



TAI CHI APP

**PREPARED BY
RANDY WEINSTEIN
FEB 4, 2020**

PROPOSAL



Contents

Disclaimer	3
Vision	4
Vision Statement	4
Opportunity	4
Competitors	4
Potential Partners	4
Differentiator	5
Potential Revenue Models	6
Other markets:	6
Benefits of Tai Chi	7
Customer Research	8
Risk Analysis	12
Market Analysis	13
Tai Chi Studios in Toronto	13
Is Tai Chi profitable ?	13
Customer Journey (simplified)	14
<i>Persona</i>	14
Customer Journey Map (Simplified)	15
Assumptions	16
User Stories (sample)	17
Stakeholder Register at Initiation:	18
Roadmap	19
Roadmap	19
Epic Goals :	20
Initiation	20
Discovery	20
MVP	20
Security & Customization	20
Expansion	20
Features	20
Release Planning	21
Backlog	22
Items before JIRA entry	22
Risk & Effort compared to Value	23
Next Steps	24
Agenda for first Refinement meeting	24

DISCLAMER

This product proposal is intended to demonstrate a product plan. It is not a real product.

VISION

Vision Statement

For students of Tai Chi

Who have difficulty practicing the set at home,

The Tai Chi companion app

Is a natural language Tai Chi guide

That verbally guides you through the set

Unlike other apps that require you to break form to interact with a screen.

Opportunity

Learning Tai Chi requires both in-person instruction and home practice, but due to the complexity of the set, it is a challenge for people to remember all of the moves in the set when practicing alone. This app will act as a study aid to guide the user through all the moves, to supplement in-person instruction.

Competitors

- Online apps showing pictures or videos of the moves in the sequence¹
- Audio files calling out the moves for \$7²
- YouTube videos³
- A list of moves on paper⁴
- Online courses, such as “The Great Courses” Mastering Tai Chi⁵

Potential Partners

- Tai Chi studios
- Book publishers
- Non-profits

¹ <https://play.google.com/store/apps/details?id=tk.myessentialoils.ideasapp&hl=en>

² <https://www.108taichimoves.com/tai-chi-add-on.html#calling>

³ https://www.youtube.com/watch?v=TxJW4-H7_R8

⁴ <https://www.108taichimoves.com/108-moves.pdf>

⁵ <https://www.thegreatcourses.com/courses/mastering-tai-chi.html>

Differentiator

1. The primary limitation of most apps and books is that they require a screen. As the Tai Chi moves are performed facing many directions, the practitioner almost never has a clear line of sight to a screen. In addition, many homes do not have adequate space to move through the whole set, so it is preferable to practice outdoors or in a larger room where there are no screens available. This app does not require a screen.
2. This app is not meant to teach Tai Chi, it is meant as a memory aid for home practice to supplement in-class instruction.

	Studio Practice	Low Tech Home practice	Traditional App	This App
Visual Learning	Senior practitioners are placed at all four corners of the room, so you always have a visual reference	No visual reference unless you break out of your practice and stop refer to notes, a book or a video	You have to break out of the set to reference the app. As you move around the set, you lose your sightline to any screen	Visual de-emphasised, there are audio queues only so you can query the app and get varying levels of detail on a move using voice commands
Auditory learning	Instructors may call out the names of the moves, but usually don't	Possible with video soundtrack but it is not adaptive	Yes, but the rate of the audio does not adapt to your practise. If you get lost, or forget one move, you have to break out of the set to interact with the app and rewind.	You can use verbal prompts to get the next move faster, or to repeat a move, or to explain a move in more detail.
Feedback	Instructors will break down a move and provide individual feedback	No feedback	No feedback	No feedback
Cost & Time	Expensive & requires travel to studio and matching schedule	Free, convenient	Small cost, convenient	Small cost, convenient
Equipment required	None	None	Device with a screen, the more screens the better.	Headphones or smart speaker only, can be used in larger spaces like parks and recreation rooms
Remembering the sequence	Sometimes even the instructor gets mixed up as to what move is next	Most practitioners cannot remember the sequence of moves in the set without guidance	Serves mostly as a memory aid, but prevents the user from doing the set as they constantly have to refer to the app.	Should help people move through memory gaps without breaking form.

POTENTIAL REVENUE MODELS

- License to studios to increase customer retention
- Plugin model, where studios can upload their variations of the set
- License as a companion app for books
- **Free download with 14 moves, in app purchase for full 108 move set. (preferred)**
- Government grant

Other markets:

If successful as a Tai Chi aid, this concept could be used for any complex sequence of moves, such as dance choreographies.

