sort reading material based on comprehension difficulty or genre	1	2	Moderate	4	4	Sort material
9	As a reader, I want to be able to rate reading material, so that it can be suggested to other readers	2	3	Moderate	4		Rate material
12	As an account holder, I want to be able to reset my password, so that I can increase security	1	2	Low	4	10	Reset password
13	As an account holder, I want to be able to browse the reading material that I have previously read, so that I can go back to that content that I really liked	3	2	Moderate	4	10, 26, 32	Browse previously read
18	As an account holder, I want material suggested to me based on reading material I have rated positively, so that I can find other books that I will like	2	3	Moderate	4	9	Suggest material based on previously rated
19	As an account holder, I want reading material suggested to me based on the other reading material I have read, so that I can easily find new reading material	2	3	Moderate	4	10, 13	Suggest material based on previously read
21	As an account holder, I want reading material suggested to me based on reading level, so that it is easy to find good reading material	33	3	Moderate	4	20	Suggest material based on reading level

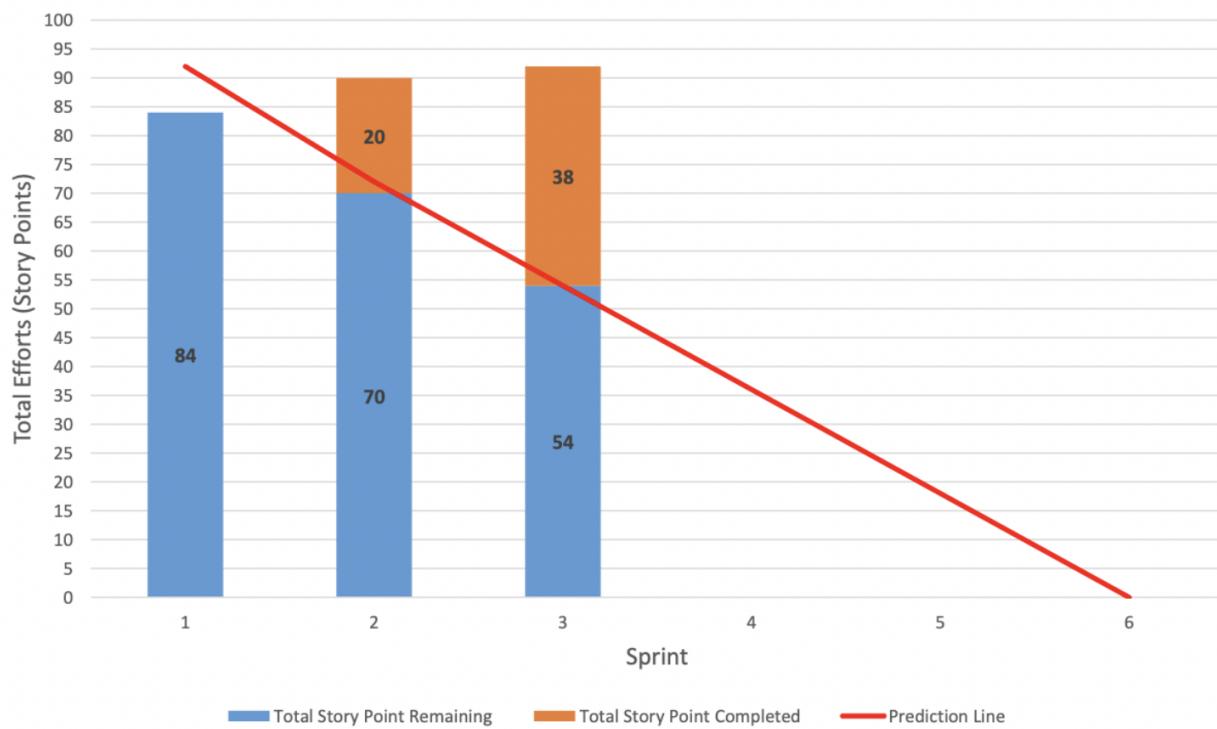
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#	Description	SP	Priority	Risk	Sprint	Dependant on User Story ID#	Short Name
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30	As a reader, I want pages to be animated when I turn them, so that it feels like I'm reading an actual book	3	3	Moderate	4	24	Animated pages
34	As an account holder, I want to connect remotely with a friend that is also using the product, so that we can read together	3	2	Moderate	4	10, 32	Connect with a friend (aka Remote connection)
36	As a reader, I want to be able to connect with a nearby device, so that we can read together on separate devices	3	3	Moderate	4		Connect near
37	As an account holder, I want to have a list of friends who also use the application, so that I can connect with them remotely to read together	2	3	Moderate	4	34	Friends list
39	As a reader, I want to read with a connected reader using video, so that I can see the person with whom I'm reading	3	3	High	4	32	Voice connections
41	As a reader, I want to be able to highlight text from a book, so that I can remember important aspect of the book	1	3	Low	4		Highlight text
42	As a reader, I want the highlights I created to be saved after I exit the book, so that I can review them when I return to the book	2	3	Moderate	4	41	Save highlights
43	As a reader, I want to see a synopsis page for a book that I select, so that I can determine if it is something that I want to read	2	3	Moderate	4	6	Synopsis Page
	Total Story Points	92					

