Project Plan

Project Name: Tresearch
Application Type: Web Application

Trial By Fire
Jessie Lazo
Matthew Chen (Team Lead)
Pammy Poor
Viet Nguyen

Instructor: Vatanak Vong

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1. Introduction

1.1 Purpose

The Project Plan intends to provide the necessary path to the implementation of our system whilst adhering to proper Scrum methodology. The Project Plan breaks down all information pertaining to the development of the Project on a low level. Phases represent significant periods of time in the semester which are then broken into Sprints consisting of the work items as well as the task breakdowns. Initial work item effort point estimates are provided based on an hour approximation. The Project Roadmap represents a high level view of the Project Plan that focuses on milestones, features, and the general timeframe.

1.2 Project Overview

Tresearch is an interactive mind mapping tool for documenting users' learning journey. Users can create their own knowledge tree(s) to document what they are currently learning and have learned throughout their life. Knowledge trees are made up of nodes that consist of a title, description/summary, and optional tag. Branches that come off of nodes point to nodes that utilize or require knowledge from the previous node. Users can view any other user's public knowledge trees to see what they are learning or have learned and how. If a user finds another user's tree or a portion of their tree to be particularly useful or helpful, they can rate a particular node or section of the tree and they can also copy that section over to their own tree. Users can add additional information to their public profiles such as what they are currently learning, and where they are working/what they currently do or have done. Users can utilize a search function in order to find people whose trees contain a certain topic or keyword/phrase, and can also utilize a filter to narrow searches by users who are learning said topic, are using said topic (i.e. in their work or otherwise), by rating, and by tags.

1.3 Risks

Risks that may be encountered throughout the development of the project are among the following. Scope creep risk, the risk in which there is an unexpected change to the Project Scope that may result in additional costs and resource allocation. Effort point risk, where initial estimates given for work items are inaccurate thereby resulting in less or more time spent which may offset other tasks set in Sprint planning. Technology risk, the risk that technologies and the versions specified are no longer viable for production in the future. Cost risk, in which features implemented in the cloud service require more payment than expected.

1.4 Risk Management

The issue of Scope Creep Risk will be addressed through determining the severity of potential risks and how much they would affect the Project. Effort Point Risk will be dealt with through each cycle of Sprint Planning to properly determine the effort points that work items and their respective tasks will take and allocate the team resources to manage them as best as possible. The Technology Risk will be addressed by going through the DARR process for new

technologies essential to the Project development. The Cost Risk will be dealt with monetary contributions from the team necessary to continue the cloud service hosting.

Deployment on Thursdays	
Backlog Grooming/Half way and Thursdays between sprints	Part of the sprint
Sprint planning-Thurdays between sprints and possibly first/last of sprint	Part of the sprint
Sprint retrospective-half way and/or last day of sprint	Part of the sprint
Client feedback/demo-Office hours days (Thurdays and Saturdays)	Part of the sprint
Spring Break 3/28/22-4/1/22	
Finals 5/9/22-5/14/22	

Fall 2021 Project Roadmap

Phase 2		**Phase 3**			**Retrospective**
Milestone 2		Milestone 3			12/09/21-12/17/22
Sprint 3	Sprint 4	Sprint 5	Sprint 6	Sprint 7	Retrospective Review
10/07/21-10/14/21	10/22/21-10/27/21	10/29/21-11/10/21	11/12/21-11/24/21	11/26/21-12/08/21	Finals Review
Project Plan	Project Plan	Low Level Design	UM	Logging	
Test Plan	Test Plan	BRD Revisions	Project Plan Revisions	Retrospective Prep	
Default Items	Network Diagram	Tech Spec Revisions	Test Plan Revsions	Default Items	
	Default Items	Site Map Revisions	Network Diagram Revisions		
		HL Design Revisions	Default Items		
		Default Items			

Spring 2022 Project Roadmap

Phase 1		**Phase 2**		**Phase 3**		**Phase 4**	
Sprint 1	Sprint 2	Sprint 3	Sprint 4	Sprint 5	Sprint 6	Sprint 7	Sprint 8
1/21/22-2/2/22	2/4/22-2/16/22	2/18/22-3/2/22	3/4/22-3/16/22	3/18/22-3/30/22	4/1/22-4/13/22	4/15/22-4/27/22	4/29/22-5/4/22
Database Setup	Datastore Access	Login/Logout	Deleting a node	Copying a node	Pasting a node	Changing parent of node	Final Deployment Setup
Datastore Access	User Access Control	Registration	Setting nodes private/public	Changing contents of nodes	Changing tags of nodes	Final Testing/Documentation	Final Deployment
Cloud Setup	User Management	Creating a node	Searching	Usage Analysis Dashboard	Usage Analysis Dashboard	Default Items	Default Items
Default Items	Logging	Default Items	Default Items	Default Items	Rating		
	Default Items				Default Items		