BENEFITS OF TAI CHI

- Improve strength, balance, and flexibility⁶
- Boost cognitive function⁷
- Improves COPD symptoms⁸
- Improves sleep quality⁹
- Improves symptoms of fibromyalgia¹⁰
- Prevents falls¹¹
- Reduces prenatal depression, anxiety and sleep disturbances¹²
- Helps with chronic nonspecific neck pain¹³
- Spiritual benefits
- Promotes east/west cultural exchange

⁶ <https://www.ncbi.nlm.nih.gov/pubmed/12966613>

⁷ <https://www.sciencedirect.com/science/article/pii/S2095254613000720#bib2>

⁸ <https://www.medpagetoday.org/pulmonology/smokingcopd/34141?pop=0&ba=1&xid=tmd-md&hr=trendMD&vpass=1>

⁹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5034925/>

¹⁰ https://www.bmj.com/content/360/bmj.k851?utm_source=trendmd&utm_medium=cpc&utm_campaign=tbmj&utm_content=consumer&utm_term=1-A

¹¹ <https://www.sciencedirect.com/science/article/pii/S1873959816300746>

¹² <https://www.sciencedirect.com/science/article/abs/pii/S1744388112000801>

¹³ <https://www.sciencedirect.com/science/article/abs/pii/S1526590016301055>

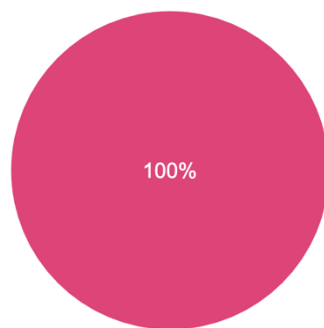
CUSTOMER RESEARCH

Tai Chi Questionnaire:

<https://forms.gle/8a5Z5wvPHmknrE6g6>

How long have you been practicing Tai Chi?

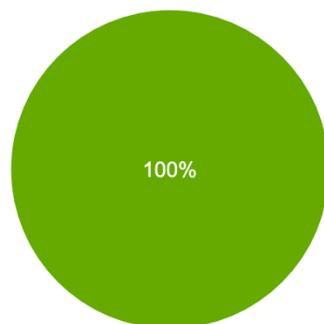
1 response



- Have not practiced Tai Chi Before
- Less than one month
- One month to 6 months
- 6 months to a year
- 1 to 3 years
- 3 to 6 years
- More than 6 years

How often do you practice Tai Chi at home?

1 response



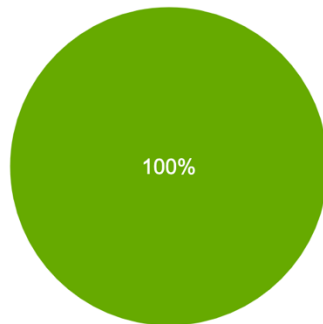
- Never
- About once a year
- About once a month
- About once a week
- Twice a week
- Three times a week
- More than three times a week
- Once a year

Tai Chi App Proposal

February 4, 2020

How often do you practice Tai Chi in a studio?

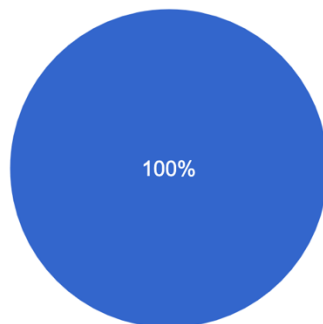
1 response



- Never
- About once a year
- About once a month
- about once a week
- Twice a week
- Three times a week
- More than three times a week
- Once a month

Do you meditate?

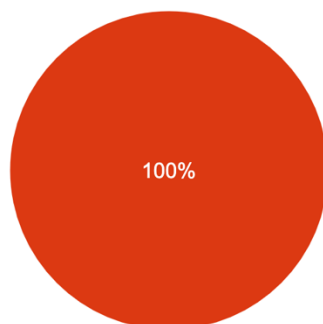
1 response



- Yes
- No

Do you use meditation apps?

