

# Heuristic Evaluation of Meet

## 1. Problem

*Meet is a smart scheduling application that helps users become more productive at work by tracking the amount of time they spend on meetings.*

## 2. Violations Found

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

The interface used the string “Save” on the first screen for saving the user’s file, but used the string “Write file” on the second screen. Users may be confused by this different terminology for the same function. Fix: Use the same string on each screen.

*[..list violations here with a blank line between each -- number from 1 to n, where n is total # of violations]*

### 2. [H2-5 Error Prevention] [Severity 3] [Found by: B]

On the Sign Up screen (screen 2) the user does not have to enter their password a second time. This could allow the user to enter the wrong password on accident and have to go through the trouble of resetting their password. Make the user re-enter their password on this screen or allow the user the view the password.

### 3. [H2-9 Help recognize, diagnose, and recover from errors][Severity 3] [Found by: B]

On the login screen (screen 1) there is no option for a user who has forgotten their password. If the user does not remember their password then they will be unable to use the application. Enter a “Forgot password?” button on the login screen.

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

Starting on the login screen (screen 1) each time you open the app is not necessary for repeat users. Assuming the user needs to log in each time and they are always sent to the log in screen, this could become cumbersome and annoying (especially on the go). The experience could be streamlined with an auto log in for repeat users.

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

On the Sign Up screen (screen 2) there is only one way of signing up (entering information). This could be slower or less desired than simply getting your information from another source. Alternative applications that have your information could be used to streamline the sign-up process i.e. a “sign in through gmail/facebook” option.

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

On the sign up screen (screen 2) “get started” is displayed where “log in” would be displayed on the log in screen, but the “sign up” button is clicked. While this is a very small violation it still may cause some confusion as to which screen the sign-up button navigates to. Change the “sign up” button, “get started” button, or both so that there is a match or display “get started” once the information has been added.

### 7. [H2-6 Recognition rather than recall] [Severity 3] [Found by: B, D]

On the New Meeting (filled) screen (screen 4) the day is displayed as 26. Users may not be able to remember which day of the week the 26th is and need to look at a calendar. Place the day of the week next to the day of the month (i.e. Mon, 26).

**8. [H2-5 Error Prevention][Severity 3] [Found by: B]**

On the New Meeting screen (screen 3) the day is placed to the left of month encouraging the use to input the day before they input the month (assuming the day and the month are separate inputs). This set up only becomes difficult whenever wanting to input the 31st day of the month as some months have 31 days and some do not, so if you were to select 31 then select September they would get September 31 (not an actual date). Have the user enter the day and the month in the same entry.

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

On the New Meeting screen (screen 3) the day and the month input separately (or it seems as though they are input separately). This is two steps that could be completed in one step. Have the user enter the day and the month in the same entry.

**10. [H2-1 Visibility of system status] [Severity 2] [Found by: A, B, C]**

On the New Meeting(filled) screen (screen 4) “minutes” is difficult to read (specifically on mobile). This could cause confusion as to what value 60 actually represents. Make “minutes” a shade darker.

**11. [H2-1 Visibility of system status] [Severity 2] [Found by: B, C]**

On the New Meeting(filled) screen (screen 4) “am pm” and “minutes” are on the far right and the “am pm” and “minutes” values are on the far left. This make it a little difficult to see what the values are referring to as the user would need to scan from the far left to the far right of the screen to “am pm” and “minutes” and their values.

**12. [H2-2 Match between system and the real world] [Severity 1] [Found by: B]**

On the Talking Points screen (screen 5) the use of “talking points” may not be very intuitive. I’m not sure if the term “talking points” is often used to describe a meeting agenda (specifically business meetings) and it may be difficult to understand what is meant by a “talking point”. Rename talking point (if there is something more conventional) or use the word agenda in the lower description.