Burndown Chart For Sprint 2



Meeting Minutes From Sprint 2



Retrospective Meeting Minutes

Sprint 2

What Went Well:

- Completed all the expected user stories.
 - However, team was close to not completing them all.
- Team had all their tests written early.
 - Improvement from last sprint.
- Communication improved this sprint.
 - Standups were productive.
 - Everyone knew the status of the product at all times.

What We Could've Done Better:

- Looked at dependencies of user stories earlier.
 - Database connection should probably have been in the last sprint since so many things were dependent on it.
 - If something had gone wrong with that feature, the whole sprint would've been a failure.
 - Shouldn't face that issue in the next sprint (based on the user stories scheduled).
- Story points weren't accurate.
 - Was determined before sprint, so not detrimental.
 - Need to make sure team continues to do that.

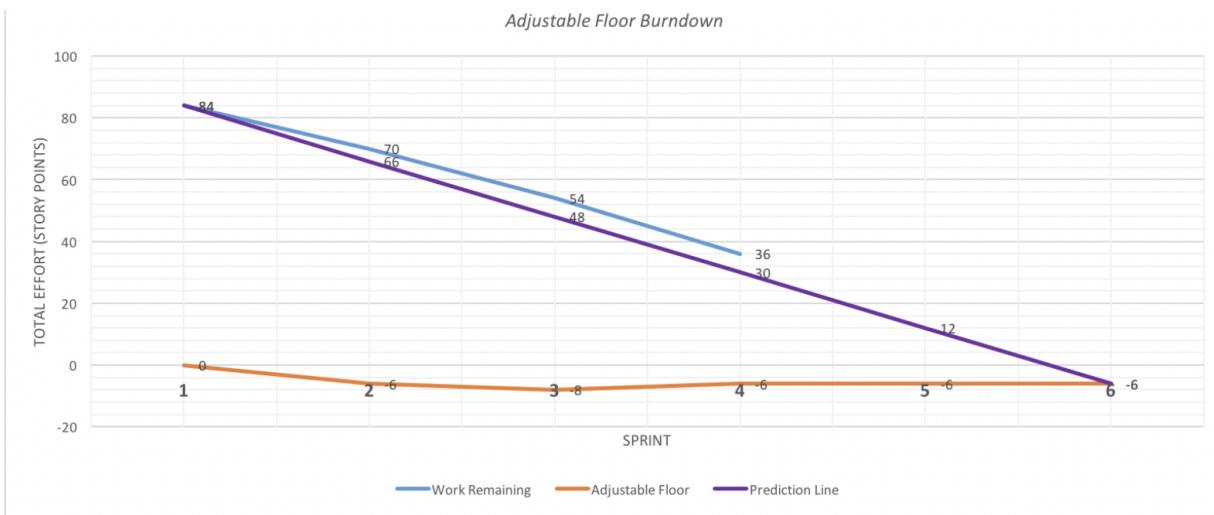
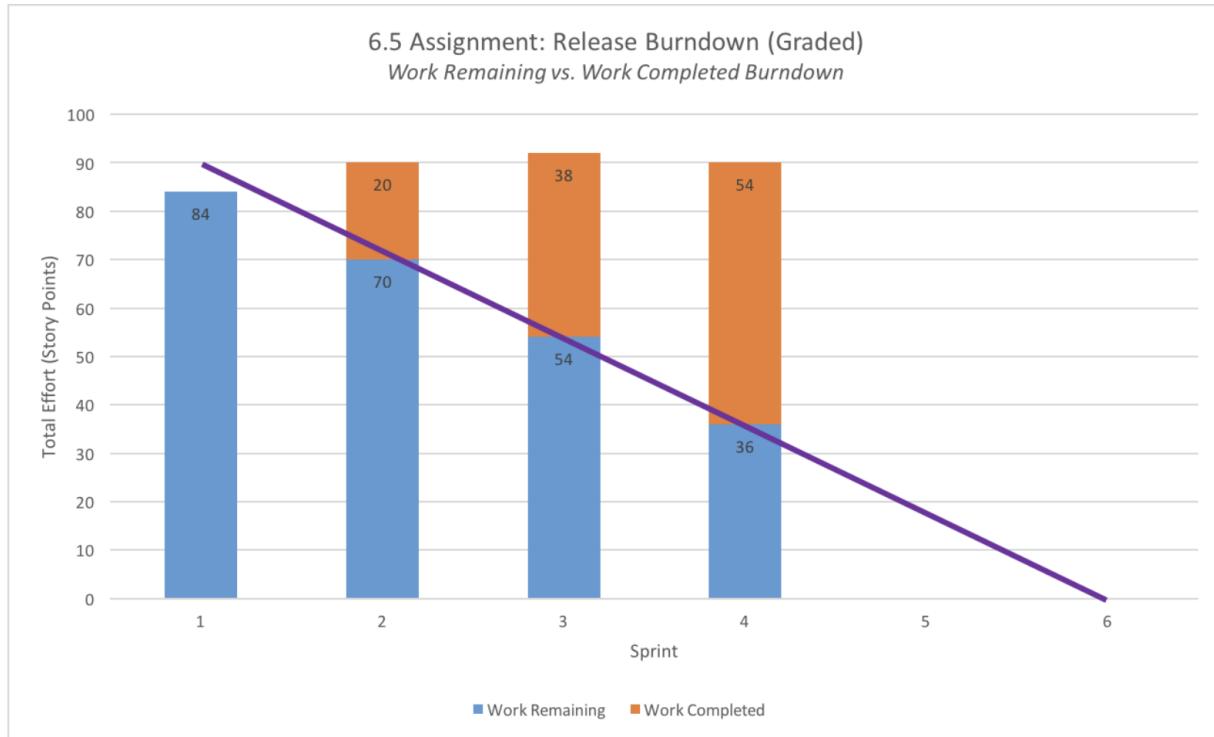
What We Can Improve On:

- More pair programming.
 - Didn't do it very often this sprint.
 - Team is going to try self-assigning tasks in pairs next sprint to encourage more pair programming.
- Continue to improve communication.

Iteration Plan For Sprint 3

- No task dependencies were mentioned.
- USID 14, 15, 16, 17 and 38 are all missing information. None of them determine how to do what the USID is asking. Example: How does the user delete data from their favorites list? The USID does not mention how they will accomplish this. This needs to be determined.
- This sprint must have taken into account that no pair programming or collaborative exercises were done in the previous sprint. This is a good change of pace.
- There's nobody assigned to review code, write acceptance tests or acceptance criteria again.
- The total hours actually make sense now, they have 110.5 hours allotted but can use 115 if needed.
- Again, I have 5.5 hours of tasks allocated to me with no time available. If my hours were given to the developers they'd almost have enough time.
- Hopefully pair programming will allow us to move forward. Previous sprints we burned across and accomplished a few tasks some days. This could have been solved with collaboration or asking for help.

Burndown Charts For Sprint 3



Meeting Minutes From Sprint 3 (Final Sprint)



Retrospective Meeting Minutes

Artifacts:

- Josh - Brought a screenshot of his unit tests failing.
 - Taught him that his code isn't always perfect.
 - Also brought a can of bug spray that Alexa got him as a joke.
- Alexa - Brought a post-it note that said "Good work today. Keep it up" that was given to her anonymously.
 - Was important to her because it was nice to be appreciated on a hard day.
- Kat - Brought the burndown chart for the project.
 - Demonstrates the hard work that they've done over the last couple weeks.
- Kat - Also brought the hard copy of the children's book that the team was using as canned data while developing.
 - Memento of the project.
 - This product hopes to bring more books like this to deserving children all over the world.

Was The Project A Success:

- Alexa - Unsure
 - Team did what we were supposed to, but wishes they could have worked on it more.
 - Doesn't feel like they built the best product that they could build.
- Kat - Agrees
 - The team did a very good job of focusing on what's important and staying on time.
- Josh - Pretty Good
 - Nothing major went wrong.

What Went Well:

- Team followed agile practices fairly well.
- Worked well together as a team.
- Team communicated pretty well when everything was said and done.

What Did We Learn:

- Josh learned that writing test cases isn't really all that hard.
- Alexa learned that it isn't good to just do what you think is best without talking about it first.
- Kat learned that scrum can be used on small projects like this, with good success.
- Alexa learned that she can work on a team better than she thought she would.



Retrospective Meeting Minutes

What We Would Do Differently:

- Write tests early.
 - Both unit and acceptance tests.
- Look at dependencies in more detail early on.
 - So that they don't run into an issue similar to the database connection in Sprint 2.
- A larger development team would be nice.
 - Project was a lot of work for such a small team.
- Look into implementing the Scrum methodology.
 - No formal methodology was used.
- More market research.

Final Capstone Completed



Aug 18, 2022

Regan Setter

has successfully completed the online, non-credit Specialization

Software Product Management

The recipient of this certificate has completed the Software Product Management Specialization. This achievement required mastering the knowledge and demonstrating the application of Agile practices within software processes, requirements, planning, and improvement to create better software products. The final Capstone course assessed the acquired knowledge and skills in a practical scenario involving product team interactions, which simulated the development of a software product from inception to delivery.

Kenny Wong

Kenny Wong
Associate Professor
Computing Science,
Faculty of Science

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