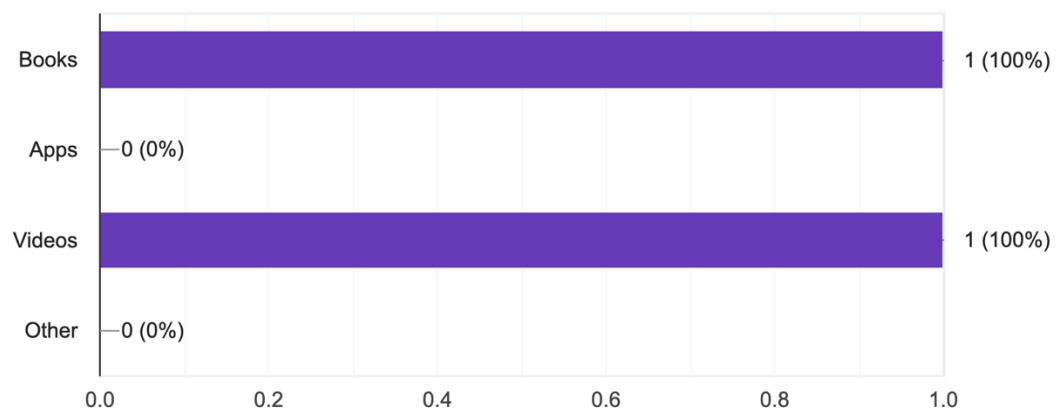
1 response



- Calm
- Headspace
- 10 % Happier
- Inscape
- Stop, Think & Breathe
- Buddhify
- Simple Habit
- Insight Timer
- None

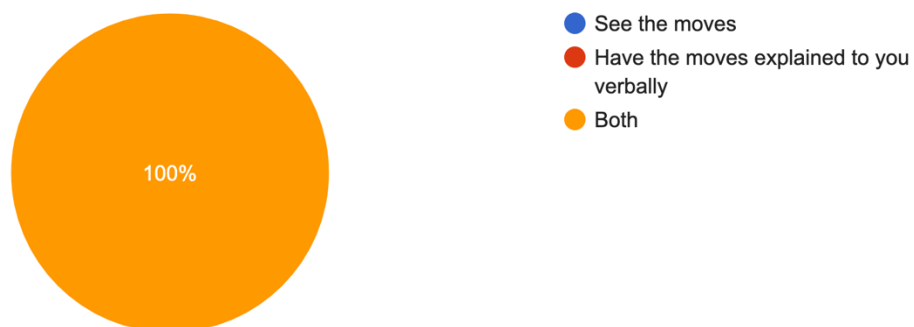
What aids do you use in your Tai Chi practice?

1 response



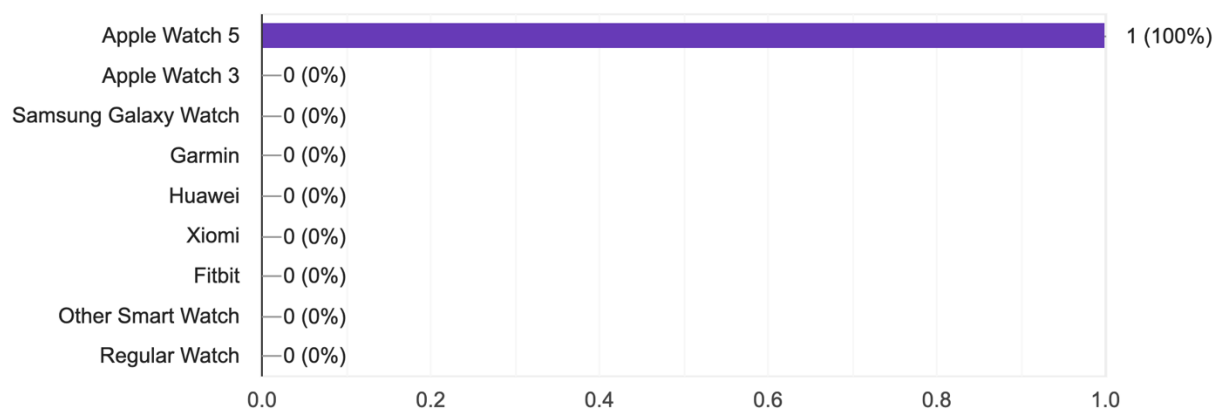
Do you prefer to see the moves or have them explained to you?

1 response



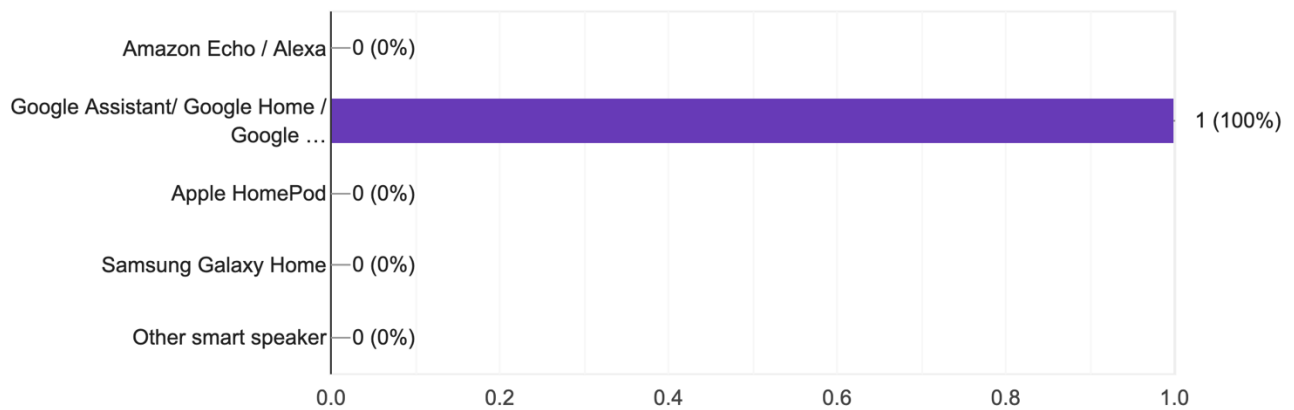
Do you own any of the following watches?

