VASILY RUZHA

# TRADERWATCH

# SUMMARY

The "TraderWatch" is an app designed for smartwatches that enhance and modify the functionality of a classic Alarm Clock application found in every Android or iOS smartphone and is focused on addressing the needs of retail and professional traders.

The idea for the product came as a result of a discussion with a professional NYSE trader who has 30+ years of experience, owns a prop-firm and education business. A prop-firm is a company that hires prospective traders, educates and provides them with capital while sharing the profits and losses of their trades.

Based on the company's statistics, about 67% of the traders experience regular hesitation (the "issue") to take trades and more than 97% of all traders experienced the issue at least once in their career. The issue significantly impacts the profitability of traders and the company as a whole. During the last year, out of all traders who experienced the issue regularly:

- 12% were not able to overcome it on their own which led to the loss of their trading capital and termination.
- 42% reported losses in the amount of 6-128% of their monthly profits compared to situations where all potential trades were taken as per the trading system.

According to Dr. Brett Steenbarger, professor of Psychiatry and Behavioral Sciences at SUNY and trading coach, one of the potential solutions to overcoming hesitation is the introduction of a trigger that brings back the trader's attention at those short moments of time when a decision should be made.

The typical workflow of the trader is cyclical in nature and requires them to repeatedly make a decision whether they want to take or pass on a trade at the end of each "decision cycle" defined by the length of timeframe they are trading. A timeframe is a period of time where price movements take place.

The default functionality of the classic Alarm Clock application require traders to wait for a specific moment in time before setting up the reminder and take other manual steps every time they want to repeat the cycle to get another notification. All that results in a subpar UX that affects the adoption of the default Alarm Clock application and renders it unusable for addressing the issue.

TraderWatch is designed to solve the issue of hesitation by providing the trigger in a form of notification at the end of “decision cycle”, along with features that deliver UX optimized for the needs of the trading community. I developed the beta version of the application in August 2022, as of now it’s being tested by the traders of the prop-firm mentioned above.

# PERSONAS

## TRADER

A trader is an individual who engages in the buying and selling of financial assets in any financial market, either for themself or on behalf of another person or institution. The main difference between a trader and an investor is the duration for which the person holds the asset. Investors tend to have a longer-term time horizon, while traders tend to hold assets for shorter periods of time, often minutes or hours, to capitalize on short-term trends.

The average trader is 40+ years old, with goals to retire early, spend more time with the family and not to be left behind new tech.

The common motivators include fear, desire to obtain more power and grow.

Main pain points consists of feeling overwhelmed with the complicated features of the trading tools, struggles with the poor customer support of the existing tools and platforms along with psychological issues, like fear to take the trade or “fear of missing out”, that affect trader’s performance.

## PRODUCT MANAGER, PRODUCT DESIGNER, DEVELOPER, TESTER, GTM AND MARKETING SPECIALISTS

Are examples of other personas that could be defined for the product based on the configuration of the team and features of the product that are required to support their needs and workflows. I will omit those for now.

# ASSUMPTIONS

1. I assume this product would be able to help Traders to address the main issue with hesitation of taking trades. It’s important to remember that ideas fail and should be validated with MVP to conserve resources.

2. I assume the implementation of the product in the form of smartwatch app would provide benefits to the traders, as that would allow to reduce the number of trades missed because of missed notification. Watch is always on hand as opposed to a phone that could be left on the table.

3. I assume the significant number of traders wear smartwatches that allow to run custom applications. In case that would be proven wrong, the companion app for the smartphone, or even a web-app, would address the issue.

# SELECTED USER STORIES

I tend to organize stories into epics. Besides stories that describe the main functionality of the product, I always have epics focused on needs of design, engineering teams and other stakeholders. Those include stories for all the preparation tasks, infrastructure setups, regression testing, deployments and GTM activities. For the sake of this exercise I would omit them and focus on selected user stories that describe the main product functionality and highlight the new feature(s) compared to classic Alarm Clock app.

In all user stories tasks are sorted by priority with 1 being the top priority.

