Software Development Plan

BeenThereDoneThat

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February, 21st, 2024

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4.1 Plan Introduction

This Software Development Plan provides the details of the planned development for *BeenThereDoneThat*, a personal journaling application designed to simplify the journaling experience by providing users with a convenient and personalized journal writing experience. The IOS application will be constructed with features that will allow users to craft journal entries and filter through all entries to view their memories structurally. Users will also have the option to, enhance entries with photos that will be saved and posted to their photo grid for convenient viewing. Lastly, users will have the ability to be recommended a random prompt to answer in their prompt and can view all categorized prompts for personal selection. The architecture and functionality of all of the application's features will rely heavily on the organization of prompt database querying, a cohesive and strategic user interface for a seamless experience, and personalization through a curated user profile creation experience.

The significance of the development of this application is that it would bring the tedious and physical task of journaling to the comfort and convenience of a mobile Apple device so users can reflect on moments in their lives anytime and anywhere. Collaboration from team members in areas of focus include UI/UX, database management, and IOS mobile application development. An agile development approach will be used for *BeenThereDoneThat* to ensure flexibility in the design and development within each sprint cycle. This document will outline the project's milestones and deliverables over the course of January 2024 to April 2024.

Project Milestones:

No.	Milestones	Expectation	Tentative Subtasks Deadlines
1	Barebones Application Build	The foundation will establish 1) a baseline foundation for an IOS mobile application's views in the Swift environment using Xcode, 2) the construction of the Firebase system user authentication and prompts storage, and 3) Figma UX wireframe views implementation with Swift views environment.	2/18/24
2	Feed Entries (Landing Page)	The build of the landing page of the application which will consist of 1) the main navigation bar, 2) the user profile view and access, 3) the photo grid wall, 4) add a new entry option, and 5) filter entries	3/17/24

		based on category.	
3	Journal Entries Environment Construction	The construction environment for all written journal entries will bring 1) the ability to create new entries with all associated attributes of a journal entry, 2) a filtering feature to view in categories, internal sub-tabs for viewing all entries and finding new prompts (categorized by mood), and 3) the Firebase storage of user information, saved entries, and recommended prompts querying (required task).	4/14/24
4	Optional Features Implementation & Refinement	The final sprint will consist of the optional features hoped to be integrated once all required application functionality is complete and cumulative project refinement. The incorporation of 1) adding a location attribute to the journal entry creation, 2) adding a music attribute to a journal entry creation, 3) randomizing prompts feature, 4) emoji library attribute to the journal creation, 5) user customizable profile elements, 6) user evaluation and constructive feedback edits for final app refinement.	4/21/24

4.1.1 Project Deliverables

a. **Sprint #1: App Foundation ~ 3 weeks (Final Delivery: 2/18/24)**
   i. Sub Tasks:
      1. Sign-in & Sign-up View - 2/10
      2. All internal page views (set-up) - 2/10
      3. User authentication - 2/18
      4. Figma wireframe views migration to Swift - 2/18
b. **Sprint #2: Feed Entries (Landing Page) ~ 1 month (Final Delivery: 3/17/24)**
   i. Sub Tasks:
      1. 'Create new' entry + button/element - 3/03
         a. Requirements/Attributes: title, date, image
      2. Display Nav bar (two tabs) - 3/06
         a. Default: grid/camera tab
      3. Filtering feature (Oldest, Newest, A-Z, Z-A) 3/15
      4. Displaying a grid of photos with all photo entries - 3/17

c. Sprint #3: Journal Entries Environment Construction ~ 1 month (Final Delivery: 4/14/24)

    i. Sub Tasks:

        1. Two subtabs ("My Entries" & "Find Prompts") - 3/30

            a. "Find Prompts" w/ prompt category options - 4/14

                i. Anxiety, gratitude, reflection, etc…

            b. Displaying entries with/ all attributes - 4/17

                i. (default order is newest to oldest)

