A Heuristic Usability Evaluation of 'Twee'

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We live in the golden age of TV shows. Some TV shows are bigger than most big blockbuster movies. Everybody watches some shows today, whether you are a teenager with a lot of time on your hands or a middle aged hard working woman. But with shows like Breaking Bad and the Wire, who does not want to watch TV. With the explosion of procedural shows the last few years, everybody watches something. It is not always easy keeping track of 10 TV shows, that is where Twee comes in. Twee helps you to keep track of which episodes you have watched and which episodes are airing. Twee is one of those things you really can not live without once you have it, but if you have not used it, it seems not that crucial. In this report, we will present a brief heuristic evaluation of 'Twee', looking at it through the lens of archetypical users, common usage activities and the most noteworthy usability issues.

1   Imagining User Persona's

When evaluating the strong points and weaknesses of an application, it can often help to take into consideration who be using it, and to which end. Issues that interfere with the main way customers are using the app should be taken more seriously. But not every app necessarily has just one kind of user. It is reasonable to assume that all users of Twee enjoy watching TV shows. However, that is still quite a diverse demographic. In this case, we thought it helpful to split the user base up in three general categories, each exemplified by one archetypical persona.

Unfortunately, no statistics have been published by the programmers behind Twee, so we instead tried to visualize the different kinds of TV enthusiasts in general. We found that these could be divided roughly in three categories: viewers that watch a small number of shows closely, viewers that watch a large amount of shows simultaneously and viewer's that briefly try a large number of shows. In attempt to visualize these types of users, the following persona's were created.

Simone

As a 32 year old surgical assistant, Simone currently does not find herself with much time to spare for TV and other entertainment. Simone never follows many shows at once, and hardly ever tries something new; in fact, right now she follows just two shows. These shows, however, she is a fanatic fan of. She has never missed an episode of either. In fact she knows enough about their respective fictive universes to write a book about by now. Although Simone hardly needs help remembering what she is currently watching, she uses Twee's calendar feature to know exactly when the new episodes come out, so she can plan her busy schedule around them.

Hugo

It is sometimes said of all demographics, high-school students have the most time to spare on entertainment media. Hugo, a high-schooler himself, is certainly no exception: one could not name a TV-show that he has not at least watched a few episodes of. Since the week-long-wait between episode's is far to long for Hugo, he watches many shows simultaneously; sometimes too many to keep track of himself. When continuing a show that he has not watched in a long time, Hugo will usually have forgotten the exact number of the episode he last watched, meaning that he partially re-watch old episodes to find himself again. Twee can save him this trouble by reminding him exactly which shows he was watching a year ago, and where he left them. The short synopses per episode that Twee displays also help get Hugo back up to speed on previously 'dropped shows.

Peter

Peter is a 43 year old IT-specialist who loves to watch TV but not just any. Peter does not like the standard procedurals that everyone else is watching, and instead likes a bit of everything, so long as it is different and new. Peter often finds himself watching no more than the first few episodes of a show, before his interest is captured by something else. The shows that Peter does watch are often obscure, low budget or in a language foreign to him. Peter started using Twee to keep track of the vast array of shows he had tried briefly and forgotten. Lately however he has been more interested in using Twee to find new and ground breaking shows. Indeed, any features that Twee might have to recommend shows to him (possibly keeping his preference in mind), could save him a lot of time of searching.

2 Exploring Usage Scenarios

In order to map out what the average user's experience will be like when using Twee, we considered a few core activities that they will likely use frequently. The central question is what the experience our persona's (and by extension, users that are like those persona's) would be when performing these activities. For Twee, most functionality revolves around the shows that have already been added to the library, so adding a new show is certainly something users will do frequently. Besides that, keeping track of which new episodes are coming out is arguably the central feature of Twee. This has been summarized in the proceeding scenarios, each followed by our idea of how the persona's would experience them.

1. Adding a new show

Simone

Adding a show should be a piece of cake for Simone. She knows the names of her shows, so she can easily find them using Twee. After that, she never has to add another show again.

Hugo

Adding a show is very easy for Hugo since he knows the names of the shows that he watches, so he will have no problem with finding them with Twee.

