Personal Capstone Pitch

MTECH iOS Development Program

Introduction

Congratulations on the progress you have made so far in this course. Your personal capstone will be an opportunity for you to prove your learning in a concrete manner, both to the instructors in this program and to future employers.

Capstone Requirements:

- Create an app and **submit it to the App Store** as a portfolio item for future employers
    - Students who are younger than 18 years old on the last day of the Personal Capstone course will instead be required to submit their final app to the lead instructor, who will replicate the App Store review process and decide whether the app meets the requirements.
- Your app must **be unique** by doing one of the following:
    - Solve a problem that no app (or few apps) exist for on the App Store already.
    - Improve upon the design of an existing app with new features and capabilities.
    - Offering an app for free/lower price with features that are only available at a paid tier.
    - For games/entertainment-oriented apps, provide a unique experience or fresh take on an existing genre.
- In contrast, your app **should not**:
    - Be a clone of an existing app.
    - Be an app that already exists in hundreds of forms on the app store.
    - Be centered around an idea that will not be impressive or appealing to future employers.
- Your app must be **built in SwiftUI.**
- Your app must feature **a minimum of 3** different screens. You should plan to have a realistic maximum number of screens, **probably no more than 5**, in order to have time to complete this app within the allotted timeframe.
- Your app must use at least **one major additional framework** (such as ARKit, SpriteKit, CloudKit, MultipeerConnectivity, and so on).
- Your app must be complete, submitted, and approved by the last day of the program.
    - Approval can take up to two weeks or more, with additional time if your app is rejected. For this reason, **you must submit your app to Apple no later than 3 weeks before the program end date.**
    - That said, your goal should be to submit it by the last day of the Personal Capstone course; no additional in-class time will be allotted to work on your Personal Capstone during the Group Capstone project, where your in-class time must be dedicated to working on your group's app.
- Your app must follow Apple's **Human Interface Guidelines (HIG)**, including user relevant **animations** and **accessibility** features.

Pitch Requirements:

To help make sure that you do not fail to meet any of the above listed requirements, you will need to pitch your app to the class and have it approved prior to beginning work on your project.

For this assignment, please complete the following steps to prepare your pitch for the class.

Pitch Instructions

Complete each step on the following pages. In class, you'll walk us through your completed pitch. As you design your pitch, focus on designing your **minimum viable product**; focus on just the features that will make your app complete enough to post to the App Store. If there are features you would like to eventually include after the class ends, consider writing those down on another page.**Step 1: Elevator Pitch**

The classic elevator pitch asks that you imagine you are on an elevator ride with a rich executive and you have 60 seconds to explain to them why they should fund your project. The idea is that if you cannot explain your idea in 60 seconds, it is not clearly defined enough for anyone else to be interested.

For the first step of this assignment, write out the elevator pitch for your app idea below.

Your Pitch

“You know how most fitness apps are either too complicated or too boring to stick with? I’m solving that for the millions of people who want to get healthier just by walking.
The name of my app is isoWalk and it is based on a game-changing study from Japan where researchers found a specific walking pattern of 3 minutes moderate followed by 3 minutes brisk pace that’s shockingly effective for boosting fitness for all ages.
The magic of this app is in the smart, adaptive music that I have integrated into it. The tempo of the music guides the users pace and audibly cues them to switch speeds, creating a perfectly guided, hands-free workout. After choosing the music and the session length the user is ready to go.
It’s the simplest way for everyone to transform their everyday walk into a scientifically proven health boost.”

Step 2: Framework Research

On the day we went over researching and implementing frameworks, you learned how to review the documentation, build a sample project, and were introduced to several frameworks that are potentially useful for your app.
Using those skills, answer each of the following questions:

What framework have you selected to use in your app?	**The Frameworks I have selected so far are:** **HealthKit or CoreMotion** **AVFoundation** **UserNotifications**
What are the major features of this framework?	● HealthKit: Securely stores data on users devices, requires explicit user permission for each data type, tracks a wide range of health data, allows app to contribute data and read data from the shared health store. ● Or ● CoreMotion: Collects motion and orientation data from the device’s sensors, processes information from the accelerometer, gyroscope, and magnetometer, provides high-level device motion data (like pitch, roll, and yaw), tracks steps and activity through pedometer features, and delivers real-time or historical motion updates for apps such as fitness, games, and navigation. ● AVFoundation: Handles playback, recording, editing and composition of audio and video, provides control over media stack, works with system media players. ● UserNotifications: schedules and handles local and remote push notifications, presents alerts, sounds, and badges, even when the app is not running, allows custom notifications, group related notifications into threads, delivers notifications silently to the app.
What are the most basic instructions for using this framework? (e.g. for TipKit: “You create tips using the Tip protocol, then display them using TipViews”; keep it brief/high level)	-HealthKit: You request permission for specific health data types, then read or write to the shared health store using queries. -CoreMotion: After giving permission You create a motion manager or pedometer object, then start motion or step updates and handle the incoming data. -AVFoundation: You create an audio or video player object, load a media file, then control playback while you walk. -UserNotifications: You request notification permission, then create and schedule notification requests with the notification center.

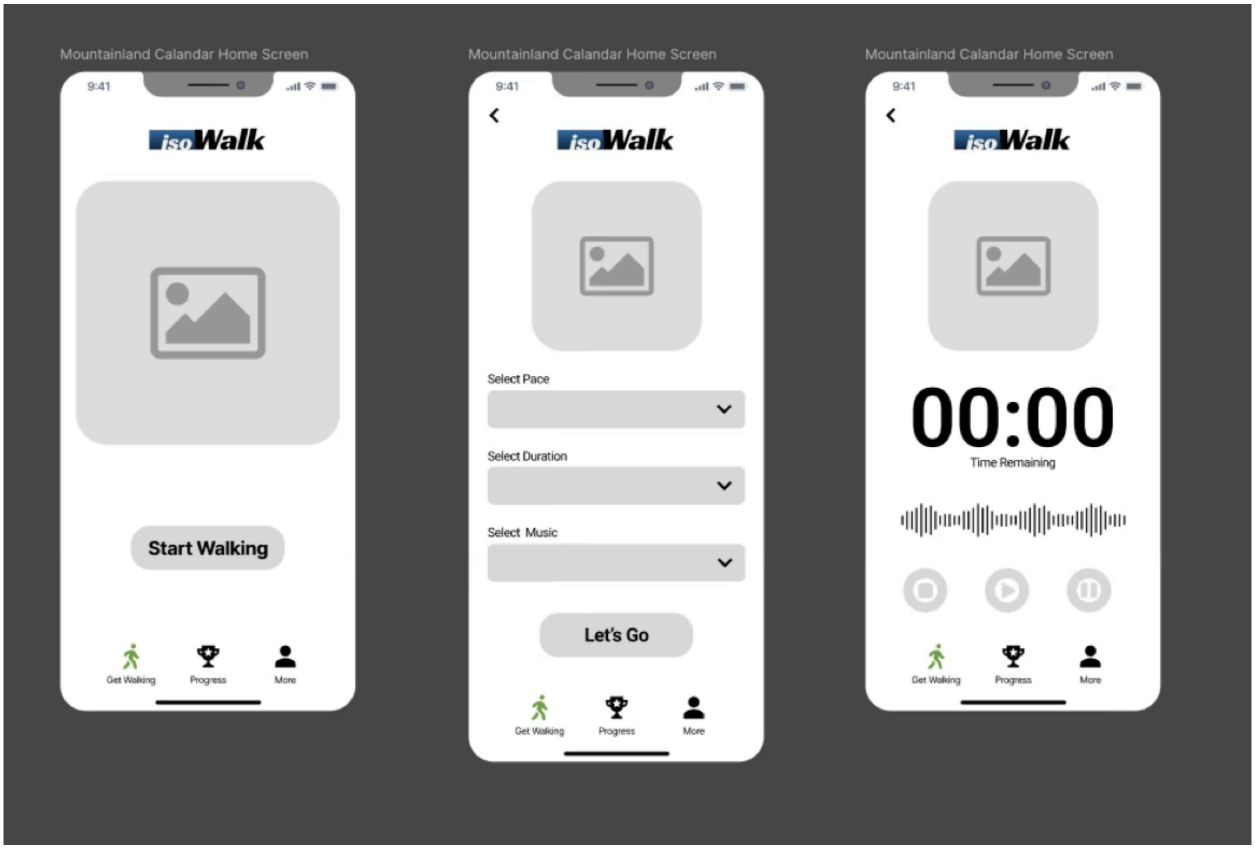
How will this framework integrate with/improve your app?	● HealthKit: for distance tracking, calorie count, unlimited stats storage on users personal devices, and security. ● CoreMotion: for real-time step and distance tracking during each walking session using the device's motion sensors. ● AVFoundation: for playing the custom 3-minute looping music. ● UserNotifications: for reminding users to do their daily walks, celebrate milestones, encourage consistency, and build habits.