        2. 'Create new' entry + button & VIEW - 3/30

        3. Firebase Entry Category Curration for indexing entries dataset - 4/3

        4. Requirements/Attributes: title, prompt - 4/12

        5. Filtering feature (Oldest, Newest, A-Z, Z-A, entry category) - 4/12

d. Sprint #4: Optional Features Implementation + Refinement ~ 1 week (Final Delivery: 4/21/24)

    i. Sub Tasks: 4/21

        1. Location attribute w/ entry

        2. Song attribute w/ entry

        3. Randomize prompt auto selection feature

            a. Randomized recommended prompts creature (dice icon)

                i. user can keep rolling (clicking on dice) until they find a prompt they like then the title/caption and category (drop-down menu) are auto-filled with that selection

        4. Emoji Library/Entry Attribute (for journal entry identifiers)

        5. customizable color scheme/background themes or patterns (similar to Instagram DMs)

        6. Final application user evaluation and refinement **(required)**

            a. Evaluate an unbiased user's interaction with the application and document the procedure of initial use and any confusion to refine features and app layout accordingly

4.2 Project Resources

4.2.1 Hardware Resources

Hardware required for the development effort of this mobile app is an Apple computer of at least version macOS Ventura 13.5 to run Xcode 15.2. For the actual execution of this app, if ever launched, it would be launched onto the Apple App Store. We would need an Apple Developer account and App Store Connects in order to get the app approved and launched onto the App Store.

4.2.2 Software Resources

We plan on using XCode version 15.2 and XCode Simulator using iPhone 15. To comfortably use XCode, 16GB of RAM and 256GB of memory will be needed. For plug-ins, we added packages of FirebaseAnalytics, FirebaseAnalyticsSwift, and FirebaseAuth to connect our mobile app with our Firebase project. Google FireBase will be our database for user authentication as well as storage for user journal entries.
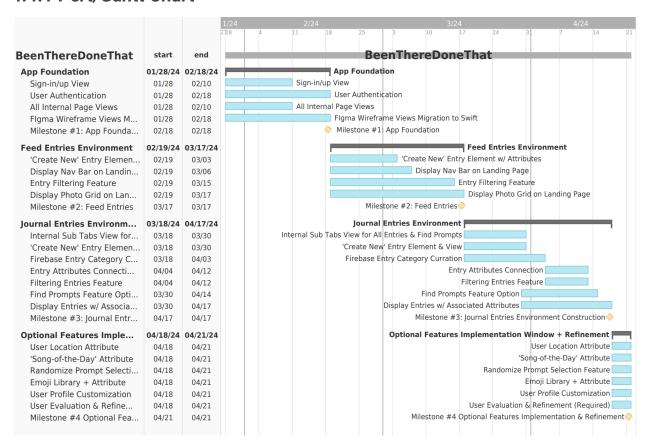
4.3 Project Organization

To successfully build *BeenThereDoneThat* in an efficient and timely manner, we have created a list of the four milestones that we want to accomplish and by when. We have already broken down what tasks each of us will complete for the app.

In the first milestone, we want to focus on the general setup of the app, including the login/sign-up functionality, as well as the app's overall look. Christina will complete the sign-in/sign-up and user authentication for the app and Troy will work on the set-ups for all page views as well as creating the mockups for UX views. In the second milestone, we want to focus on the photo feed entry aspect of the app. Christina will create the two navigation tabs at the bottom of the screen of the journaling tab and picture feed tab and work on the grid of photos with their entries. Troy will implement a "create new" button for the user to write a new photo entry. In the third milestone, we want to focus on the journaling aspect of the app. Christina will implement a "create new" button for the user to write a new journaling entry and the view in which the user will write an entry, with requirements of a title, prompt, etc. Troy will implement the two subtabs within this tab, one of which is "Find Prompts," where users can find inspiration with prompts placed in their own category (gratitude, anxiety, etc.) The second tab is "My Entries" which is a list of the user's past written journal entries.

4.4 Project Schedule

This section provides the complete schedule information for the *BeenThereDoneThat* application project.