Peter

There are no detailed search functions to look for shows, the only ways to add a show to your shows is to know the name of the show you want to watch, or to see it in trending. In Peters case this is problematic since he wants to discover new shows that he doesnt know yet and that arent very popular yet so he cant find them with these two methods. To add a TV show Peter has to first find the shows somewhere else and then add it on twee when you just want to use one app to find and add the shows to your shows.

2. Seeing which episodes are available

Simone

For someone like Simone, it is very easy to see what episodes are available. Since she only watches a couple of shows, her timeline is clean and relatively empty. However, the real value Twee has to offer her, is planning ahead so she can adjust her schedule to the air dates of her favourite shows. The Twee calendar provides that feature for her. She can easily see on what days the episodes air, from a month prior to said air date. This allows her to keep track of her shows and adjust her schedule around them.

Hugo

Seeing what episodes are available is no problem with the app since you can easily see that when you click on a TV show that you have added to your shows. For Hugo it might be a little unclear since he watches a lot of shows and he has some shows that he doesnt really keep up with. On the Timeline he can see the episodes of shows that he is almost caught up with but for the shows that he isnt he cant quickly see what episodes he has left.

Peter

When you have added a show to your shows you can easily see how many episodes have already aired and when the rest of the episodes air in this season. Thus, for someone like Peter who mostly watches shows that are in their first season he can quickly see how many episodes have already aired and when the next one airs. But what you really want to see when you open Twee is that you can see every show that is still airing and where you have episodes left to watch. You will only see a show on your timeline when you have seen the episode that aired one month ago.

3. Checking which episodes you missed after a period of time (like a holiday)

Simone

If, sadly, Simone was not able to watch an episode due to her tight schedule, she need not worry. She can use the timeline to find the recently aired episodes of her shows, and if she has been out for a while, she can use Twee's 'backlog' feature to find them.

Hugo

If Hugo was not able to watch any show he can see them on his timeline if he was almost caught up with a show. Otherwise he can fill in his last day of watching a show in the backlog and Twee will show every episode of every show that he has not marked as watched yet. So he can easily see which episodes he still has left to get caught up again.

Peter

If you were gone for some time there is an easy tab to set the date of the last time you watched an episode of any show and it will give you a list of all episodes of your shows that you have missed. It is automatically updated when you add a new show to you shows and you can mark them as watched on the same page so you can easily keep track of all episodes you have missed until you get by again.

3 Inspection of Usability Problems

An initial inspection was conducted by us four separately, each trying to identify shortcomings of the app that could either subtly or severely hinder the user experience. The problems we found are summarised (in no particular order) below.

Following the accumulation of this list, we individually reviewed the severity of these problems, based on how frequently they might occur, how difficult they are for users to circumvent, and much of a problem they might be for our three hypothetical users, among others. The partial results of this evaluation can be found at the back of this report, but we have also compiled them into the following conclusions:

1. *Adding and removing shows from your time-line is not possible, which clutters the time-line.*

   Although this leads to noticeable cluttering of the user interface, which most of us found frustrating to deal with, this will only occur for users with a large number of shows in their libraries. Since no real functionality is lost either, we agreed that this is issue of minor importance.

2. *In the calendar, no distinction is made between shows that are 'starred' and shows that are not, which could make it hard to find one's favourite show.*

   We each individually concluded that for someone that uses Twee with the primary goal of keeping of knowing exactly when their shows air (for instance, someone who uses cable televion to view their shows, or someone with a busy schedule, like Simone) this problem would seriously affect usability. However, since these kinds of users are presumably in the minority, the problem is only of moderate severity.

3. *Although the calendar can display all episodes airing within the next month, it does not support the 'calendar-like' month layout that many users may have become accustomed with. This could make it more difficult for users to visualise times and plan their month (or week) accordingly.*

   ... furthermore, the episode names and numbers are shown prominently, with the show name shown only in very small text, even though the show name is often the only important information. This makes the list less concise and readable.

   This is the issue we were most divided on in our evaluation, with some of us listing it as a 'minor gripe' and others going so far as to call it a 'game-breaker'. Although all of us agreed that the calender could be more readable, some found it worse than others. What made the severity of this point particularly difficult to pinpoint was that none of us were fully sure how much the average user would use the calender (some users might only use the time line instead). Averaging out our individual conclusions, we agreed that this was a problem of moderate severity.