Assumptions for the estimations:

| Points | Effort for 1 person |
|---|---|
| 1 | Up to 1 day |
| 2 | 2-3 days |
| 3 | 5 days or “half-sprint” |
| 5 | 10 days or full sprint |

## 1. “As Trader I want to setup a reminder by selecting the timeframe that I use with my trading strategy so I could focus on trading tasks rather than configuration of tools”

| | |
|---|---|
| Description | Every day, before trading session begins, trader performs the market analysis and prepare trading plan for the session. Time spent on configuration of tools comes at a premium as it distracts Trader. It’s critical to simplify the process to the extreme.<br><br>The most natural way for Traders to setup the reminder would be by allowing them to select the timeframe that they use to make decisions.<br><br>Most popular timeframes for intraday trading include 1m, 2m, 5m, 15m, 1h and 4h.<br><br>The length of the selected timeframe will define the duration of the notification cycle for the reminder.<br><br>See Step 1 at Figure 1 attached below. |
| Expectations | 1. Trader is able to see the list of most popular timeframes.<br>2. Each item of the list display timeframe dimension and abbreviation of units (ex. "1 Min", "1 Hr”).<br>3. Trader is able to set the reminder by clicking on one of the timeframes presented in the list. |
| Tasks (priority according to numeration) | 1. Research/confirm the list of timeframes to be used by Traders (PM/Design, 1 point)<br>2. Design the Timeframe View, validate with stakeholders and address the feedback (Design, 2-3 points)<br>3. Implement the Timeframe View (Developer, 2 points)<br>4. Test the Timeframe View (Tester, 1 point)<br>5. Address the feedback (Developer, 1 point) |

## 2. "As Trader, once timeframe is selected and reminder is set, I want to see the counter showing the time left until the next decision, so I could plan for periods when my attention is necessary”

| | |
|---|---|
| Description | It's impossible for a human to maintain the same level of focus through 7 hours of trading session. As result of losing focus traders miss opportunities which triggers the emotional response which in turn leads to a hesitation of taking new trades.<br><br>Providing the counter that clearly visualize the time that is left till the next moment the decision have to be made, allow trader to redistribute attention and stay focused through the short periods of time when it's necessary.<br><br>See Steps 2-4 at Figure 1 attached below. |

| | |
|---|---|
| Expectations | 1. Trader is able to see the dimension and abbreviation of units for the timeframe what was used to setup the reminder.<br>2. Trader is able to see the time left till the next decision have to be made.<br>3. Trader is able to visually identify the progress within current cycle.<br>4. The last 15 seconds of each cycle, when Trader has to make a decision, are visually highlighted. |
| Tasks (priority according to numeration) | 1. Design the Counter View, validate with stakeholders and address the feedback (Design, 3 points)<br>2. Implement the Counter View (Developer, 1 point)<br>3. Implement the Counter component, integrate it into Counter View (Developer, 3-5 points)<br>4. Integrate the Counter View with Timeframe View/navigation (Developer, 1 point)<br>5. Test the Counter View and integration with Timeframe View (Tester, 2-3 points)<br>6. Address the feedback (Developer, 1 point) |

### 3. "As Trader, I want to be able to select different timeframe without restarting the app, so I have better user experience”

| | |
|---|---|
| Description | In case Traders accidentally selected wrong timeframe, we need to allow them to go back from Counter View to Timeframe View and select another timeframe from the list.<br><br>See Step 4 at Figure 1 attached below. |
| Expectations | 1. Once in Counter View, Trader is able to navigate back to Timeframe View and select another timeframe from the list<br>2. Once new timeframe is selected, reminder is reset and counter is updated |
| Tasks (priority according to numeration) | 1. Design the navigation from Counter to Timeframe View, validate with stakeholders and address the feedback (Design, 1-2 points)<br>2. Modify Counter View, add navigation that allow Trader to go back to Timeframe View (Developer, 1-2 points)<br>3. Test the integration between Counter and Timeframe views (Tester, 1 point)<br>4. Address the feedback (Developer, 1 point) |