1 response



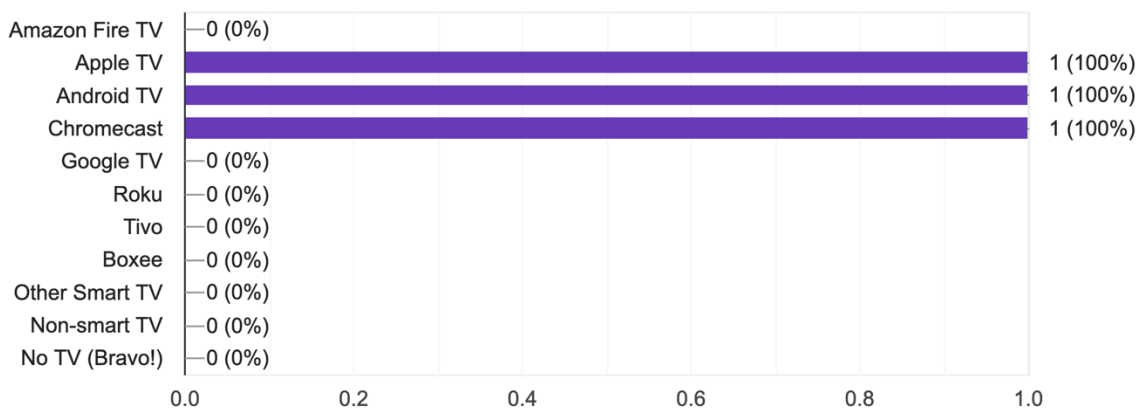
Do you own any of the following smart speakers?

1 response



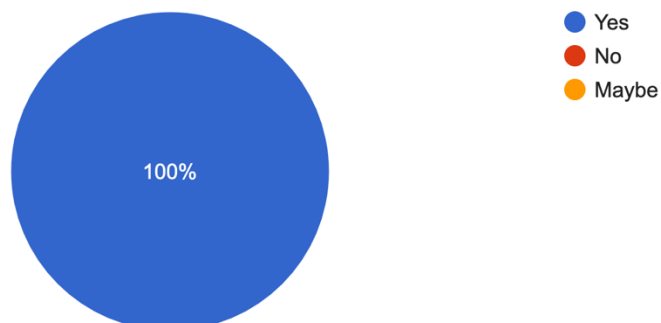
Do you own any of the following smart TVs?

1 response



Would you be interested in an app to help you with your Tai Chi practice?

1 response



RISK ANALYSIS

- People misunderstand the concept and think the app will teach them Tai Chi without in-person instruction
- People would prefer a simple mp3 or YouTube video
- The technology may not yet be mature enough to be easy to use (Alexa, Google home, Siri, Text-to-speech)
- The target market may not be technologically savvy enough to use this type of app
- Tai Chi studios might feel threatened, or think that this app competes with in-class instruction
- Tai Chi studios may claim intellectual property on the text used to explain moves

MARKET ANALYSIS

There are nine organizations operating in Toronto whose primary focus is Tai Chi, in addition to many martial arts studios and cultural organizations that teach Tai Chi as part of their more general programs.

Tai Chi Studios in Toronto

- City of Toronto¹⁴
- Tai Chi and Meditation Centre¹⁵
- Fung Loy Kok Institute of Taoism¹⁶ (153 locations in Ontario)
- Shambala¹⁷
- Rising Sun School of Tai Chi¹⁸
- Yang Style Tai Chi Centre¹⁹
- Shifuyuanjing (Shaolin) Qigong²⁰
- QiBelly²¹
- Tai Chi Journey²²

Is Tai Chi profitable ?