4. *Adding non-English TV shows often results in shows without a name in my shows.*

   This issue affects such a small enough portion of the userbase that it seems like a low-priority problem. Even so, most of us only rated this as

a moderate hindrance to usability. Thus, we agreed that this is an issue of low priority.

5. *In my shows, deleting a show, or moving it to* my archives*, requires that the user long-presses that show. There is no clear indication that a long click will accomplish this.*

   The consensus was that this was the most serious issue. After all, this can and likely often does affect limit functionality of the app. Noteworthy is that long-press gestures may be more common Android app's than in IOS ones, so this may be more of an issue for some users than others. However, when a user does not realize that this gesture exists, it can have a serious impact on their experience with this app. It seems likely enough that one would not notice it, that we decided to rate this as a high severity issue.

4 Conclusion

For our target audience, our persona's, this app accomplishes its tasks quite well. Twee can be a real time saver for users like Hugo and Simone. Only Peter has some problems, for instance if he wants to discover new shows and wants to add foreign shows. The simple and easy design makes the app both easy to navigate and user friendly. It has something for almost every person. Simone can use it to keep up to date with the few shows that she follows. Hugo can keep track of every episode that he has watched and of those he has not. The only of our persona's that can not really use Twee is Peter since he wants to find new shows, and Twee does not really have a good search function, you can only add shows by typing its name, its tvdb id or finding it on the trending page A change like show added is shown in the form of a toast. The app uses the English language and no technical terms that are difficult to understand for the average user. The user has a lot of freedom in the app. If, for example, an user adds a show he/she does not want to add, it is possible to remove it. Or if an user sets an episode on watched, it can easily be undone. For the most part the user's memory load is minimal, only in certain instances (like deleting a show from your shows) does the user have to find something out himself. The app has a few accelerators, for example, an option to set an whole season as watched. Most parts of the app are very easy to navigate. The app also uses the new Android standard of material design. It has a beautiful design and even supports two different interface themes (although the black theme is noticeably less readable than the default). Because so many people watch tv shows today, there is a lot of demand for these kind of app's and websites. But of all these apps Twee is simply among most pleasing to the eye and (despite a few very minor usability issues), it has the most ease of use and is simply the most robust.

Appendix : Individual Reviews

1. *Adding and removing shows from your time-line is not possible, which clutters the time-line.*

M. Hernandez

It is very unintuitive that all of your shows appear on the time-line, even the ones that were not starred (and the ones that were archived, too!). This design choice is in conflict with the function of the time-line. which is a sort of 'to do' list. Having shows which they do not plan to watch appear on their to do list, could be a frustrating experience for users. Luckily, the time-line includes the option to use a compact grid view, so that even a user that watches a lot of shows will be able to browse through with relative ease. Thus, this might only be a minor annoyance.

G. Hendriksen

This is only annoying if the user watches and follows many shows. If one only follows two or three shows, like Simone and Peter, the time line is still quite empty and clear. It is easy to see which shows you are watching, and what episodes you still have not watched. However, for people like Hugo, this is an issue, since they have a lot of shows on their time line, making it cluttered indeed.

4.1   J. Vrancken

The time line is a very nice function in the app. It is quite new, thus has not been tweaked to perfection. The biggest problem with the time line is the fact that the app decides which shows are shown. The user can explicitly add shows to their timeline by pinning them, but the app also puts any recent episodes of shows you have watched on the user's time line. For users like Peter and Simone this is not a very big problem, because they do not have many shows on their time line in the first place, but it is a problem for Hugo. His time line will become clustered very quickly.

4.2   R. Leferink

The time line is a very handy feature of the app to show you which shows you are almost caught up with, the only problem with this feature is that you can not remove shows from it so it can become cluttered when you are following a couple of shows at the same time. You can manually add

shows to your time line by pinning it so you can see when a new episode has aired when you open the app but removing shows that are not pinned is not possible which is a small annoyance. This is not a really big problem for Simone and Peter since Simone only watches 1 or 2 shows at the same time and Peter does not watch a lot of shows at the same time most of the time. For Hugo however this is a pretty big problem since he watches a lot of shows at the same time so his time line will be cluttered most of the time.