## 4. "As Trader, I want to be able to set up a new reminder at any time, so I can focus on following the rules and improve performance of my trading"

| | |
|---|---|
| Description | One of the main issues in using the classic Alarm Clock application for trading is necessity to wait for a very specific moment of time when reminder has to be activated, so the next and subsequent cycles match the length of timeframe.<br><br>The TraderWatch should allow Trader to set the reminder at any moment and automatically adjust the time left in current cycle based on the time the reminder was set.<br><br>***This is the key feature that differentiate TraderWatch from other Alarm Clock applications on the market.***<br><br>**Example:** Trader uses 15 minutes timeframe that split each hour on 4 15-minutes cycles. Assume current time is 09:35:00am. Using the functionality of classic Alarm Clock, Trader will have to wait and set the reminder precisely at 09:45:00am so the next cycle begins at 10:00:00am. Using TraderWatch, if Trader open the app and selected the timeframe at 09:35:00am, the length of the current cycle will be shortened to 10 minutes, with the next 15 min cycle starting at 09:45:00am.<br><br>See Steps 2-4 at Figure 1 attached below. |
| Expectations | 1. Trader is able to set the reminder at any time without waiting for the end of current cycle.<br>2. Once the reminder is set, the time left on the counter is adjusted based on the length of the selected timeframe and the actual time the reminder was set by the Trader |
| Tasks (priority according to numeration) | 1. Modify the Counter component, implement the logic that offset the length of current cycle based on the time timeframe was selected by the Trader. (Developer, 2-3 points)<br>2. Test the Counter component (Tester, 2 points)<br>3. Address the feedback (Developer, 1 point) |

## 5. "As Trader I want to be reminded when I need to make a decision so I can form a habit of making that decision, take the action and improve my trading performance"

| | |
|---|---|
| Description | TraderWatch is solving the issue by developing a habit of focusing and creating the sense of urgency to make trading decision during the last 15 seconds of the notification cycle, regardless of the time frame selected by Trader.<br><br>It's *critical* for the Trader to be notified in a way that minimize the amount of trades missed due to the missed notification, as that affect the performance of trader and profitability of the company.<br><br>See Step 3 at Figure 1 attached below. |

| | |
|---|---|
| Expectations | 1. Trader is being notified for the last 15 seconds of current cycle regardless of the timeframe selected.<br>2. Trader is notified by a sound signal or by a haptic engine in case the silent mode is activated on a device. |
| Tasks (priority according to numeration) | 1. Modify the Counter component, add the sound and haptic notification for the last 15 seconds of the notification cycle (Developer, 1-2 points)<br>2. Test modifications to Counter component (Tester, 1 point)<br>3. Address the feedback (Developer, 1 point) |

## 6. "As Trader I want reminder to automatically reset and repeat the full cycle until I explicitly stop it so I'm not distracted and can focus on my trading performance"

| | |
|---|---|
| Description | One of the main issues of using the classic Alarm Clock application for trading is necessity to perform an additional action to repeat the notification cycle once the current cycle is finished. That distract Trader at critical time when the decision have to be made.<br><br>The TraderWatch should automatically reset the notification cycle, once the current cycle is finished, without additional actions from the Trader. This endless loop could be broken by either navigation back to Timeframe View or by the termination of the app.<br><br>***That's another feature that differentiate TraderWatch from other Alarm Clock apps as they require another click to reset the reminder.***<br><br>See Step 4 at Figure 1 attached below. |
| Expectations | 1. Once current notification cycle is finished, its automagically reset based on the length of the timeframe originally selected by Trader.<br>2. Trader is able to break the sequence of notification cycles by navigating back to Timeframe View.<br>3. Trader is able to break the sequence of notification cycles by termination of the app. |
| Tasks (priority according to numeration) | 1. Modify the Counter component, implement automatic restart of the cycle once current cycle is finished (Developer, 1 point)<br>2. Test modifications to Counter Component (Tester, 1-2 points)<br>3. Address the feedback (Developer, 1 point) |