Step 3: Design Sheet

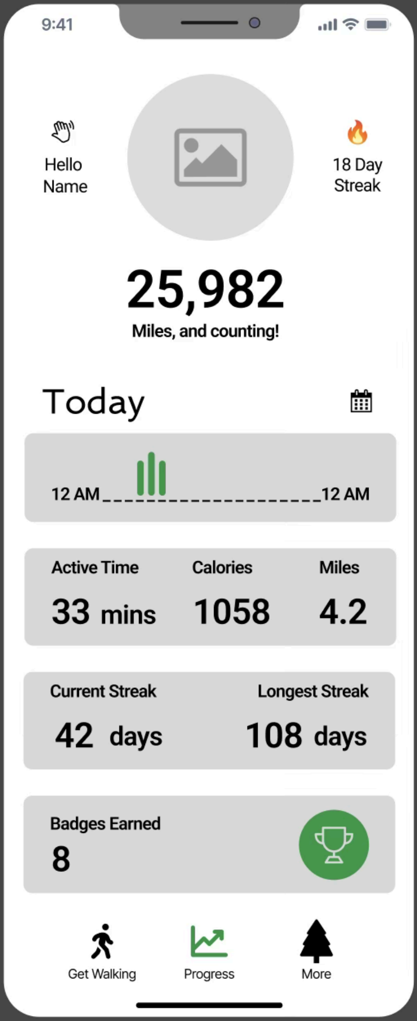
Your next goal is to create a visual representation of your app. This design does not have to be final, and can simply represent your first draft. Eventually, you will be required to create a full design document; for now, create a visual design that explains, in the most basic terms, how your app will work.

You can use a tool such as Freeform, Google Slides, or Figma to make a rough design, or draw it out on a piece of paper. Don't waste time drawing every UI element exactly as it will appear, as your design is likely to change after your pitch. Focus on doing the bare minimum to give the rest of us an idea of how your app will look and work.

Paste your design below. (You can delete the example to make room.)



Progress Home Screen



Hello Name

18 Day Streak

25,982

Miles, and counting!