2. *As of writing this report, the option for setting a different date offset for a specific show does not work properly. This could mean the loss of an essential feature, since time offsets can vary wildly per show, making the calendar unreliable.*

M. Hernandez

I imagine that this feature being dysfunctional can be quite a deal-breaker for some users. Specifically for users like Simone, who might only be using this app for the calendar app in the first place. It is also not really possible to circumvent this problem: although storing the correct time an episode in a separate calender app is always possible, this more-or-less defeats the point of using Twee in the first place for Simone. Granted, the percentage of users that only uses twee to remember the exact hour an episodes airs is probably not that high, so this problem likely does not obtrusively affect many users.

G. Hendriksen

This could be a big problem for Simone, since she has a very tight schedule to keep, meaning she would want to plan in the episodes on the right day. If this date offset does not work, her planning could possibly be wrong, causing her to miss the episode.

4.3   J. Vrancken

The feature to offset the release date of every show or specific shows is very useful feature. Especially for people who do not live in United States, because they will most likely get the shows at least one day later. The problem is that sometimes the offset does not update correctly, thus showing a wrong air date. For Simone this does not matter too much, she watches not many shows and can remember the weekly hours they air. But Hugo watches too many shows to remember when they come out, this problem means that he might miss an episode or two. Peter does not watch too many shows, but the shows he watches have varying air dates, the offset means that he also might miss an episode.

4.4   R. Leferink

The app has a feature to offset the airing time of a show to set the airdate 2 days earlier or 2 days later. However this doesnt always works well and can show wrong airdates or show that an episode has already aired when it hasnt. For Simone this isnt a problem since she only follows a couple of shows so she can remember the airdates herself but for Hugo this can be a problem since he watches a lot of shows at the same time so he cant keep track of airdates of every show that he is currently watching which might mean that he misses an episode of a show. This can also be a problem for Peter since he might be watching multiple shows as well and since they are not as popular he might be able to see that episode again until they air again.

3. *Although the calendar can display all episodes airing within the next month, it does not support the 'calendar-like' month layout that many users may have become accustomed with. This could make it more difficult for users to visualise times and plan their month (or week) accordingly.*

   ... furthermore, the episode names and numbers are shown prominently, with the show name shown only in very small text, even though the show name is often the only important information. This makes the list less concise and readable.

M. Hernandez

Seemingly, the calendar is one of the main selling-points of this app for many types of user. In fact, all three of our hypothetical users (Peter, Simone, Hugo) would use the calendar, I imagine. Thus, even though this is a more of an *aesthetic* issue and not one of app functionality, it will noticeably affect most users.

Of all the app's in the Play store that have a calendar feature, a large majority uses the default week and month layout, and I strongly expect users will have trouble adjusting. Moreover the layout used here is not only unfamiliar, but also unintuitive and ugly. The text showing the name of the show airing is (the most vital information) small and difficult to read in both the black and white versions of the app, there is no immediately clear barrier between different days, and the "time-distance" between events in not visually communicated at all. Given all this, I would strongly consider improving on this aspect of the app in the next patch.

G. Hendriksen

The calendar feature is very useful. However, the way it is organised is not very neat. It would be better if it was displayed in a grid, like every other calendar. That would make it easier to see what episodes air on what day,

and how that corresponds to your own personal schedule. Furthermore, it would help people like Hugo very much, since the current calendar also becomes very cluttered with the amount of shows they watch.

As for the font sizes, I do not think this is a very big problem, since the show name is at least shown. For people with a full calendar, like Hugo, I could imagine they would want to find their favourite show easier, but other than that, I do not think it is a large issue.

4.5   J. Vrancken

Hugo is affected most by this problem, the many shows he watches means his calendar is very long. It would be better if there was a grid like calendar so he could easily see what is coming the following month. For Peter and Simone this is also a problem, but a lot less severe.

4.6   R. Leferink

This is not really a big problem it is only a small annoyance to plan your week around your shows. In the current layout it is also difficult to see what shows air on one day and what shows on the day after. For Simone this should not be a real problem since she only follows 1 or 2 shows at most so those airdate's will most likely not overlap, but for Hugo this is problematic since he follows a lot of shows their airdate's will probably overlap. For Peter this could be an issue since he might watch multiple shows at the same time. The biggest problem with this is that the calendar does not display airtime's so you only know what day your show airs but not when.