		Fall 2021	Assignee	Phase 2					Phase 3								
				Milestone 2													
				Sprint 3			Sprint 4			Sprint 5			Sprint 6			Sprint 7		Sprint 8
				10/07/21 - 10/14/21			10/22/21 - 10/27/21			10/29/21 - 11/10/21			11/12/21 - 11/24/21			11/26/21 - 12/08/21		12/9/21 - 12/17/21
Fall Break 11/22/21 - 11/26/21			Jessie L	Project Plan	8	Jessie L	Project Plan	9	Jessie L	Low Level Design	15	Viet N	UM	15	Matthew C	Logging	15	Retrospective Review
Finals 12/13/21 - 12/18/21			Pammy P	Test Plan	12	Pammy P	Test Plan	2	Matthew C	BRD Revisions	3	Jessie L	Project Plan Revisions	2		Retrospective Prep		Finals Review
				Default Items	12	Matthew C	Network Diagram	5.5	Jessie L	Tech Spec Revisions	2.5	Pammy P	Test Plan Revisions	3		Default Items	12	
		Work Items					Default Items	12	Pammy P	Site Map Revisions	0.5	Matthew C	Network Diagram Revisions	5				
									Viet N	HL Design Revisions	3		Default Items	12				
Default Items	12									Default Items	12							
Backlog Grooming/Half way and Thursdays between sprints	3			PP: High Level (Fall)	1		High Level (Fall)	1		BRD: More specific direction on system behavior	1		Backlog Grooming	3		Backlog Grooming	3	
Sprint planning-Thurdays between sprints and possibly first/last day of current/next sprint	4			PP: High Level (Spring)	1		High Level (Spring)	1		BRD: More Non-Functional Requirements	2		Sprint Planning	4		Sprint Planning	4	
Sprint retrospective-half way and/or last day of sprint	2			PP: Low Level (Fall)	3		Low Level (Fall)	3		TS: Elaborate on Development/Testing Differences	2		Sprint Retrospective	2		Sprint Retrospective	2	
Client feedback/demo-Office hours days (Thurdays and Saturdays)	3			PP: Low Level (Spring)	3		Low Level (Spring)	4		TS: Address Front-End Technologies	0.5		Client Feedback/Demo	3		Client Feedback/Demo	3	
				TP: Test Plan Write Up (Draft)	6		Use Case 2: Copying a node	1		HL: Specify Data Access Components	1							
Cost of Deployment	$100	Tasks		Use Case 1: Creating a Node	0.5		Test Plan Final Draft	3		HL: Hardware Architecture	2							
				Use Case 2: Copying a Node	0.5		Find Ports/IPs	1		HL: Elaborate on general	1							
				Use Case 3: Pasting a Node	0.5		Research Cloud Provider	2		SM: Reduce Lines	0.5							
				Use Case 4: Setting private/public state	0.5		Create Diagram	1		Backlog Grooming	3							
Sprint (One Week Long)	Sprint (Two Weeks Long)			Use Case 5: Changing contents	0.5		Decide Input/Outputs	0.5		Sprint Planning	4							
Max Team Capacity-42	Max Team Capacity-84			Use Case 6: Changing tag	0.5		Specify Firewall Purposes	0.5		Sprint Retrospective	2							
Med Team Capacity-35	Med Team Capacity-70			Use Case 7: Changing parent	0.5		Specify Load Balancer Purposes	0.5		Client Feedback/Demo	3							
Min Team Capacity-27	Min Team Capacity-54			Use Case 8: Deleting a node	0.5		Backlog Grooming	3										
Avg Expected Team Capacity-32	Avg Expected Team Capacity-64			Use Case 9: Searching	0.5		Sprint Planning	4										
				Use Case 10: Rating	0.5		Sprint Retrospective	2										
				Backlog Grooming	3		Client Feedback/Demo	3										
				Sprint Planning	4													
				Sprint Retrospective	2													
				Client Feedback/Demo	3													
		Time/Sprint			31			30.5			36			37			27	

Estimates	Project Plan	17
	Test Plan	14
	Network Diagram	13
	Low Level Design	15
	UM	15
	Logging	15
	BRD Revisions	3
	Tech Spec Revisions	2.5
	Site Map Revisions	1
	HL Design Revisions	4
	Project Plan Revisions	2
	Test Plan Revisions	3
	Network Diagram Revisions	5