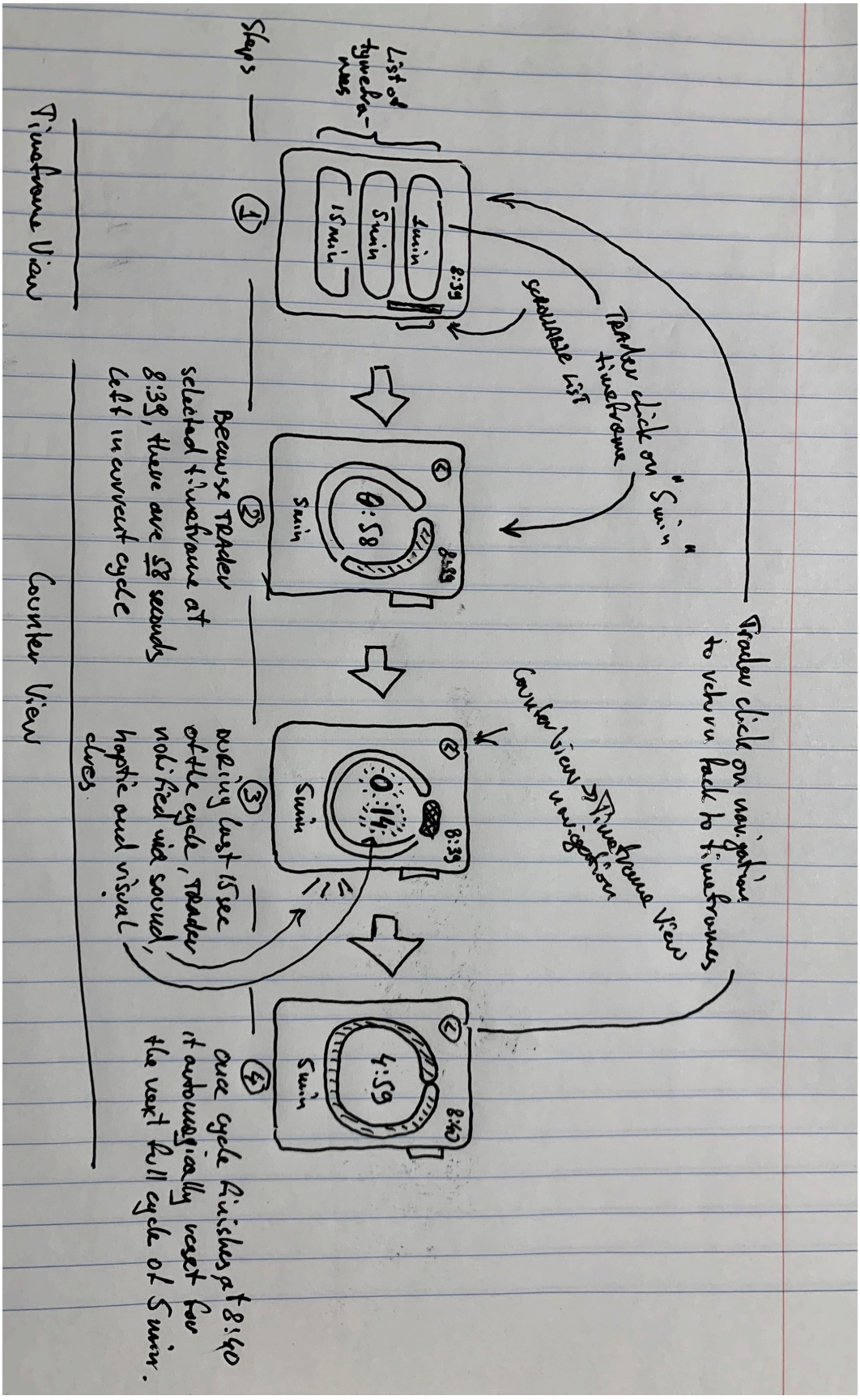


Figure 1 - TraderWatch workflow