# Heuristic Evaluation of [WellWatch]

#### 1. Problem

WellWatch fills in free time in a user's day with short, healthy activities

#### 2. Violations Found

#### 1. [H2-3 Consistency & Standards] [Severity 4] [Found by: A, C, D]

The user can only choose a randomly selected activity, there is no option for them to choose from multiple activities/ see a last of activities

### 2. [H2-2: Match Between System & Real Worlds] [Severity 4] [Found by: A,B, C, D]

The "home" button takes you to the welcome screen, which is a useless screen, and when you click on the button on the welcome screen it takes you right back to where you were

## 3. [H2-4: Consistency & standards] [Severity 3] [Found by: C, D]

Sometimes you are able to click on the box that resembles a text box, but sometimes you can't click it. It seems a little arbitrary where you click to go to the next step

## 4. [H2-1: Visibility of System Status] [Severity 2] [Found by: A, B]

There's no way to track your progress on the app. It would be helpful to have something similar to the iPhone activity tracker to see the progress on the app

#### 5. [H2-2: Match Between System & Real Worlds] [Severity 4] [Found by: A,B, D]

The message screen seems to be mirrored after a chat history, but sometimes the whole chat disappears and starts over. It seems like this should scroll, but like a texting conversation.

#### 6. [H2-10: Help & Documentation] [Severity 3] [Found by: A,C, D]

When you complete an activity, it asks if you want to add the activity to the calendar. It's unclear if you mean retroactively add it to the calendar or schedule it for later on. There should be documentation for this.

## 7. [H2-9 Help users recognize, diagnose, and recover from errors] [Severity 2] [Found by: A,C, D]

Once the user decides to do an activity or not, there is not a clear ability to change their mind or go back in any way. Once the user chooses "Not now" or "Yes!" they are stuck with that decision. This violates the heuristic because there is no clear path for users to recover from errors. I would recommend allowing users the ability to change their mind or pick from a list of activities at any time so they can do the activity that they accidently or purposefully said no to just moments prior.

## 8. [H2-8 Aesthetic and minimalist design] [Severity 1] [Found by: B]

While the 'Home' and activity pages (when the users have decided to partake in activity) are very aesthetically pleasing, the rest of the app lacks beauty in the same way that the entry page would suggest the user should expect. The colors of the app are boring, and the composition of the page doesn't provide a pleasant viewing experience. This violates the heuristic because although it provides

a minimalist design, it is not aesthetically pleasing or consistent. To change this I would expand upon the designs developed on the pages with the images and script text.

## 9. [H2-2: Match Between System & Real Worlds] [Severity 2] [Found by: B, D]

The box stating "Give me a spontaneous activity" looks exactly like the text box where the users click and are prompted to type a text message on an iPhone. However, in this case, clicking the box requires no user typing and instead doesn't ask them for their input, like it does in the Messaging app on an iPhone. This will cause confusion as to the way this functionality is invoked. This slightly confuses your first task and makes it a little more difficult to easily start a spontaneous activity. I would recommend changing the way that this functionality appears, maybe portraying it as a button or by moving its location on the screen so that it does not seem eerily similar to iPhone texting even though its functionality is much different.

#### 10. [H2-3: User Control & Freedom] [Severity 2] [Found by: A,C, D]

There is no option to undo a previous action taken at any point throughout the interface, such as after choosing to accept an activity or importing the calendar. This removes control from the user because it prevents the user from cancelling an activity that they accepted and the user is in fact stuck at that screen with no ability to use the application until they complete the activity (for the "meditating" option, for the "walk by the main quad" option you are able to exit out of the activity by choosing a new spontaneous activity). A quick fix would be to provide an undo button that can undo anything the user just did and have that capability accessible at all times.

#### 11. [H2-3: User Control & Freedom] [Severity 2] [Found by: C, D]

The user has no power to select an activity based on an amount of time that they feel like they have. Instead, the user is reliant on the system using the calendar and accurately picking an amount of time for them. This completely fails if a user doesn't list something in their calendar and also inherently takes some control away from the user since it doesn't allow them to dictate how much time they want to spend on activity. Again, this makes your first task of helping the user complete spontaneous activities more difficult because the user can't choose an activity based on the amount of time they have. I recommend letting a user specify how much time they have free, and getting a spontaneous activity based upon that amount of time.

#### 12. [H2-10: Help & Documentation] [Severity 1] [Found by: C, D]

Having a short value proposition either on the home screen or the documentation would help to clarify to new users what the app is designed for. Once you start using it, it becomes obvious but I think reassuring the user when first opening the app is a good idea.