Today

Active Time 33 mins

Calories 1058

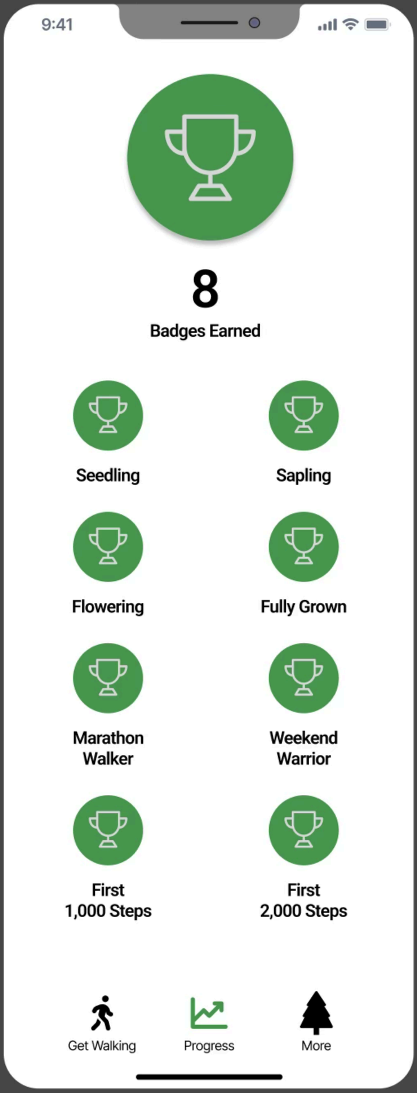
Miles 4.2

Current Streak 42 days

Longest Streak 108 days

Badges Earned 8

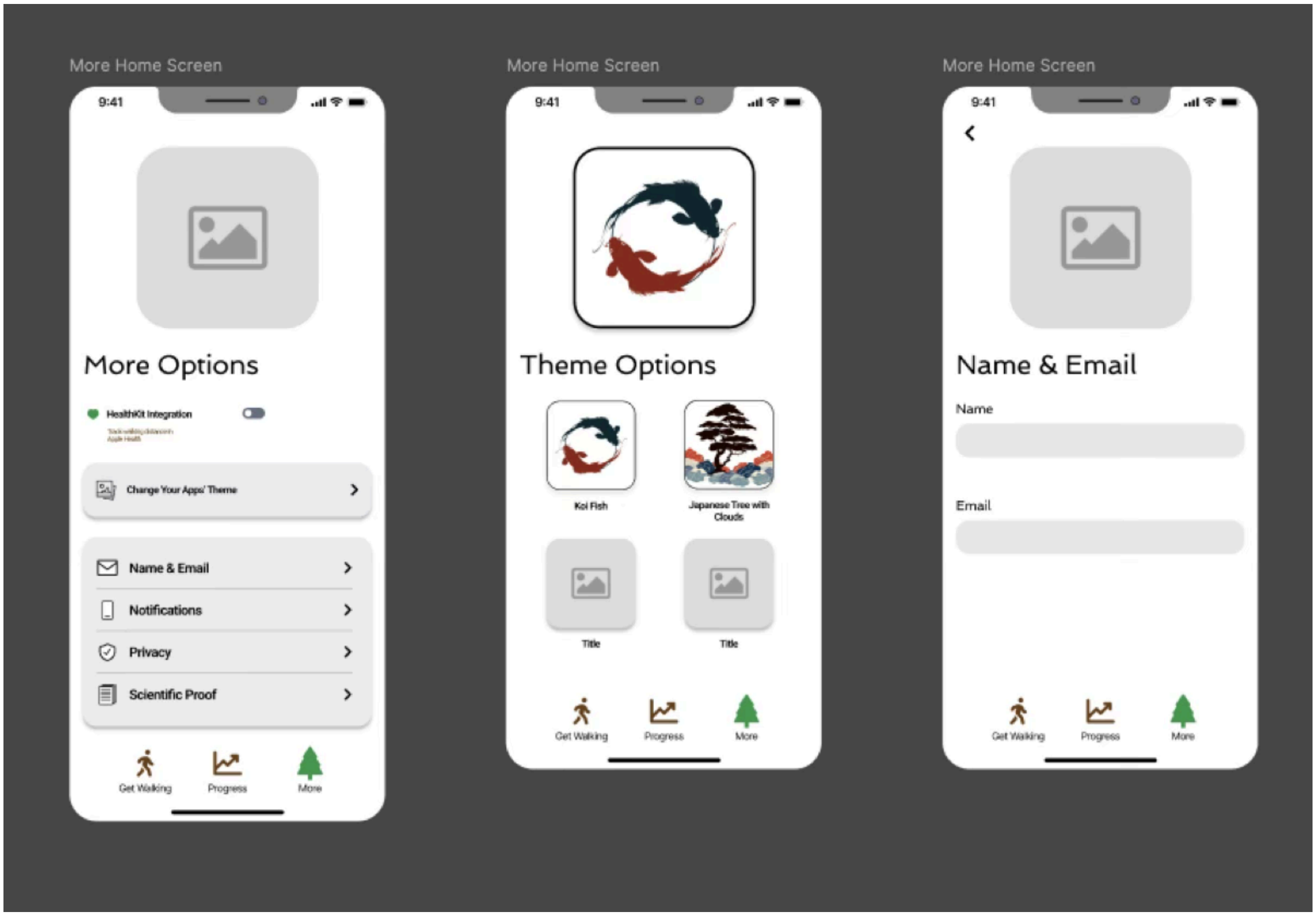
Badges Home Screen

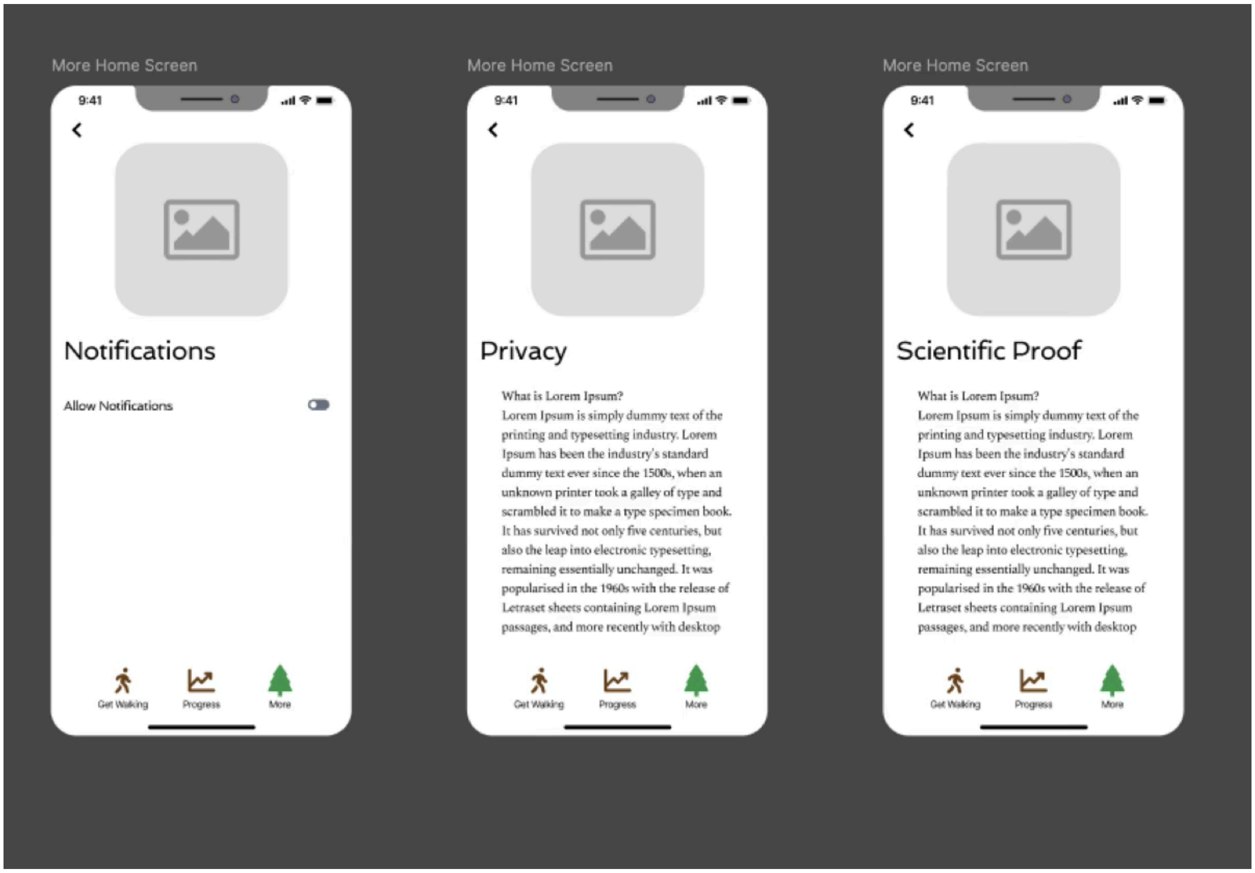


8

Badges Earned

Seedling	Sapling
Flowering	Fully Grown
Marathon Walker	Weekend Warrior
First 1,000 Steps	First 2,000 Steps


More Home Screen
9:41
More Options
HealthKit Integration
Track walking distance in Apple Health
Change Your Apps' Theme
Name & Email
Notifications
Privacy
Scientific Proof
Get Walking
Progress
More
More Home Screen
9:41
Theme Options
Koi Fish
Japanese Tree with Clouds
Title
Title
Get Walking
Progress
More
More Home Screen
9:41
Name & Email
Name
Email
Get Walking
Progress
More



What is Lorem Ipsum?
Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop

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Step 4: Market Research

One of the things we want to emphasize for this project is how it will look on a resume to future employers. The more useful, interesting, or real-world applicable your app is, the more likely it is to impress an employer.