The Fung Loi Kok Institute of Taoism is a registered charity²³, therefore their financials are public. Here are their stats for 2017:

- 377 locations in Canada
- Operating in over 30 countries
- Canadian Expenses 2017: over **\$7.5 million**
- Canadian Revenue 2017: over **\$9 million**
- Canadian Assets: over **\$44.5 million**

¹⁴ <https://www.toronto.ca/data/parks/prd/fitness/reg/tai/index.html>

¹⁵ <https://www.torontotaichimeditationcentre.com/>

¹⁶ <https://www.taoist.org/locations/toronto/>

¹⁷ <https://toronto.shambhala.org/program-details/?id=416796>

¹⁸ <https://taichitoronto.ca/>

¹⁹ <https://www.taichitoronto.net/>

²⁰ <https://www.shifuyuanjing.com/>

²¹ <https://www.qibelly.com/>

²² <http://taichijourney.ca/>

²³ <https://www.charityintelligence.ca/charity-details/460-fung-loy-kok-institute-of-taoism>

CUSTOMER JOURNEY (SIMPLIFIED)

Persona	Robert	Evelyn	Cynthia	Vivian
Title	Uninitiated	New Tai Chi student	Seasoned Tai Chi Veteran	Tai Chi Instructor
Demographic	App addict, downloads everything	Middle aged, working, stressed out, tech savvy, Tai Chi is a way to relax and escape from home	Retired, some health issues, but still mobile, not tech savvy. May have slight memory or vision issues.	Working, does this as a passion in her spare time.
Experience	Has never been to a Tai Chi class	Likes Tai Chi, probably will drop out at some point due to scheduling conflicts	Likes Tai Chi does not practice at home because she can't remember the sequence.	Practicing for 10 years, teaching for 3, does workshops with other instructors, likes the sense of community
Actions needed	Needs to learn the basics	Home practice as an alternative to in-class study to bridge periods where she is too busy to go to a studio	Home practice	Recommend app to students, encourage them to practice at home, get feedback on where in the set they are getting stuck at home
Obstacles	Not as interested in Tai Chi, just wanted an app for relaxation, not invested	Make time for practice in a busy household. It might be easier to be away from it all at the studio	Does not know how to use smart speakers or apps	Resistance to change, weary of fads, might feel threatened by technology
Expectations	The app will teach him Tai Chi and it will be easy	The app will behave like other exercise and meditation apps she already uses	App will behave like a low-tech book or video. Not patient with new tech.	App will not teach the wrong thing

Customer Journey Map (Simplified)

Robert

1. Downloads the app (curious)
2. Learns that he needs to take a class to learn Tai Chi from the welcome screen (disappointed)
3. Tries the app anyways (impatient)
4. It is too hard to follow (frustrated)
5. Uninstalls the app. (relieved)
6. Result: None

Evelyn

1. Signs up for Tai Chi class (excited)
2. Really enjoys it for the first few weeks (determined)
3. Instructor recommends downloading the app (curious)
4. She downloads the app, but does not use it (indifferent)
5. She has to skip two classes in a row because of another commitment (guilty)
6. She uses the app in place of the class (relieved)
7. She realizes that she knows 18/108 moves, but then on one move she is less confident (unsure of herself)
8. She returns to class with a specific question on move 19 (attentive)
9. Result: Returned to class instead of abandoning, is more engaged in learning

Cynthia

1. Is recommended the app by the instructor (skeptical)
2. Does not know how to download the app (confused)
3. Is encouraged by Evelyn's use of the app, asks for help downloading (bonding)
4. Uses the app at home, realizes that she needs to customize it (frustrated)
5. Returns to class, gets more help (embarrassed)
6. Uses the app habitually, now practices at home in addition to class (relief)
7. Result: Feels more confident in class because she knows the set on her own. (proud)

Vivian

1. Comes across the app in a workshop or via search (curious)
2. Downloads app to try it (curious)
3. She is skeptical, but does not uninstall it (skeptical)
4. When a student comments that they can't practise at home because the set is too complicated, she is reminded of the app (curious)
5. She recommends the app to the one student (curious)