4.4.1 Pert/Gantt Chart

BeenThereDoneThat	start	end	
App Foundation	01/28/24	02/18/24	App Foundation
Sign-in/up View	01/28	02/10	Sign-in/up View
User Authentication	01/28	02/18	User Authentication
All Internal Page Views	01/28	02/10	All Internal Page Views
FIgma Wireframe Views M...	01/28	02/18	FIgma Wireframe Views Migration to Swift
Milestone #1: App Founda...	02/18	02/18	Milestone #1: App Foundation
Feed Entries Environment	02/19/24	03/17/24	Feed Entries Environment
'Create New' Entry Elemen...	02/19	03/03	'Create New' Entry Element w/ Attributes
Display Nav Bar on Landin...	02/19	03/06	Display Nav Bar on Landing Page
Entry Filtering Feature	02/19	03/15	Entry Filtering Feature
Display Photo Grid on Lan...	02/19	03/17	Display Photo Grid on Landing Page
Milestone #2: Feed Entries	03/17	03/17	Milestone #2: Feed Entries
Journal Entries Environm...	03/18/24	04/17/24	Journal Entries Environment
Internal Sub Tabs View for...	03/18	03/30	Internal Sub Tabs View for All Entries & Find Prompts
'Create New' Entry Elemen...	03/18	03/30	'Create New' Entry Element & View
Firebase Entry Category C...	03/18	04/03	Firebase Entry Category Curration
Entry Attributes Connecti...	04/04	04/12	Entry Attributes Connection
Filtering Entries Feature	04/04	04/12	Filtering Entries Feature
Find Prompts Feature Opti...	03/30	04/14	Find Prompts Feature Option
Display Entries w/ Associa...	03/30	04/17	Display Entries w/ Associated Attributes
Milestone #3: Journal Entr...	04/17	04/17	Milestone #3: Journal Entries Environment Construction
Optional Features Imple...	04/18/24	04/21/24	Optional Features Implementation Window + Refinement
User Location Attribute	04/18	04/21	User Location Attribute
'Song-of-the-Day' Attribute	04/18	04/21	'Song-of-the-Day' Attribute
Randomize Prompt Selecti...	04/18	04/21	Randomize Prompt Selection Feature
Emoji Library + Attribute	04/18	04/21	Emoji Library + Attribute
User Profile Customization	04/18	04/21	User Profile Customization
User Evaluation & Refine...	04/18	04/21	User Evaluation & Refinement (Required)
Milestone #4 Optional Fea...	04/21	04/21	Milestone #4 Optional Features Implementation & Refinement

4.4.2 Task Resource Table

Assignee	Task	Resource
Christina	Sign-in & Sign-up View	Software: Xcode 15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Christina	All internal page views (set-up)	Software: Xcode 15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Christina	User authentication	Software: Firebase, Xcode 15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Troy	Figma wireframe views migration to Swift	Software: Figma, Xcode 15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13

Troy	'Create New' Photo Entry Element	Software: Xcode15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Christina	Display Nav Bar	Software: Xcode15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Christina	Display Photo Grid View	Software: Xcode15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Troy	FIltering Feed Feature	Software: Xcode15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Christina	'Create New' Journal Entry Element	Software: Xcode15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Christina	Display Complete Journal Entry View	Software: Xcode15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Christina	FIltering Entries Feature	Software: Firebase, Xcode15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Troy	Internal Sub Tabs for "My Entries" & "Find Prompts"	Software: Xcode15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Troy	'Find Prompts' Category Feature	Software: Firebase, Xcode15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Troy	'Create New' Journal Entry Element	Software: Xcode15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Troy	Firebase Prompt Category Curation	Software: Firebase, Xcode15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Christina	Location Attribute (Optional)	Software: Xcode15.2, Swift Hardware: Apple Computer w/ macOS

		Ventura 13
Troy	'Song of the Day' Attribute (Optional)	Software: Xcode15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Christina	Randomize Prompt Auto Selection	Software: Firebase, Xcode15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Troy	Emoji Library/Entry Attribute	Software: Firebase, Xcode15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Collaborative	User Evaluation + Refinement	Software: N/A Hardware: N/A
Collaborative	Testing	Software: XCTest, Firebase, Xcode15.2, Swift Hardware: Apple Computer w/ macOS Ventura 13
Collaborative	Technical Documentation	Software: Google Docs Hardware: Apple Computer w/ macOS Ventura 13