Heuristic Evaluation of Rote

1. Problem
Rote is an app designed to make task management easy. The prototype was designed to fulfill three main user goals: creating a profile, creating a task, and editing a task.

2. Violations Found

1. **[H 2-10 Help and Documentation] [Severity 3][Found by A and C]**
   Very abrupt entrance to creating a new profile. I open the app, see the logo, and suddenly I am creating a new profile? A bit more of a welcome and walkthrough would make it smoother transition. This is especially true for the users that are going through creating a new profile, as they are only starting to use the app. So ease them a little bit more into it by telling them what they are about to do. A screen with a message like 'Welcome to Rote! Your journey with us is about to begin, but before it does let's start by creating your profile! That way we can get to know you better' (or something less melodramatic!)

2. **[H2-4: Consistency & Standards] [Severity 2] [Found by D]**
   The interface leads to a profile creation page that prompts users to input relevant information. One such requested input is "Avg. priority," which is later used as a feature of task creation/editing. Upon inputting information, the next screen has the input request change form "Avg. priority" to "Dream vehicle" (see ppt slides, pg. 7). Perhaps this was an error, but the inconsistent use of "Avg. Priority" leads to confusion. Consider using a more clear request line.

3. **[H2-2: Match System & World] [Severity 2] [Found by D]**
   The trifurcated "Goal", "Task", and "Event" scheme is not a natural translation from the real world. A user may not know which to select based on their needs. Possibly change verbiage schema like "Dream" "Goal" "Task," or provide more context.

4. **[H2-3: User Control & Freedom] [Severity 1] [Found by D]**
   Upon clicking the "+" button, the user is prompted with a pinwheel for "Goal", "Task", or "Event" creation. However, it is not clear how the user should exit out of this feature. Does clicking outside of the pinwheel cancel the operation? Creating a clearer way to cancel would make the process more clear.

5. **[H2-3: User Control & Freedom] [Severity 4] [Found by all]**
   Upon choosing to create "Goal", "Task", or "Event", the interface brings the user into a screen in which he or she can assign date, time, and length to events, but cannot cancel a proposed creation. Consider adding a "Cancel" function to these three screens.

6. **[H2-3: User Control & Freedom] [Severity 4] [Found by all]**

When adding a task, the interface prompts the user to "confirm all" from the Calendar view to assess whether the user is happy with the changes. However, it is unclear how the user might seek to *not* confirm all. Does clicking outside the "confirm all" button not confirm the operation? Creating a clearer way to cancel would make the process more clear.

7. **[H2-1: Visibility of system status][Severity 1] [Found by D]**
The landing page does not provide information for the user as how best to proceed. Admittedly, this is not crucial, but might cause a split-second of initial confusion. A simple "Click to begin" could shore up this minor violation.

8. **[H2-8: Aesthetic and minimalist design] [Severity 4][Found by A, B, C, D]**
The arrow in the bottom left-hand corner of the calendar and agenda views ostensibly seeks to convey when the user has strayed from a given day (e.g. the user is viewing a week in November when the date is October 26). But, when the user is on the current day, the arrow provides no additional information. Furthermore, it is confusing, as the user may try to click it (to no avail). Consider eliminating the arrow on screens in which the user is viewing the current day to avoid competing with user attention.

9. **[H2-6: Recognition rather than recall] [Severity 3][Found by D]**
The "Add New Task" page features a timeline of dates, e.g. ("30th, 31st, 1st, 2nd … 12th"). However, it is not clear which month these dates correspond to. The user should be able to clearly know the month from a given date selection without referring to the main calendar page.

10. **[H2-8: Aesthetic and minimalist design][Severity 2] [Found by D]**
The "Add New Task" page features a timeline of dates, e.g. ("30th, 31st, 1st, 2nd … 12th"). This is cluttered and does not add significant information. Consider eliminating these suffixes and using a physical line instead, with periodic rather than exhaustive date markers (e.g. "1st" … "30th" rather than "1st" "2nd" "3rd" "4th" … "30th"). This will decrease clutter and allow space to include information, such as the month.

11. **[H2-8: Aesthetic and minimalist design] [Severity 1] [Found by D]**
The "Add New Task" page features the use of abbreviations "Est." and "Pref." This nomenclature does not add functionality or significant explanatory power for the user. Consider eliminating it to reduce text.

12. **[H2-7: Flexibility and efficiency of use] [Severity 2] [Found by A, B, & D]**
In the "New Profile" screen, the interface presents a blue circle. It is unclear what this blue circle represents. Is it a feature to add a profile photo? Is it the "return to home" feature? If the former, adding a standard, camera icon would allow for experienced and novice users to efficiently add photos without being confused over interface design.