**13. [H2-10 Help and documentation][Severity 3][Found by: B, D]**

On the Attendees screen (screen 9) the message “attendees will check off their talking points” is not clear. First time users may be unsure as to what checking off talking points actually means. Change the message to be a bit more specific (i.e “attendees will check off talking points that are relevant to them”)

**14. [H2-3 User control and freedom][Severity 4][Found by: B, C]**

On the Review screen (screen 12) there is no option for creating another meeting without sending or canceling the current meeting. If the user wanted to make multiple meetings before sending them to attendees they would not be able to. Implement a save function for meetings.

**15. [H2-6 Recognition rather than recall][Severity 4][Found by: B, D]**

On the Review, Organizer Home, RSVP, Attendee Home, and Meeting screens (screens 12, 13, 14, 17, and 18) the duration of the meeting is not displayed. This is important information that the organizer may not remember and the attendee will not know. Add the duration of the meeting to the Review, Organizer, RSVP, Attendee Home, and Meeting screens.

**16. [H2-6 Recognition rather than recall] [Severity 4][Found by: A, B, C, D]**

On the Stats screen (screens 19) the “% of last month man hours”, “avg hours/month”, and “% of talking points relevant” are a bit confusing. If the user has a hard time understanding what the statistic is referring to they will not be interested in the statistic. Make the titles for these statistics more specific or have an option to view an explanation for the statistics.

**17. [H2-7 Flexibility and efficiency of use][Severity 4][Found by: A, B, C, D]**

On the Contacts screen (screen 10) there is no option for selecting multiple people, all people, or groups of people. If the attendees have the option of selecting they are not needed at this meeting then the organizer may want to skip selecting specific people and just select a group and have the members decide if they should be there or not. Add a select all or allow for creating contact groups (recent, frequent, mobile team).

**18. [H2-3 User control and freedom][Severity 5][Found by: A, B, C, D]**

On the Meetings screen (screen 18) there is no way to edit/delete a meeting. If the organizer makes a mistake while creating the meeting or wishes to not have the meeting (if not enough items were clicked) then there is no way to change or remove the meeting. Add an edit/delete button of the Meetings screen.

**19. [H2-3 User control and freedom][Severity 3][Found by: B, C, D]**

On the Meetings screen (screen 18) there is no way for the meeting organizer to change the relevance of a meeting item for an attendee. If the organizer knows why a meeting item is relevant to an attendee but the attendee does not then there is no way to let the attendee know. Allow the organizer to edit responses.

**20. [H2-3 User control and freedom][Severity 3][Found by: B, D]**

On the Meetings screen (screen 18) there is no way for the meeting organizer to reorder/remove meeting items. What happens if a talking point isn't relevant to any of the attendees? The organizer may want to change the order of the meeting topics once they see the people that each item is relevant to. Let the organizer re-order or remove meeting items once they receive feedback (or suggest a new order).

**21. [H2-2 Match between system and the real world][Severity 1][Found by: B]**

When entering a talking point (screens 5-8) there is no option to prioritize or order the the talking points. As a meeting organizer it may be important to order the talking points or make sure that one of the talking points gets discussed. Add a priority scale or add numbers to the talking point input and allow that scale/order to be edited in later screens.

**22. H2-2 Task 1 [Severity 4][Found by: C]**

The first screen when a user opens the app is the ‘create a new meeting’ screen. This is a violation since it does not confirm to the logical user flow. Most users are likely to be interested in checking their upcoming meeting first. While setting a new meeting is an important screen, it should probably not be the first screen the user sees when they open the application.

Suggestion: The first screen when the app is opened should be the list of upcoming meetings. To make it more intuitive the symbol ‘upcoming’ should be moved to the far left.

**23. H2-3 Task 1 [Severity 4][Found by: B, D]**

In the first ‘create a new meeting’ screen (out of the four in the flow) there is no cancel or X button. This violates the user control and freedom. A user who accidentally pressed the ‘create new meeting’ button should have an easy “emergency exit”.