		Spring 2022	Phase 1						Phase 2						Phase 3						Phase 4					
			Sprint 1			Sprint 2			Sprint 3			Sprint 4			Sprint 5			Sprint 6			Sprint 7			Sprint 8		
			1/21/22-2/2/22			2/4/22-2/16/22			2/18/22-3/2/22			3/4/22-3/16/22			3/18/22-3/30/22			4/1/22-4/13/22			4/15/22-4/27/22			4/29/22-5/4/22		
Spring Break 3/28/22-4/1/22			J	Database Setup	38	P	Datastore Access	8	V	Login/Logout	14	P	Deleting a node	19	P	Copying a node	20	P	Pasting a node	20	P	Changing parent of node	23	Final Deployment Setup	25	
Finals 5/9/22-5/14/22		Work Items	P	Datastore Access	8	V	User Access Control	14	J	Registration	14	V	Setting nodes private/public	13	V	Changing contents of nodes	11	V	Changing tags of nodes	11		Final Testing/Documentation	25	Final Deployment	25	
			V	Cloud Setup	6	J	User Management	19	P	Creating a node	19	J	Searching	14	J	Usage Analysis Dashboard	14	J	Usage Analysis Dashboard	9	M	Default Items	16	M	Default Items	16
			M	Default Items	16	M	Logging	10	M	Default Items	16	M	Default Items	16	M	Default Items	16	M	Rating	11						
						M	Default Items	16										M	Default Items	16						
Default Items	16	Tasks	DB: Purpose for each database	2		DA: Network Communication	2		Login/Logout: Insert/Queries	2		Delete: Insert/Queries	2		Copy: Insert/Queries	2		Paste: Insert/Queries	2		Parent: Insert/Queries	2	Final Deployment Setup	25		
Deployment on Thursdays	4		DB: Find and organize information that we will be needing	6		DA: Error Handling	2		Login/Logout: UI	4		Delete: UI	7		Copy: UI	8		Paste: UI	8		Parent: UI	10	Final Deployment	25		
Backlog Grooming/Half way and Thursdays between sprints	3		DB: Determine classes/tables	6		DA:Testing	3		Login/Logout: Network Communication	2		Delete: Network Communication	2		Copy: Network Communication	2		Paste: Network Communication	2		Parent: Network Communication	2	Deployment	4		
Sprint planning-Thurdays between sprints and possibly first/last day of current/next sprint	4		DB: UML and Relation Scheme Diagraming	6		DA: Documentation	1		Login/Logout: Error Handling	2		Delete: Error Handling	2		Copy: Error Handling	2		Paste: Error Handling	2		Parent: Error Handling	2	Backlog Grooming	3		
Sprint retrospective-half way and/or last day of sprint	2		DB: Refining	6		UAC: Insert/Queries	2		Login/Logout: Testing	3		Delete: Testing	5		Copy: Testing	5		Paste: Testing	5		Parent: Testing	6	Sprint Planning	4		
Client feedback/demo-Office hours days (Thurdays and Saturdays)	3		DB: SQL	6		UAC: UI	4		Login/Logout: Documentation	1		Delete: Documentation	1		Copy: Documentation	1		Paste: Documentation	1		Parent: Documentation	1	Sprint Retrospective	2		
			DB: Testing	3		UAC: Network Communication	2		Registration: Insert/Queries	2		Private/Public: Insert/Queries	2		Contents: Insert/Queries	2		Tags: Insert/Queries	2		Final Testing/Documentation	25	Client Feedback/Demo	3		
Costs	$100		DB: Documentation	3		UAC: Error Handling	2		Registration: UI	4		Private/Public: UI	3		Contents: UI	2		Tags: UI	2		Deployment	4				
			DA: Analyzation	3		UAC: Testing	3		Registration: Network Communication	2		Private/Public: Network Communication	2		Contents: Network Communication	2		Tags: Network Communication	2		Backlog Grooming	3				
			DA: Access Requirements	2		UAC: Documentation	1		Registration: Error Handling	2		Private/Public: Error Handling	2		Contents: Error Handling	2		Tags: Error Handling	2		Sprint Planning	4				
			DA: Inserts/Queries	3		UM: Insert/Queries	2		Registration: Testing	3		Private/Public: Testing	3		Contents: Testing	2		Tags: Testing	2		Sprint Retrospective	2				
			Cloud: Setup	3		UM: UI	7		Registration: Documentation	1		Private/Public: Documentation	1		Contents: Documentation	1		Tags: Documentation	1		Client Feedback/Demo	3				
Week	Sprint		Cloud:Testing	3		UM: Network Communication	2		Create: Insert/Queries	2		Searching: Insert/Queries	2		UAD: Insert/Queries	2		UAD: Error Handling	2							
Max Team Capacity-42	Max Team Capacity-84		Deployment	4		UM: Error Handling	2		Create: UI	7		Searching: UI	4		UAD: UI	10		UAD: Testing	6							
Med Team Capacity-35	Med Team Capacity-70		Backlog Grooming	3		UM: Testing	5		Create: Network Communication	2		Searching: Network Communication	2		UAD: Network Communication	2		UAD: Documentation	1							
Min Team Capacity-27	Min Team Capacity-54		Sprint Planning	4		UM: Documentation	1		Create: Error Handling	2		Searching: Error Handling	2		Deployment	4		Rating: Insert/Queries	2							
Avg Expected Team Capacity-32	Avg Expected Team Capacity-64		Sprint Retrospective	2		Logging: Insert/Queries	3		Create: Testing	5		Searching: Testing	3		Backlog Grooming	3		Rating: UI	2							
	512		Client Feedback/Demo	3		Logging: Network Communication	2		Create: Documentation	1		Searching: Documentation	1		Sprint Planning	4		Rating: Network Communication	2							
Jessie (J)	16					Logging: Error Handling	2		Deployment	4		Deployment	4		Sprint Retrospective	2		Rating: Error Handling	2							
Matthew (M)	16					Logging: Testing	2		Backlog Grooming	3		Backlog Grooming	3		Client Feedback/Demo	3		Rating: Testing	2							
Pammy (P)	22					Logging: Documentation	1		Sprint Planning	4		Sprint Planning	4					Rating: Documentation	1							
Viet (V)	16					Deployment	4		Sprint Retrospective	2		Sprint Retrospective	2					Deployment	4							
						Backlog Grooming	3		Client Feedback/Demo	3		Client Feedback/Demo	3					Backlog Grooming	3							
						Sprint Planning	4											Sprint Planning	4							
						Sprint Retrospective	2											Sprint Retrospective	2							
						Client Feedback/Demo	3											Client Feedback/Demo	3							
		Time/Sprint		68			67			63			62			61			67			64		66		