13. **[H2-9: Help users recognize, diagnose, and recover from errors] [Severity 4] [Found by D]**

Upon clicking a task from the calendar, an "Edit Task" feature arises. The "Edit Task" screen lists the "Task Name". However, the calendar does not list the name of the task in each task. Therefore, the user could be accidentally editing the wrong task. For example, the user could intend to click a task adjacent to the task actually clicked. But, the user could in fact be editing a separate task. Consider adding the name of the task into each block on the calendar so that the user knows if they have clicked on the wrong task.

14. **[H2-4: Consistency and Standards] [Severity 2] [Found by D]**

In the "Agenda" screen, the usual "Week" - "3 Day" - "Month" task visualization scheme is broken, as the agenda on the prototype displays agenda items for the following two days. Are these the agenda items for the given day, or longer periods? Maintaining the calendar-view interface scheme, with clearly delineated dates, would maintain the standard here.

15. **[H2-4: Consistency and Standards] [Severity 2] [Found by D]**

The blue color is sometimes used in cases in which the user can edit text of an input (e.g. "Goal Name: Learn to Play Piano" is editable text). However, in the New Profile Section, the blue color is not used for editable text. This leads to confusion about whether/when the user can edit text. Consider choosing a consistent standard such as an opaque text entry field (see Apple Calendars "Edit" function for an example of opaque text entry). Have consistent user interface design.

16. **[H2-10: Help users recognize, diagnose, and recover from errors] [Severity 2] [Found by C & D]**

There is no documentation explaining the "Avg. Priority" request. What does this mean? How were the values concocted? What if the user does not know his or her average priority? If this is an automated value that does not require user input, clearly delineating that via a change in color scheme or shading might be helpful.

17. **[H2-4: Consistency and Standards] [Severity 2] [Found by B]**

The phrase "Pref. Block Length" may be confusing to users. I didn't know what was meant by 'Block' at first. This could be solved by a tutorial or less awkward phrasing.

18. **[H2-7: Flexibility and efficiency of use] [Severity 2] [Found by B]**

Creating multiple tasks could seem repetitive, especially if all of them are similar. This could be made smoother by allowing for creation of several similar events at once, or the ability to duplicate events.

19. [H2-1: Visibility of Status] [Severity 3] [Found by C]

At first was confused about why clicking on some tasks shifted things around- some orange squares would turn empty while adjacent squares turned orange. Eventually figured out it was jumping back in time a week. Having an animation will clarify that you're moving back and forward in time and to a new screen altogether.

20. [H2-7: Flexibility & Efficiency of Use] & [H2-9: Help Users with Errors] [Severity 4] [Found by C]

When setting up profile, ask the user for their birthday instead of their age. This will make setting up a profile potentially a one-time set-up, they won't have to update their age every year.

21. [H2-10: Help & Documentation] & [H2-6: Recognition not Recall] [Severity 3] [Found by A and C]

Color coding is not apparent, still unclear as to what which colors represent what. Creating a color key that can easily be referred to will help user better understand what they're looking at.

22. [H2-3: User Control & Freedom] [Severity 2] [Found by C]

What if I want to change a set task into a goal or an event? Might be nice for user to have option of editing task into a new type.

23. [H2-2: Match Sys & World] & [H2-4: Consistency & Standards] [Severity 1] [Found by C]

The progress bar resembles a scroll bar. Try differentiating it from a form we associate with moving back and forth.

24. [H2-7: Flexibility & Efficiency of Use] [Severity 0] [Found by C]

Why is Monday first day of the week? Might be nice to have the option for what day of week to start on.

25. [H 2-4 Consistency and Standards] [Severity 2] [Found by A and B]

The home menu lacks lines to differentiate between options and sections. When opening the home menu it is not noticeable that there are options for week, 3-day, month, agenda. This is the same case for the options in the sections 'Favorite Tasks' and 'Most Recent'. Furthermore the only discernible change in section is the font of the title of each section. Not adding lines makes a user unsure of whether they are actual options, as well as where to click for a specific option (what area selects that option? what area is outside that option?). I would recommend adding lines between different sections and options to differentiate between them.

26. [H 2-8 Aesthetic and Minimalist Design] [Severity 2] [Found by A]

There is a lot of unused space in the home menu. Also, the button sizes are incredibly small. For example, the button to 'Edit Profile' is incredibly small. A person with big fingers would struggle to click the option. Using the space better would allow you to make small buttons bigger and remove so much unused space on the screen.

27. [H 2-8 Aesthetic and Minimalist Design] [Severity 2] [Found by A]

The hour sliders in adding a task/event/goal screen have predetermined values such that they allow 2 or 4 hours, but not 3 hours. This can be a problem for the case where you actually will

take you 3 hours to finish a task, however you have to add that extra hour for no reason at all. Same thing in choosing blocks of sessions. Options should increment by 30 minutes, not big chunks. This might be hard to do with sliders, so exploring other options (maybe a digital timer you can modify?) might be best in this case.