Suggestion: add a cancel or an X shaped button in the top of screen similar to other screens in the application.

24. H2-1 Task 1 [**Severity 2**][**Found by: C**]

In the 'create new meeting screen' the time is highlighted by default to AM. Furthermore, the location of the time (e.g. 7:00) is to the far left while the location of the period (i.e AM/PM) is to the far right of the screen. It makes it a little hard for the eye to see at what time exactly is the meeting. It is a violation because it is not as easily visible as it should be.

Suggestion: centralize all the user inputted information on the screen similarly to the way an alarm time is inserted on an iPhone. This will make it easier to read the time of the meeting. Additionally, grey out the AM/PM button. The desired period should be highlighted only once clicked.

25. H2-8 Task 1: [**Severity 2**][**Found by: C, D**]

In the 'create new meeting' screen the font of the title "meeting info" is very thin and thus blends with the rest of the text fields. The fact that the text is aligned to the left makes the user think that this line should be edited as well. The name 'meeting info' suggests that the user should write some information about the meeting in that text field. This is a violation since the title is not as aesthetic as it can be.

Suggestion: Make the title more visible and distinguishable from the rest of the text. Centralizing the title and either increasing the font size or making it bolder can achieve this. Additionally, a better title could be 'New meeting' instead of 'meeting info'. This change will clarify what is the purpose of the screen.

26. H2-10 Task 1 [**Severity 2**][**Found by: C**]

on the 'talking points' screen the instructions are a little confusing: 'an ordered list of meeting topics' sounds as if the topics should already be there. This is a violation since we should try to make the documentation as short as possible. It also seems as if they talking points should be ordered, but they're unordered everywhere else.

Suggestion: change the title to 'meeting topics' and make the instructions more succinct, saying only: "add one to get started!".

27. H2-2 Task 1: [**Severity 4**][**Found by: C**]

On the log in screen the user is requested to insert a phone number and a password. Assuming that user has already opened an account it would make more sense if the log in screen requested a user name rather than a phone number. This is a violation since inserting a user name is a more common industry standard than using a phone number.

Suggestion: once a user has registered for the app on subsequent log-ins the user should be asked to fill in their user name and password.

28. H2-2 Task 1: [**Severity 3**][**Found by: C**]

When writing a talking point there is an enforced character limit (i.e. 100 characters). This limit might not be enough for users to express their talking point of interest. A normal SMS message has a limit of 160 characters and Twitter for example uses a 140-character limit.

Suggestion: increase the character limit to that of a text message: 160 characters.

29. H2-3 Task 1 [**Severity 2**][**Found by: C**]

On the screen where the user has to specify which people are invited to attend the meeting, the options bar at the bottom is missing. Therefore the user has no easy "emergency exit" enabling them to go back to other features of the app. Additionally there is no title to this screen.

Suggestion: add the options bar to this screen as well and add a informative title such as “Choose attendees”.

30. H2-4 Task 1 [**Severity 2**][**Found by: C**]

The send an invite button (shaped like a paper plane) is identical to the symbol of the ‘invited’ button in the bar, which is a little confusing. The invited button relates to Task 2 while the sending of an invitation is part of task 1. This is a violation of consistency and standards because the user should not think that the two buttons are related.

Suggestion: the symbol of the waiting invites should be changed to clarify the difference between this button and the send invites button. A good symbol for example could be a sealed envelop. Moreover, it will probably make more sense to call the button in the lower bar ‘waiting invites’ rather than ‘invited’. This will make it clearer for the user what is the feature the button leads to.

31. H2-6 Task 2: [**Severity 3**][**Found by: C**]

On the ‘invited screen’ it seems like a dot next to the symbol on the bottom bar suggests that there are waiting invitations the user has not responded to. The user doesn’t know exactly how many pending invites he/she has without accessing this tab. This is a violation because the user should not count how many waiting invitations he/she has nor should he/she remember this number. Suggestion: similarly to missed phone calls on the iPhone, the number of waiting invitations should be written on the top right side of the ‘invited’ symbol so the user knows at any moment and no matter what screen he/she is looking at, how many meeting invitations he/she still has to respond to.