ASSUMPTIONS

- **Assumption:** The audio only approach will work to increase the length of practice
 - **Test:** Watch someone do Tai Chi with no guidance. Then watch them with simple verbal queues only, then watch them with the option to ask for complicated but non-specific (canned) instructions on a particular move.
 - **Metric:** Number of moves completed
 - **Decision:** If the number of moves does not increase, perhaps the audio only method is flawed. Test again with audio and visual cues.
-
- **Assumption:** The audio only approach will work to help guide people past moves they are unsure about
 - **Test:** Watch someone do Tai Chi with simple verbal queues only, then watch them with the option to ask for complicated but non-specific (canned) instructions on a particular move.
 - **Metric:** Number of moves completed
 - **Decision:** If the audio only method is not able to help people past a troubled move, perhaps we should offer a “skip move” or “mark move for review in class” functionality instead, which is easier to implement!
-
- **Assumption:** Smart speaker technology is ready for more complicated use cases.
 - **Test:** Spike
 - **Metric:** Can the platform accept verbal ques and adjust the feedback accordingly
 - **Decision:** Do we offer a smart speaker version, such as an Alexa Skill, or stick with a traditional app
-
- **Assumption:** Smart watch technology is advanced enough to make this a pleasurable experience.
 - **Test:** Spike
 - **Metric:** Can the platform accept verbal ques and adjust the feedback accordingly, or does it require physical interaction?
 - **Decision:** Do we offer a smart watch version, such as Apple Watch 5 version, or stick with a traditional app
-
- **Assumption:** Text to speech is good enough that we can allow easy customization of the move explanations
 - **Test:** Spike
 - **Metric:** Subjective. Is it a calming effect or annoying?
 - **Decision:** Do we offer text-to-speech and quick customization, or do we use pre-recorded human voice and have a higher barrier to customization.
-
- **Assumption:** There is a need for an app targeting people who are already taking Tai Chi lessons
 - **Test:** If there is demand, people will download the app
 - **Metric:** Number of downloads
 - **Decisions:** Adjust marketing or find co-branding. Abandon the app if there is no interest

USER STORIES (SAMPLE)

- As a Tai Chi practitioner, I'd like to listen to the moves as I practice at home so that I can remember the sequence without breaking form and referring to notes
- As a Tai Chi practitioner, I'd like the ability to pause playback of the sequence when I get lost so that I can get help with the move from my favourite info source.
- As a Tai Chi practitioner, I'd like the ability to mark a position in the set for follow-up in class.
- As a Tai Chi practitioner, I'd like the ability to adjust the speed of the sequence during playback so it is not too slow or too fast for my current level.
- As a Tai Chi practitioner, I'd like the ability to get more details on a move when I don't remember exactly what the move entails.
- As a Tai Chi practitioner, I'd like the ability to change the voice or add background music to make practice a more relaxing experience.
- As a Tai Chi practitioner, I'd like a reminder to practice so that I have an excuse to slip away from my family
- As a Tai Chi practitioner, I'd like the ability to track my practices so that I can see my progress in remembering the set.
- As a Tai Chi practitioner, I'd like the ability to share my practise summary to social media so that I can brag to my friends about my progress.
- As a Tai Chi practitioner, I'd like the ability to ask a question from my instructor or my classmates so that I can get more immediate feedback.
- As a Tai Chi practitioner, I'd like the app to be able to detect when I am mis-performing a move so that I have confidence I am performing the set correctly.
- As a Tai Chi practitioner, I'd like the app to give positive feedback as I progress to help me feel better about practicing at home.
- As a Tai Chi studio, I'd like the ability to customize the set according to the way I teach it.
- As a Tai Chi studio, I'd like to gather some stats on my class to see how they are progressing as a group.
- As a Tai Chi studio, I'd like to gather some stats on my individual students to see how they are progressing compared to the group.
- As a Tai Chi studio, I'd like to be able to offload my membership management to an app to make it easier to track and collect membership fees.

STAKEHOLDER REGISTER AT INITIATION:

Name	Phone	Email	Type	Interest	Influence	Risks	Management
Taoist Tai Chi	(416) 656-2110		Studio	20 %	50 %	Copyright infringement	Not contacted yet, be very gentle with pitch
Me	Myself	I	Product Sponsor	100 %	80 %	Time	If I have no investors, I make all the profit
Me	Myself	I	Developer	80 %	80 %	Time	I would have to write MVP, can subcontract if evidence shows this is a viable profitable product
AWS			Vendor	0 %	40%	Immature Tech, Costs	Alexa is a risk, AWS is not
Apple			Vendor	0%	40 %	None	
Google			Vendor	0%	20 %	Immature Tech, Costs	Google home roadmap might have what we need in the future, otherwise we're not using them
Investor	??	???	Investor	80%	80%	Instead of working for me, I work for the investor.	Don't do this unless I have done a lot of research, but pitch is prepared

ROADMAP

Roadmap

<i>Epic</i>	Initiation	Discovery	MVP	Security & Customization	Expansion	Features
<i>Cloud</i>	Audio Generation Spike	Rest API	DB	Auth & Personalization	Scalability & Reliability	Backlog Items
<i>iOS</i>	iOS App Spike	Apple Watch Spike	iOS App	iOs App Auth & Personalization	Watch or Tablet App	Backlog Items
<i>Other devices</i>	Android App Spike	Smart Speaker Spike	Android App	Android App Auth & Personalization	Smart Speaker App	Backlog Items

EPIC GOALS :