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]	0	1	0	1	0	2
[H2-2: Match Sys & World]	0	0	1	0	0	1
[H2-3: User Control]	0	1	1	0	2	4
[H2-4: Consistency]	0	0	5	0	0	5
[H2-5: Error Prevention]	0	0	0	0	0	0
[H2-6: Recognition not Recall]	0	0	0	1	0	1
[H2-7: Efficiency of Use]	1	0	2	0	1	4
[H2-8: Minimalist Design]	0	0	3	0	0	3
[H2-9: Help Users with Errors] (3)	0	0	1	0	2	3
[H2-10: Documentation]	0	0	0	2	0	2
Total Violations by Severity	**1**	**2**	**13**	**4**	**5**	**25**

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	Evaluator A	Evaluator B	Evaluator C	Evaluator D
sev. 0	0%	0%	50%	50%
sev. 1	0%	0%	40%	60%
sev. 2	23.5%	23.5%	11.8%	41.2%
sev. 3	33%	0	50%	17%
sev. 4	25%	25%	25%	25%
total (sev. 3 & 4)	27.3%	18.2%	31.8%	22.7%
total (all severity levels)	22.2%	17.8%	26.7%	33.3%

5. Summary Recommendations

EVALUATOR A:

There are two main problems with the current prototype that repeat throughout it. Firstly, it seems like you guys tried to innovate with the design, such as the lack of text boxes, lines to differentiate between options and such. While there is always room to change the design norm, I believe you guys might have pushed the envelope a bit too much. The good part of the 'design norm' is that people are used to it and know what to do when they face it. So when they see a text box, they know to click on it and

enter text. When they see a menu, they can differentiate between options and sections by the lines that set them apart. This is the part that it is better not to mess with, this way there won't be a barrier of entry in the form of learning how to use the basics parts of the app. I would recommend staying a little bit more inside the boundaries already set. Mess with color, maybe a bit with shape, but just removing them is a bit too much. The second thing is that the app seems tailored for people that already know how to use it. Newcomers will be faced with an application that not only challenges them on the basics (first point) but also on the actual usage of the app. What does the arrow mean? Why are the boxes changing colors? Why are the boxes shaded? I would recommend one of two things. Either making the interface even more simple (might be hard to do since I can see it is already very simple) or better help them as they navigate. Maybe a tutorial on what each button does or represents. Or even tips when they click on something the first time. I believe it needs to be more newbie friendly.

EVALUATOR B:

Overall, good job. The app seems like it is progressing well. I think the main focus of your app should be to differentiate itself from the several other calendar alternatives out there. If this means introducing the user to predictive functionality in the context of the app. Right now, I don't see much emphasis on what makes your app special. Apart from that, I would recommend making your functionality as clear as possible. This could include a simple tutorial, or fewer buttons that need to be clicked in order to do anything. The majority of your interface violations stem from the fact that users will not know how to accomplish their tasks without a guide. You have two options: retain your complex functionality but include a user guide so that advanced users will gain more value out of the interface, or make the interface more simple. This means sacrificing some features or efficiency in the name of perfect clarity. Think about your target user, and which avenue they would likely prefer.

EVALUATOR C:

App looks great! Really like the concept- I'd love to give it a try. I enjoyed the flexibility in flipping between view options and choosing between different types of tasks. A few comments- I was initially confused as to what an "agenda" view would look like. Try "daily" view instead of "agenda" for consistency with other view options. I also would have liked to see the view options listed in ascending order i.e. daily - > 3-day - > week - > month. When it comes to timing options, it might be beneficial to give the user of more specific times of day. For example, giving the user the chance of selecting early morning, late afternoon, etc. In contrast, the priority range seems overly specific- 10 feels like a large range for priority items, I personally would feel fine with 3 levels of priority. When filling out "est. time per week" when adding a new task, how are you determining the cap time? It might be beneficial to give the user an "other" or "input time" option.

Finally, finish your website! Filler text still present all over site.

EVALUATOR D:

Generally speaking, Block Dudes have produced a simple and easily maneuverable prototype. However, the primary problems with the prototype stem from 1) the use of jargon used in Rote, such as the functional differences "event" and "task," 2) the user's memory load when inputting tasks, in particular as it relates to the user having to remember what month he or she is inputting a task for, and 3) eliminating unnecessary features, such as the arrow on the calendar views when viewing the current date. These trends generally fall under a larger category of user clarity, whereby the user needs to understand the functional definition of different metrics, colors, and features. Beyond these easily categorized heuristics, another problem the user might run into is the learning period. In particular, Rote operates on a very specific understanding of task management based on assigning blocks of time for given tasks and specific priority levels for those tasks. If user data suggests a need for increased flexibility in scheduling, rote's current design may not easily allow changes to be made to that effect. Thus, offering increased functionality into the adding feature section, be it Task, Event, or Goal, might make the design more intuitive for users of different scheduling preferences. For example, assigning flexible end times or a less precise metric for user priority (such as "low", "medium", "high") might increase flexibility for those users who are confused over how to prioritize their tasks in the first place!