32. H2-2 Task 3: [**Severity 3**][**Found by: C, D**]

The ‘upcoming’ screen has a list of the meeting the user is going to. However, meetings or any other time based events are most intuitively presented in calendar/time table blocks. This is a violation since it doesn’t follow the real world convention, which presents events as colored boxes in calendars (similar to Google calendar and iCalendar displays). This feature makes it harder for the user to see how busy his day is. Also, if a list view for the events is kept for the app, they should be ordered from soonest to last.

33. H2-1 Task1: [**Severity 2**][**Found by: C, D**]

On the new meeting summary page the time of the meeting is displayed as:

*7:00 PM – Monday, October 26*

The dash symbol makes it feel as if the meeting will go from 7:00pm until Monday. This is a violation because a system should always keep users easily and efficiently informed.

Suggestion: display the time similarly to the way events are displayed on the iPhone calendar:

*Wednesday, Nov 4*

*1:30 PM to 2:50 PM*

34. H2-3 Task 2: [**Severity 4**][**Found by: C, D**]

In the response to an invitation screen there is no way for the user to easily decline the invite. This is a major violation since the user doesn’t have an easy and quick “emergency exit”. Furthermore, such an easy way to reject an invite is highly necessary considering the purpose of the app is to minimize the time spent on attending meetings. On the other hand, a participant might need to be present at a meeting but just not be able to make that specific time.

Suggestion: add a ‘decline invitation’ button or a ‘decline with comments’ option.

35. H2-8 Task 3:[**Severity 3**][**Found by: C**]

The statistics page lacks the information I need as a user in order to make a better decision to reduce the time I spend on meetings. This is a violation since an interface should be minimalistic and present only relevant information to the user. What I am most interested to see is:

- a. How much time I've spent on meetings on a monthly/weekly basis
- b. How do I compare to others in my office

36. [H2-3: User Control & Freedom][**Severity 3**][**Found by: D**]

If user accidentally chose to respond to the wrong meeting, there's no obvious way to get back to the invited page from the response page. Can insert a back button or have the invited button at the bottom go back to the meetings list.

37. [H2-5: Error Prevention][**Severity 3**][**Found by: D**]

It isn't totally clear which, if any, information must be filled out before moving onto the next screen when making a new meeting. There could be situations in which having a room figured out isn't yet necessary (for example, for a phone meeting or a lunch meeting), but it's hard to envision justifiably leaving out the meeting date or time. Give some signal as to which information is necessary and which is optional.

38. [H2-6: Recognition not Recall][**Severity 3**][**Found by: D**]

When RSVP'ing to a meeting, making the "none" option the default makes it feel like the user probably should also feel as if they aren't needed at the meeting, so it isn't clear that the user is SUPPOSED to choose which points are relevant. Also, it seems like there are situations that aren't covered – what should a user do if none of the points seem specifically relevant but the user doesn't want to opt-out of the meeting? It feels as if selecting "none" un-invites the user to the meeting. Possible solution: allow a write-in for comments and don't automatically select "none" (though leave it as an option).

39. [H2-9: Help Users with Errors][**Severity 4**][**Found by: D**]

In general, it's hard to tell how error messages will be designed, if at all, because they weren't worked into the medium-fi prototype. Some places that error messages would be particularly helpful include setting meetings for dates/times in the past, durations that exceed a certain threshold, leaving out required fields, etc.

40. [H2-6: Recognition not Recall][**Severity 3**][**Found by: A, D**]

On new meeting review page, it seems as if I should be able to interact with the talking points list because there are bullet points next to them that don't exist on the other static pages, like an upcoming event's page. I would make this more consistent and remove those bullet points in order to reduce the impression that they're interactive (unless they are, in which case implement that functionality).