Initiation

- Decide what cloud we are going to host this in
- Decide if we are going to generate audio on the backend or the front end
- Decide if we are going to generate the audio upfront or on-the-fly
- Discover any glaring technical challenges on iOS or Android
- Create wires for an MVP mobile app
- Decide how the front end is going to communicate with the backend
- Complete a high level architecture
- Create a sequence diagram for one of the user flows

Discovery

- Design the REST API that will support the user flow for both devices
- Have a mock API set up that developers can code against
- Decide what features an apple watch can support, create wires if any
- Decide what features a smart speaker can support, create a script if any

MVP

Usable Android and iOS app against an implemented real API

Security & Customization

- iOS app and Android app support user authentication and profiles
- Backend supports authentication and user profiles, and “power users”
- One personalization feature implemented, such as bookmarking, preferences, or set customization.

Expansion

- Address scalability & reliability and cost issues in backend (refactor)
- Apple Watch version in market
- Smart Speaker version in market

Features

Backlog should be very full at this point.

RELEASE PLANNING

There are 2 epics/sprints without a release, where we set up source control with automated testing scripts, set the coding standards and definition of done as part of the initial backlog planning meeting, set up automated deploys to the various app stores, and implement some type of blue/green continuous integration on the cloud side using an AWS CloudFormation script hooked into AWS code deploy and GitHub. The third epic / sprint should be a customer facing MVP on a subset of devices, after that it is fast and furious continuous integration and tight releases. This product has no competitors and no stakeholder deadlines to force release dates, and the product does not have large security, reliability or scalability constraints, so the release schedule can be as fluid as we need. We'll probably automate release notes from source control, but no need to publicize the releases in advance. We'll use them for marketing post-release only.