Estimates																										
						Purpose for each database	2	Find and organize information that we will be needing	6	Determine classes/tables	6	UML and Relation Scheme Diagraming	6	Refining	6	SQL	6	Testing	3	Documentation	3					
	Database Setup	38		Datastore Access	16	Analyzation	3	Access Requirements	2	Inserts/Queries	3			Network Communication	2	Error Handling	2	Testing	3	Documentation	1					
	Cloud Setup	6		Setup	3													Testing	3							
	User Access Control	14								Insert/Queries	2	UI	4	Network Communication	2	Error Handling	2	Testing	3	Documentation	1					
	User Management	19								Insert/Queries	2	UI	7	Network Communication	2	Error Handling	2	Testing	5	Documentation	1					
	Logging	10								Insert/Queries	3			Network Communication	2	Error Handling	2	Testing	2	Documentation	1					
	Login/Logout	14								Insert/Queries	2	UI	4	Network Communication	2	Error Handling	2	Testing	3	Documentation	1					
	Registration	14								Insert/Queries	2	UI	4	Network Communication	2	Error Handling	2	Testing	3	Documentation	1					
	Creating a node	19								Insert/Queries	2	UI	7	Network Communication	2	Error Handling	2	Testing	5	Documentation	1					
	Deleting a node	19								Insert/Queries	2	UI	7	Network Communication	2	Error Handling	2	Testing	5	Documentation	1					
	Setting nodes private/public	13								Insert/Queries	2	UI	3	Network Communication	2	Error Handling	2	Testing	3	Documentation	1					
	Searching	14								Insert/Queries	2	UI	4	Network Communication	2	Error Handling	2	Testing	3	Documentation	1					
	Copying a node	20								Insert/Queries	2	UI	8	Network Communication	2	Error Handling	2	Testing	5	Documentation	1					
	Changing contents of nodes	11								Insert/Queries	2	UI	2	Network Communication	2	Error Handling	2	Testing	2	Documentation	1					
	Usage Analysis Dashboard	23								Insert/Queries	2	UI	10	Network Communication	2	Error Handling	2	Testing	6	Documentation	1					
	Pasting a node	20								Insert/Queries	2	UI	8	Network Communication	2	Error Handling	2	Testing	5	Documentation	1					
	Changing tags of nodes	11								Insert/Queries	2	UI	2	Network Communication	2	Error Handling	2	Testing	2	Documentation	1					
	Rating	11								Insert/Queries	2	UI	2	Network Communication	2	Error Handling	2	Testing	2	Documentation	1					
	Changing parent of node	23								Insert/Queries	2	UI	10	Network Communication	2	Error Handling	2	Testing	6	Documentation	1					
	Final Testing/Documentation	25																Testing								
	Final Deployment Setup	25																Testing								
	Final Deployment	25																Testing								
	Default Items	128																								
Total		518																								