Mindfulness Application - Final Report [Prototype V 1.0]

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Document Purpose
The following document contains all feature and implementation details associated with the initial prototype of the SCI Mindfulness application. This includes feature details for respective target audience/clients, tech-stack used, completed elements, future plans and milestones, as well as any miscellaneous logistics.

Stakeholders
Our immediate stakeholder for this project is the SCI group, headed by Mary-Jo, the mindfulness and mental health coach for the group. Mary-Jo coordinates these meetings on a regular basis in order to provide mindfulness content. The issue at hand was that previously recorded content and any new information was not available or hosted in any organized platform.

For more information regarding Mary-Jo and her amazing work; https://mary-jo.com/.
SCI Group; https://sci-bc.ca/event-dir/mindfulness-with-mary-jo/

Upon reaching out to her, there was a potential to build an iOS application which allowed her followers to be able to connect in a more organized and efficient manner to the content offered by the group.

This application will allow users to select from specific categories to enable access to the content offered as well as posted by Marry-Jo, giving the user the opportunity to reflect, relax, and meditate. User's will also be able to stream content offered live by Marry-Jo without leaving the application, this goes for all of the content that is offered on the application.

Feature Rankings
The priority of the features that were included in this initial prototype were overall chosen based on importance, difficulty of implementation, and stakeholder/target audience requests. These features are considered as "core" features that are used to build the foundation of the application itself, hence part of the initial prototype design. Secondly, we rank the priority based on evaluating the cost (time, resources) as well as keeping 3 factors in mind; **feasibility**, **desirability**, **viability** (https://plan.io/blog/feature-prioritization/).

Features Completed - Prototype
- Established and connected Firebase Infrastructure, with all necessary infrastructure present within the frontend Swift application.
- Implemented the ability to create, login with respective accounts
- Designed and implemented a carousel that shall act as buttons to allow users to explore different categories in a subfield.
- Dynamic changing and modification of the carousel.
- Created the UI of the application based on the proposed prototype design document, which held information elicited from the SCI group regarding features.
- Ensured all Youtube links are dynamically retrieved from Firebase through the videoId.
- Designed a structural flow of the program, starting from user login until user is able to watch/access the specific Youtube video
- Presented the user an option to like/dislike videos, which can be used to allow users to have all their favorites videos in a separate section.

Pending/Improved Features - Design (Ranked By Priority)
- Replace the pull down with a back button, makes it more convenient for first time users
- Add the ability to contact someone for the login authentication issues

- More password authentication abilities, such as resetting passwords
- Change the message in the main page

Pending Features - Prototype (Ranked By Priority)

- Enhanced connections to Firebase to ensure all operations are loaded dynamically.
    - This includes all pictures/logos/documents
    - Buttons should be dynamically generated based on the number of videos that exist in Firebase Storage.
- Creating a page that will allow the user to explore their statistics and personal information. The infrastructure has already been created in Firebase.
- Create the ability to log a user in without having an account (As a guest, this should ensure that they are not able to interact with certain features. This includes the ability to like or dislike a video, having a statistic page to take a look at their data on the application)
- Ensure all UI labels/buttons and sizing works independently for different ranges of Apple products
- Explore other forms of media that can be incorporated into the application. Ex. SoundCloud, Spotify, Apple Music
- Optimization → This is specific to all operations that are being retrieved from Firebase. This includes handling all async/sync operation

Tech Stack

The tech stack used for this project is simplistic in that it revolves around **Firebase** for the backend and **Swift** for frontend UI implementation. Within the front-end, there is also the usage of pods using **cocopods** such as iCarousel and Youtube player. We have used Firebase as our backend as it supports multiple platforms, and its ease of use is always appreciated for learners. It also offers a lot of in-built support for authentication, as well as document storage and more.

Reference to firebase as being a frontrunner in mobile application backend support: (https://www.tristatetechnology.com/blog/firebase-backend-mobile-app/#:~:text=Firebase%20allow%20syncing%20the%20real,and%20accurate%20management%20and%20maintenance)

Conclusion

Overall, the goals of the prototype were exceeded within this term. The primary goal of this term was to elicit information from the SCI group, parse through the requests, and be able to come up with a design that would match their feature requests and be easy to use. This of course is a difficult process to find the perfect middle ground for, however, we were able to create an amazing application design that was met with great acceptance by the SCI group.

Furthermore, not only were we able to complete the design of the application but also got an amazing amount of progress done regarding its implementation. We were able to create a working user login connected to the background, and implemented everything from the home page to category selection to respective video playback. From here on, those who pick this project up will be able to easily follow our design to polish and implement the Swift application.

Logistics

Github Access → https://github.com/abdullahkhokhar/Mindfulness-iOS
Firebase Credentials → Email: spinalinjury22@gmail.com, Password: SpinalInjury22
https://plan.io/blog/feature-prioritization/