#### 13. [H2-3 User Control & Freedom] [Severity 2] [Found by: B, D]

After entering in the star ranking for a completed event, the WellWatch chat screen stalls unless you click "Give me a spontaneous activity." It is very unclear as to how the user can return to the initial screen where an activity is recommended based upon the free time you currently have in your calendar. The only apparent option is for the user to click "Give me a spontaneous activity," and it is never explained whether this capability is also based upon the free time you currently have or not. I would recommend resetting the screen after the user submits a star ranking and providing an option to get a recommended activity based upon the free time you have in your calendar again. If this functionality is already present in the "Give me a spontaneous activity" action, then clarify that the spontaneous activity will be based upon the free time in your calendar.

#### 14. [H2-3 User Control & Freedom] [Severity 3] [Found by: D]

Clicking the back button in the upper-left corner of the screen immediately after an activity is finished will undo the completed activity. This takes a different action than the button's name suggests, which would be to return to the chat screen with a completed activity. I would suggest changing the button's name to say "Undo" or changing the button's functionality by sending the user to the WellWatch chat screen, depending on your intended purpose.

#### 15. [H2-6 Recognition Rather Than Recall] [Severity 2] [Found by: D]

Upon choosing the activity to take a walk by the main quad, the user is only presented with the words "take a walk" and no idea of the location given to take a walk to or by. Thus, the user must not only remember where the application told them to take a walk but also the directions to get there from where they are. This increases the difficulty for the user to learn new activities, your second task, since the user has little idea about the actual activity. I would recommend adding walking directions for the user to follow for the activity.

## 16. [H2-6 Recognition Rather Than Recall] [Severity 2] [Found by: D]

When choosing a spontaneous activity, the chat does not state how long the activity will take and instead assumes that the user remembers what it originally said their free time was in the very first screen. I recommend restating the time an activity will last inside of the chat when recommending a new activity.

## 17. [H2-7 Flexibility and Efficiency of Use] [Severity 1] [Found by:A, D]

For a user who already knows what activity they want to do, there doesn't appear to be a method of getting to that specific activity. There is no activity history list or a quick way to jump to favorite activities. It's unclear how the star ratings will ultimately affect this and if there will be a new page, but currently there is no way for advanced and previous users to go to their favorite activities. This makes your third task of integrating spontaneous activities into a routine more difficult for the user. I would recommend adding a page that keeps track of all activities rated three stars or greater, or a similar method of tracking the higher-rated activities.

## 18. [H2-7 Flexibility and Efficiency of Use] [Severity 0] [Found by: C]

This wasn't an issue for me, however if your user was unfamiliar with youtube, I'm not sure they would have known to click the red play button. The screen prompts the user to "Watch an instructional video", it's a bit unclear if that's going to be provided in the next few seconds, or if the user is supposed to go and find a video. I would change the implementation to show the timer screen for a few seconds, and then automatically transition into the youtube video.

## 19. [H2-7 Flexibility and Efficiency of Use] [Severity 1] [Found by: C]

Also on the video screen, when I clicked the youtube video, it redirected me to the page of the video. It was a bit confusing if this video was the one that walks me through the exercise or not (perhaps just because it's not a real video yet). But then I returned to the timer screen and didn't know how to continue on in the app. I kept clicking back for a while and then couldn't do anything except start the activity. It took about a minute for me to

#### 20. [H2-6 Recognition Rather Than Recall] [Severity 1] [Found by: C]

At the beginning of the application, I was told that I had 15 minutes to complete an activity, however was only suggested a ten minute walk. If I hadn't remembered I actually had 15 minutes, during my

free time, I wouldn't have been as active as I potentially could have been since I only walked for ten minutes.

## 21. [H2-2 Match between System and Real World] [Severity 1] [Found by: B]

When arriving at the chat page, it seems as if the messages from the app have already arrived. Because virtual chatting is intended to mirror real life, it seems that these messages shouldn't have already arrived, because the AI machine should feel like a life coach/trainer/guru who the user is in communication with. This violates the heuristic because having the conversation begin before the user gets there doesn't match the real world. The system should be adjusted such that these messages arrive after the user lands at the page, although not so long that the user is confused by what they are supposed to do.

## 22. [H2-4 Consistency and standards] [Severity 2] [Found by: B, C]

The design of buttons in the app is not consistent within the app itself nor is it consistent with standards set by common messaging services like imessage. The buttons themselves are not clearly delineated [see: give me a spontaneous activity] while others are just inconsistent [see: chat versus cal, not now, sure!]. This violates the heuristic because the app doesn't use the same placement or design of buttons nor does it follow platform conventions. To change this, I would advise deciding on a clear button design that resembles other app's conventions while integrating the aesthetic design of the activity pages.

## 23. [H2-7 Flexibility and efficiency of use][Severity 1] [Found by: A, B]

The user can't get better or become more efficient at any features of the app. In order to do an activity, the user largely has to wait for the app to make a suggestion or choose to pick a random activity. Then the chat that transpires is largely the same every time. Any improvement that may ensue is that the user could end up scheduling many wellness exercises into their day to the point at which the app is no longer useful. This violates the heuristic because it does not accelerate the process for experts nor does it allow users to tailor frequent actions. There should be a feature that allows the user to pick an activity themselves and jump right in without needing a suggestion or a spontaneous activity.