BACKLOG

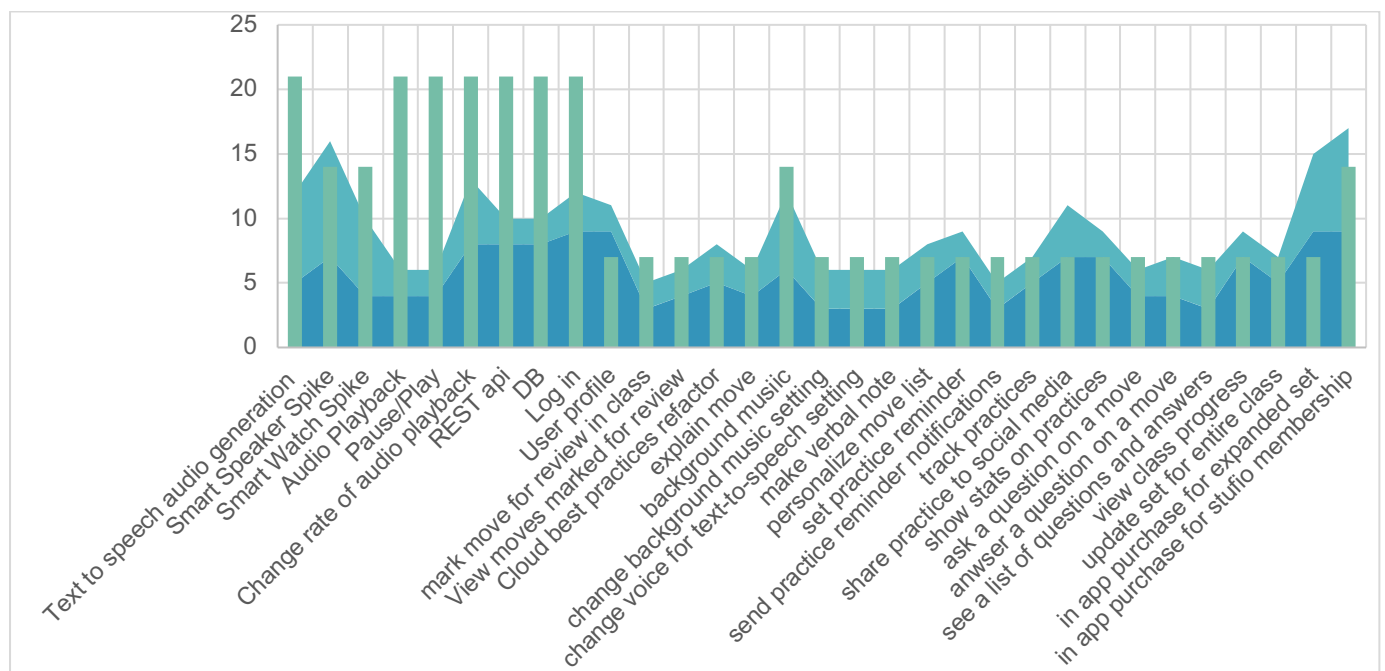
Items before JIRA entry

ID	Feature	Epic	Server Sprint	iPhone Sprint	iPad Sprint	Apple Watch Sprint	Android Sprint	Alexa Sprint	Effort /10	Kano	Risk / 10	Value
1	Text to speech audio generation	Initiation	1						5	3 Mandatory	7	21
2	Smart Speaker Spike	Discovery						2	7	2 Exciter	9	14
3	Smart Watch Spike	Discovery				2			4	2 Exciter	6	14
4	Audio Playback	MVP		3	3	5	3	5	4	3 Mandatory	2	21
5	Pause/Play	MVP		3	3	5	3	5	4	3 Mandatory	2	21
6	Change rate of audio playback	MVP		3	3	5	3	5	8	3 Mandatory	5	21
7	REST api	Discovery	2	3	3	5	3	5	8	3 Mandatory	2	21
8	DB	MVP	3	4	4	5	4	5	8	3 Mandatory	2	21
9	Log in	Security/Customization	4	4	4	5	4	5	9	3 Mandatory	3	21
10	User profile	Security/Customization	4	4	4	5	4	5	9	1 Linear	2	7
11	mark move for review in class	Security/Customization	4	4	4	5	4	5	3	1 Linear	2	7
12	View moves marked for review	Security/Customization	4	4	4	5	4	5	4	1 Linear	2	7
13	Cloud best practices refactor	Security/Customization	5						5	1 Linear	3	7
14	explain move	Expansion	6+	6+	6+	6+	6+	6+	4	1 Mandatory	2	7
15	background music	Expansion	6+	6+	6+	6+	6+	6+	6	2 Exciter	6	14
16	change background music setting	Expansion	6+	6+	6+	6+	6+	6+	3	1 Linear	3	7
17	change voice for text-to-speech setting	Expansion	6+	6+	6+	6+	6+	6+	3	1 Linear	3	7
18	make verbal note	Backlog	6+	6+	6+	6+	6+	6+	3	1 Linear	3	7
19	personalize move list	Backlog	6+	6+	6+	6+	6+	6+	5	1 Linear	3	7
20	set practice reminder	Backlog	6+	6+	6+	6+	6+	6+	7	1 Linear	2	7
21	send practice reminder notifications	Backlog	6+	6+	6+	6+	6+	6+	3	1 Linear	2	7
22	track practices	Backlog	6+	6+	6+	6+	6+	6+	5	1 Linear	2	7
23	share practice to social media	Backlog	6+	6+	6+	6+	6+	6+	7	1 Linear	4	7
24	show stats on practices	Backlog	6+	6+	6+	6+	6+	6+	7	1 Linear	2	7
25	ask a question on a move	Backlog	6+	6+	6+	6+	6+	6+	4	1 Linear	2	7

26	answer a question on a move	Backlog	6+	6+	6+	6+	6+	6+	4	1 Linear	3	7
27	see a list of questions and answers	Backlog	6+	6+	6+	6+	6+	6+	3	1 Linear	3	7
28	view class progress	Backlog	6+	6+	6+	6+	6+	6+	7	1 Linear	2	7
29	update set for entire class	Backlog	6+	6+	6+	6+	6+	6+	5	1 Linear	2	7
30	in app purchase for expanded set	Backlog	6+	6+	6+	6+	6+	6+	9	1 Linear	6	7
31	in app purchase for studio membership	Backlog	6+	6+	6+	6+	6+	6+	9	2 Exciter	8	14

Risk & Effort compared to Value

The compound line graph in the back represents Risk and Effort stacked. The bars represent value. The tallest bars that stick up above the line graph represent the most value for the least effort and risk



NEXT STEPS

1. Secure signoff from a project sponsor, easy, it's me
2. Assemble a development team
3. Assemble office, hardware, software licenses etc.
4. Host Initial Product Backlog refinement meeting (agenda below)
5. Start with a sprint planning meeting and kick off the first sprint

Agenda for first Refinement meeting

1. Intros for all the people in the room, get to know each other. 30 mins
2. Use the pitch deck to foster some excitement for the project 30 mins
3. Agree on working parameters for the team 30 mins
4. Pass out Presentation document for later reading.
5. Break 20 mins
6. Look at backlog, ideation to find feature gaps for earlier sprints and flesh out the backlog 1 hour
7. Start refining sprint 1, splice stories into manageable chunks, between 2 hours and 3 days completion time, as the team sees fit and time permits
8. Break 1 hour
9. Questions from team to me, however long that takes
10. Second pass at fleshing out the backlog 30 mins
11. Confirm some tech choices and assumptions in addition to working parameters 30 mins
12. Definition of Done 30 mins
13. Close out meeting.

Tai Chi App Proposal

February 4, 2020