41. [H2-5: Error Prevention][**Severity 3**][**Found by: D**] What happens if all of the meeting participants say that none of the action items are relevant to them, so they opt out of the meeting? It seems as if this would result in an error, and it's unclear what would happen in this case. I would notify the organizer if everyone RSVP's no, or if no one has RSVP'ed X hours before the meeting is set to start.

42. H2-1 **Visibility of system status** [**Severity 3**][**Found by: A**] – The interface uses a very light font on all text input screens for the placeholder text that does not have enough contrast and is hard to read. Consider using a slightly dark font so that user does not have strain his/her eyes to read it.

43. H2-6 **Recognition rather than recall [Severity 3][Found by: A]** – The interface should display the meeting information in the adding talking points so the user knows information is correct.
44. H2-10 **Help and documentation [Severity 3][Found by: A]** – The talking points piece is a swipe-to-move-ahead interface but the interface does not make that obvious for first time users. Consider adding a tutorial for first time users to walk them through the steps and swiping.
45. H2-10 **Help and documentation [Severity 2][Found by: A]** – On the review screen, the Paper Airplane icon is unfamiliar. Be sure to explain this feature in a tutorial for first time users or have “Send” next to the paper airplane.
46. H2-7 **Flexibility and efficiency of use [Severity 4][Found by: A]** – The interface does not have an options for previous meeting templates that might be useful for frequent users with routine meetings. Add an option to load previous meetings or save them.
47. H2-2 **Match between system and real world [Severity 3][Found by: A]** – The interface does not list names in alphabetical order despite the “A” used at the top screen.
48. H2-1 **Visibility of system status [Severity 3][Found by: A]**– There is no indicator to let the user know if he/she has selected someone to invite, and no way to advance to the next time. Add an indicator next to each name that toggles on and off when selected (as in the “interviewee discussion” screen) and a “Done” button at the bottom.
49. H2-10 **Help and documentation [Severity 2][Found by: A]**– The “invited” tab does not indicate whether the user must respond or whether they are awaiting the RSVPs of others. Add a small line at the top explaining the purpose of the tab or change the tab name.
50. H2-4 **Consistency and standards [Severity 1][Found by: A]** – The talking points on the “interviewee discussion” meeting screen are not aligned the same as the meeting review screen. Pick a layout (I like this one better) and stick with it.
51. H2-8 **Aesthetic and minimalist design [Severity 1][Found by: A]** – If you do decide to keep both graphs, the circular graph on the “this month stats” screen appears too large and should be about the same diameter at all the information to the left of the pie chart.
52. H2-2 **Match between system and real world [Severity 1][Found by: A]**– The lack apostrophe’s on the “this month stats” screen seems strange. Change “month” to “month’s” or make it “stats this month”.
53. H2-10 **Help and documentation [Severity 5][Found by: A]**– There are no help or settings screens. Not part of the tasks, but it’s important to remember to include settings and consider adding a help/tutorial option.

### 3. Summary of Violations

Category	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (sev 5)	# Viol. (total)
[H2-1: Visibility of Status]		4	2			6
[H2-2: Match Sys & World]	4		3	2		9
[H2-3: User Control]		1	3	3	1	8
[H2-4: Consistency]	3	1	1			5
[H2-5: Error Prevention]			4			4

[H2-6: Recognition not Recall]			5	2		7
[H2-7: Efficiency of Use]	2	1		2		5
[H2-8: Minimalist Design]	1	1	1			3
[H2-9: Help Users with Errors]			1	1		2
[H2-10: Documentation]		3	2		1	6
<b>Total Violations by Severity</b>	<b>10</b>	<b>11</b>	<b>22</b>	<b>10</b>	<b>2</b>	<b>53</b>
<b>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)</b>						