#### 24. H2-4 Consistency and standards [Severity 1] [Found by: B]

The entire format of the app seems like a chat platform, yet doesn't act as such. The user is not able to ever type anything to the system, nor should they necessarily be able to in the next iteration of the app. This violates the heuristic because it does not follow platform conventions of having a chat screen without actually having a chat capability. I would change this by largely changing the structure of the page and considering different organizations of the page.

## 3. Summary of Violations

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
[H2-1: Visibility of Status]			1			1
[H2-2: Match Sys & World]		1	1		2	4
[H2-3: User Control]			3	1	1	5
[H2-4: Consistency]		1	1	1		3
[H2-5: Error Prevention]						0

[H2-6: Recognition not Recall] [H2-7: Efficiency of Use]	1	1 3	2			3 4
[H2-8: Minimalist Design] [H2-9: Help Users with Errors]		1	1			1
[H2-10: Documentation]		1		1		2
Total Violations by Severity	1	8	9	3	3	24
Note: check your answer for the green box by making sure the sum of the last column is equal to the sum of the last row (not including the green box)						

## 4. Evaluation Statistics

Severity /	Evaluator A	Evaluator B	Evaluator C	Evaluator D	Evaluator E
Evaluator					
sev. 0	0%	0%	100%	0%	
sev. 1	25%	50%	38%	25%	
sev. 2	33%	50%	44%	66%	
sev. 3	33%	0%	66%	100%	
sev. 4	100%	66%	100%	100%	
total (sev. 3 & 4)	66%	33%	83%	100%	
total (all severity levels)	38%	42%	50%	63%	

## **5. Summary Recommendations**

Overall, we thought the user interface of your application was very well designed with just a few minor flaws that inhibit the user's ability to complete your three tasks. The application looks beautiful – the pictures, font, minimalist design, and familiarity of the chat are all exceptional. However, to improve what you currently have, we would focus a little more on adding new capabilities that make each of your three tasks easier to accomplish, such as allowing the user to skim through their favorite events, find a brand new event, select an activity based upon a manually-entered time, or choose where in their calendar they want to add a routine. This helps to make the user feel at home and comfortable with the app from the start. The majority of the errors identified were related to two things: the consistency throughout the application, and the user's ability to choose things when using the app. To speak to the consistency of the application, the button schema was a bit confusing. As users, we thought that keeping the buttons all the same color and in relatively the same location during different screens in the app would help to make using the app more intuitive for the user. Since the application does use a chat similar to iMessage as its main interface, it was not obvious that we were supposed to click the text box to start an activity. Furthermore, we would keep the responses more consistent as well. We felt like the app prompted me to be much more excited once we was done with the activity by having the answer "Yes!" as opposed to "Sure" when we chose to complete the activity. Seeing that this app is hoping to promote a healthy lifestyle, we felt as though the enthusiasm when choosing to complete an activity should be just as happy, if not happier than when completed. The second area we would hope to see improved was the level of freedom granted to users. We understand that part of the application's goal is to make healthy decisions come easier for users – at the same time users should be able to tailor their choices. After a while, there will be certain activities that we would grow accustomed to and comfortable with. It would be ideal if the user was able to choose these activities by hand. Try to find a better way to provide these functionalities for the user while sticking to the great minimalist design that you already have implemented, possibly through the use of more options on the home screen, such as being able to choose a spontaneous activity based on manually-entered time, choose a brand new activity, or choose a favorite activity.

## **Severity Ratings**

- 0 don't agree that this is a usability problem
- 1 cosmetic problem
- 2 minor usability problem
- 3 major usability problem; important to fix
- 4 usability catastrophe; imperative to fix

## Heuristics

## [H2-1: Visibility of System Status]

keep users informed about what is going on

## [H2-2: Match Between System & Real World]

- speak the users' language
- follow real world conventions

## [H2-3: User Control & Freedom]

- "exits" for mistaken choices, undo, redo
- don't force down fixed paths

## [H2-4: Consistency & Standards]

#### [H2-5: Error Prevention]

#### [H2-6: Recognition Rather Than Recall]

make objects, actions, options, & directions visible or easily retrievable

#### [H2-7: Flexibility & Efficiency of Use]

- accelerators for experts (e.g., gestures, kb shortcuts)
- allow users to tailor frequent actions (e.g., macros)

#### [H2-8: Aesthetic & Minimalist Design]

• no irrelevant information in dialogues

## [H2-9: Help Users Recognize, Diagnose, & Recover from Errors]

- error messages in plain language
- precisely indicate the problem
- constructively suggest a solution

## [H2-10: Help & Documentation]

- easy to search
- focused on the user's task
- list concrete steps to carry out

not too large