4. *In calendar, no distinction is made between shows that are 'starred' and shows that are not, which could make it hard to find one's favourite show.*

M. Hernandez

I would expect this issue to affact a relatively large part of the user base. After all, the list-like layout of the calendar makes it so it quickly becomes cluttered. For anyone who is only tangentially interested in some of the shows in their library and archive, I expect this to be noticeable annoyance.

G. Hendriksen

This could be an issue for Hugo. Since he watches a lot of shows, it is not unlikely that he has a couple of favourite shows. It would make sense that he would want those shows to be highlighted in the calendar, so he could be able to watch them before other shows. For Simone and Peter, this is

less of an issue, since they do not have a lot of shows to watch, so it is very likely that they do not have a favourite show that they want to have highlighted.

4.7   J. Vrancken

Hugo is affected most by this problem, he has a lot of shows in his calendar. Searching for his favourite ones is a tedious job, it would be better if he could quickly see the them. For Peter and Simone this is also a problem, but a lot less severe.

4.8   R. Leferink

The main problem here lies with the backend databases the app uses, trakt. and thetvdb.com. Despite being very complete, they miss some of the more obscure, foreign shows. Peter will not like this, a lot of the shows he watches fall into that category and he thus can not add some of them. Hugo might have the same problem with one or two shows, but the problem is less severe for him. For Simone the problem does not matter that much, everything she watches is very popular and widely cataloged.

5. *Adding non-English TV shows often results in shows without a name in my shows.*

M. Hernandez

When a user has looked up a show in the database and added it to their library, they themselves should already know the name of that show. It seems likely that they could recognise the show in their library, even with the name or picture missing. Thus, no functionality should be lost, although this does seem like rather annoying visual imperfection. The scope of this issue is limited by the fact that most well-known shows all nearly all English, but it is still worth considering the impact that this will have on the Hugo's of the world.

G. Hendriksen

This could be a problem for people like Peter, because he likes to watch obscure shows that are not necessarily English. He could end up with a list full of shows that lack a name, which would be quite unfortunate and not really practical.

4.9   J. Vrancken

The main problem here lies with the backend databases the app uses, trakt.tv and thetvdb.com. Despite being very complete, they miss some of the more obscure, foreign shows. Peter will not like this, a lot of the shows he watches fall into that category and he thus can not add some of them. Hugo might have the same problem with one or two shows, but the problem is less severe for him. For Simone it does not matter that much, everything she watches is very popular and widely catalogued.

4.10   R. Leferink

For Simone and Hugo this probably will not be a problem since they will only watch shows that have English names. For Peter however this could be a problem since he watches more obscure shows and probably non-English as well.

6. *In my shows, deleting a show, or moving it to* my archives*, requires that the user long-presses that show. There is no clear indication that a long click will accomplish this.*

M. Hernandez

The existence of certain gestures not being noticed by some users is not always a problem. It is fine when there are other ways to accomplish the same task, and the gesture is just there to give users more options. However, when a gesture is the only way to accomplish a task, it needs to be immediately clear to the user that it is there. For instance, Twee communicates the fact that swiping in from the left opens an options menu very clearly by placing an 'options' icon in the top left of the screen. The image buttons that users need to long press to archive shows do not communicate so clearly. They have nothing special about them. The exact same buttons used in the timeline, but in there, long pressing them does nothing (so a user might try long pressing them in the timeline and reasonably assume they this never has an effect).

Of all usability problems this app has, I find that this is far and away the most offensive one. For users like Peter or Hugo, archiving old show is a routine activity, and the app would be incomplete without it, with shows cluttering a user's library and them not being able to discard them. Currently however, it is very plausible that some users will never realize that it exists. Or perhaps they will, but they will give up on looking after a while and maybe move on to a another (more usable) TV-show app.

G. Hendriksen

This is an issue that all users will experience once, I believe. Especially for the users for whom it is not intuitive to click and hold on a show. It is a major inconvenience the first time around, since it is not clear how to do this. However, when you find this feature, by luck or accident, you will have no trouble with it anymore, as you know how to do this.

4.11   J. Vrancken

This is really a problem for the non android power users, people that will not instinctively know what is pressable and long-pressable. Deleting and archiving shows is not something you do daily on the app, thus it will take most users some time to encounter the problem.

4.12   R. Leferink

This is a small problem for all three personas. At first they wont know how to delete a show but since long clicks are so widely used that will be one of the first things they will try after they cant delete it with a single click.