#### 4. Evaluation Statistics

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D	Evaluator E
level 1	3	5	0	0	
level 2	2	3	6	2	
level 3	5	8	4	10	
level 4	2	4	4	6	
level 5	2	1	0	1	
<b>total (levels 4 &amp; 5)</b>	4	5	4	7	
<b>total (all levels)</b>	14	21	16	19	

Evaluator # Ex. C	# problems found Ex. 7	# Unique problems remaining & problem IDs Ex: 5 (1, 7, 11, 13, 17)
C	16	9 (22,24,26,27,28,29,30,31,35)
A	14 total	42-53 (12 unique)
D	19 total	36-39 (unique)
B	20	9 (2, 3, 4, 5, 6, 8, 9, 12, 21)

#### 5. Summary Recommendations

**A:** Aesthetically, the medium-fi prototype for BetterMeet has a very minimalist and clean interface, so most of the issues with the app revolve around fundamental questions that the app has attempted to address. The intended functionality fundamentally revolves around one task (setting meetings), and it does that in a simple way. That being said, there seem to be a few questions



regarding some of the assumptions that seem to be worked into the app, such as what should happen if an invitee opts-out of a meeting or worse, if all invitees opt- out. The app should take into account that meetings vary, so it would be nice to see increased flexibility around the assumption that people *should* even be able to opt-out of meetings once they have been invited. Regarding the stats page, there doesn't seem to be much benefit of showing only the stats that are there right now because, for example, only two months are compared at a time at the top (rather than showing long-term trends), and the summary statistics on the bottom don't seem to by themselves mean much other than satisfying curiosity. The interface is aesthetically pleasing, yes, but it leaves a lot of room for questions as to what happens next.

**B:** This is a very visually appealing minimalist design. While the simplicity of the design is beneficial to the goal of keeping the item lists short and focus in some area of the application there is information left out that is desired. Adding small things such as the end time of a meeting or more detailed statistics descriptions would improve the experience. Also, there are also many screens that are visually appealing, but do not allow for streamlined tasks such as inviting large groups of people or selecting the day once instead of twice. There are also some functions that could be added to the application that would make the application more familiar to a frequent meeting planner like being able to change the order of the meeting items. Another useful function that I did not mention in the violation list may be to implement the ability to sync with a calendar. Overall, this is a quality design with few violations.

**C:** Overall fantastic job! I appreciate how consistent the fonts and colors are. Moreover, I like that the application is very minimalistic overall with relatively few screens. This is appropriate for an application that should save users time. Additionally, the application's design fits the goals of Tasks 1 and 2 (plan a new meeting and respond to an invite). Moreover, I liked the 'new meeting' summary screen. It is extremely elegant and contains all the relevant information necessary to complete task 1 (attendees, what they will be speaking about, time, location and man-hours). I feel that a large improvement that should be made is related to the goal of minimizing meeting hours. The term "Man hours" is used multiple times across the application but it doesn't seem to capture what you want it to mean which is: "total amount of hours spent on meetings". It would make sense to add a little more documentation (i.e. comments) in order for the user to better understand what this value means and how does the application calculate it. This modification will make the goal of task 3 (presenting useful meeting stats) much more effective and actionable.

Finally, many of the violations I found were the result of the application not conforming to common real world, industry standards (heuristic H2-2). These violations can easily be resolved by adhering to the standards of similar applications as mentioned above.

**D:** The minimalist design is beautiful; the interface is generally clean, consistent and aesthetically pleasing. The color patterns are calming and contrast well everywhere except in the placeholder text. Most of the issues I had using the prototype could have been cleared up with a tutorial feature that overlaid the screen (similar to the "swoosh. sent." screen). I wonder if your constant use of lowercase is suitable/would work in a more formal work environment. Finally, it might be worth re-thinking your status screen or having a little text box at the bottom talking about the importance of man-hours. Is this a specific number that users care significantly about?

## **Severity Ratings**

- 1- don't agree that this is a usability problem
- 2- cosmetic problem
- 3- minor usability problem
- 4- major usability problem; important to fix
- 5- 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