Imagine you were a hiring manager, and you were comparing two employees with relatively equal experience, but they had different portfolio items—one showed you an app designed to help people organize and pack prior to a move and uses CloudKit, and one has an app that allows users to create a collection of their favorite Pokémon using a free API. Which would you be more inclined to hire? The second option isn't necessarily a deal breaker, but many hiring teams are going to select the one more relevant to the type of business they run, so unless you're applying at Nintendo, the packing app is probably a better idea.

We also want you to look for app ideas that actually fill a market need. Again, it's not a deal breaker to build an app when similar apps already exist on the app store, but ideally we'd also like to see this become a successful app. For example, take a moment to search the App Store for "D&D Character Sheet" and see how many results pop up; a D&D character sheet app is rather complicated, takes a lot of effort, and in the end is likely going to look pretty similar to the offerings already on the market. If you're going to add one to that list, make sure you can answer the question, "What will make a user pick mine over these others?"

In order to ensure your app will stand out, explain to us in your pitch how your app will one of the following things:

- Solve a problem that no app (or few apps) exist for on the App Store already
- Improve upon the design of an existing app with new features and capabilities
- Offer an app for free/lower price with features that are only available at a paid tier

- For games/entertainment-oriented apps, provide a unique experience or a fresh take on an existing genre

Explain what will make your app stand out on the App Store and to employers below.

What Makes Your App Special?
IsoWalk is not a step counter. It's a walking prescription. Based on the landmark research by Dr. Shizue Masuki, it guides you through the exact 30-minute interval walk (3 minutes at a normal pace followed by 3 minutes at a brisk pace) proven to significantly improve cardio-metabolic health, reduce fragility, sharpen focus and so much more. This is the one walk designed for everyone: from post-rehab patients to desk-based professionals wanting to optimize their lunch break to older adults building resilience. With seamless Apple Health integration and music that automatically sets your pace, effective exercise has never been simpler - or more engaging.

Step 5: Inspiration

While design is not something we focus on too heavily in this course, a good design will go a long way to getting eyeballs on your project and will be more likely to impress a future employer. A good way to work out your own design is to draw inspiration from well designed, aesthetically pleasing apps. Below, list a few apps you will use as a source of inspiration for the visual layout and style of your app, and describe what elements appeal to you and how you will take inspiration from them in your app.

Source app elements	How will it inspire my app?
Apple Music **Dulingo**	Apple Music: for the simplicity of the design of their music playing experience Dulingo: for their gamification, badges, and stats

Step 6: Time Estimate

The last step for your pitch is to consider whether your app is going to be realistic to complete in the time allotted. Not including unplanned changes to our calendar, you will have **25 days in class** to work on this project. With 3 hours in class and 1 hour at home each day, that means **you only have about 100 hours to complete this project**, unless you work on weekends, extra evening hours, and so on. In addition, some of that in-class time will include lessons, concept reviews, code challenges, and so on, so the actual time you will have in class will be a bit less than 100.

With that in mind, outline below a rough estimate of the time you will dedicate to this project. If you are going to work on weekends and evenings, you may exceed the 100 hours you estimate, but be prepared to fulfill that expectation if we approve your pitch on that basis. In your estimations, remember to include time for **planning, designing, coding views, coding logic, debugging, testing, gathering feedback, asking for help, researching,** and **submitting to the App Store**. Bear in mind that this is, of course, a very rough estimate, and the actual time you will spend will ultimately be impossible to accurately predict. It's better to overestimate than underestimate!

How long will building this take?
I will be using the whole 100**+** hours to build this app