Heuristic Evaluation of DotTrain

1. Problem

This is an evaluation of the DotTrain app to promote sustainable commutes through socializing on the train.

2. Violations Found

1. [H2-3 User Control and Freedom][Severity 4] [Found by A,B,C,D]

No back button to go between intermediate screens. On some screens there is simply no exit route and I end up stuck for eternity.
Fix: Implement navigation between tasks and levels in tasks.

2. [H2-1 Visibility of Status][Severity 2][Found by B,D]

When you click on "invite", it sends the user back to the list without a clear indication what happened.
Fix: Provide a status indication of people that were invited, perhaps on the match list.

3. [H2-3 User Control and Freedom][Severity 3][B]

The invitations screen (page 3) is a dead-end.
Fix: Implement navigation in the page.

4. [H2-8 Aesthetic and Minimalist][Severity 3][A,B,C,D]

On the match list(screen 2), too much text and bold does not assist in distinguishing between users.

Fix: A possible fix would be to have a % interest matching. The text is hard to parse.

5. [H2-4 Consistency and Standards][Severity 2][B,D]

Home screen has a green availability, but then there's a switch on the bottom. What does it look like if the switch were toggled?
Fix: Send to home screen to send home.

6. [H2-8 Aesthetic and Minimalist Design][Severity 2][B]

In looking at a specific user, the invite and accept button are the same, except for the text, which is hard to read. Should distinguish between similar but different actions.
Fix: Invite comes before accept, so the buttons could have different hues to indicate that they're different steps in the process.

7. [H2-8 Aesthetic and Minimalist Design][Severity 1][B]

The profile page is too empty and doesn't convey essential information about a user's profile. Name remains in the corner (self-referential link?), no profile image or other personal information.
Fix: Remove the corner link on this page, and place the name in the center, along with some personal info/preferences.

8. [H2-8 Aesthetic and Minimalist Design][Severity 3][B,C,D]

The icons between choosing a game and listening to music are too small, indistinct, and don't correlate to the actions.
Fix: Choose larger, more appropriate icons. Music note for music?

9. [H2-3 User Control and Freedom][Severity 2][B]
Screen 11: You're forced to choose between music and game, and there's no alternative, nor a way to back out.
Fix: Add navigation.

10. [H2-3 User Control and Freedom][Severity 4][A,B,D]
Within the game, there's no back button. Game is not implemented, but it's a dead end.
Fix: implement navigation

11. [H2-2 Match between System and Real World][Severity 4][A,B,C,D] How do you find the person you matched with in real life? There is no way to message someone you matched with. It would be good to communicate with matches so that you can arrange meeting or clarify what time they will be available.
Fix: add a messaging layer, a location based finder, or a real world analog to bike tags.

12. [H2-4 Consistency][Severity 3][B,C]
On screen 2, green dot in the app seems to indicate availability, but here it's really indicating invitations. The green dot is overloaded in meaning through the app. Generally, in chat apps, green indicates available, not a notification.
Fix: Be more selective about the use of green, or vary the hues.

13. [H2-8 Aesthetic and Minimalist Design][Severity 2][B,D]
In looking at a specific matched profile, it's very cluttered and full of text.
Suggestion: show percent match

14. [H2-3 User Control and Freedom][Severity 3][B,C]
No way to exit out of the profile without going to the home page and losing status.
Fix: implement navigation

15. [H2-4 Consistency and Standards][Severity 3][B,C,D]
No need to go back to home button unless you're opting to taking yourself offline (which the switch does). Going back to home should not be navigation, but more akin to logout.
Fix: Separate navigation within the tasks from taking yourself offline.

16. [H2-5 Error Prevention][Severity 2][A,B]
No way to back out of invitations if you change your mind or matched with someone else.
Fix: implement navigation

17. [H2-5 Error Prevention][Severity 3][A,C,D]
No way to see or change your daily interest preferences. You would have to start from the beginning all over again. Should be a way to efficiently and dynamically change interests.
Fix: have a screen to change your preferences.

18. [H2-7 Efficiency of Use][Severity 2][A,C,D]
Every use has to go through every topic of the day. For a power user, there's no way to skip past the topics and auto-fill, or just pick one topic and skip the rest.
Fix: add a button (fake) an auto-fill button when you ask the user to select topics for the day.

19. [H2-2 Match System and Real World][Severity 3][A,B,C]
The app is designed for anonymity. As a result, all the screens show interests, when you're matching with a person. As a result, there's no way to remember users that you want to talk to again (i.e. friends). It's also deeply impersonal and difficult to build connections.

Fix: Show the matches with some sort of personification, whether it's a username or a mii-style avatar. At a minimum, you want a first name so you can introduce yourself.

20. [H2-8 -Aesthetic and Minimalist Design][Severity 3][A,C,D]
Text heavy design is extremely confusing. Not obvious what to click and there is too much information to parse at the same time. Every time I click I have no idea where I'm about to go in the app.
Fix: I would suggest making better use of icons and pictures.

21. [H2-8 Aesthetic and Minimalist Design][Severity 0][A,C]
I'm really not sure what the profile is for. What are the categories? I thought I already swiped for interests. Either make the profile a little more useful and less text heavy or maybe get rid of it. Is it necessary? Is the profile today's interests or permanent interests?
Fix: Identify if the profile contains "my interests" or "my topics for today"

22. [H2-2 Match System and Real World][Severity 1][A,C]
Match system and real world. These QR codes don't exist on caltrain. What if you're standing/packed in with the bikes?

Fix:If you are assuming that caltrain will let you put things on the train, why not something like iBeacon to allow the device to determine which seat or standing area without user intervention? it would also live update if the user switches their seat.

23. [H2-10 Help and documentation][Severity 1][A,B]
It's not apparent how you play this game. There's no instructions on screen, or buttons that would be present in other sudoku apps. In general, there are few on-screen indicators on where the user is in the task flow.
Fix: Implement an interface for the game

24: [H2-8 Aesthetic and Minimalist Design][Severity 0][A]
It's redundant and unnecessary to display the user's own name. If the idea is to create a link to the user's own profile, the settings button suffices perfectly.
Fix: Remove the upper right corner link, and perhaps merge it with the settings icon.

25: [H2-4 Consistency and Standards][Severity 2][A]
The arrows next to the swipe look like scroll arrows, not tinder style swipes. I initially thought I was just scrolling through the topics and then got to the end unexpectedly.
Fix: There should be some indication which side is which (up/down). Perhaps even an up/down swipe would make more sense.

26: [H2-1 Visibility of status][Severity 1][A]
Showing a list of matches before the user's voted on any topic is misleading. Why even show the list at all? Does it update live when the user swipes a particular subject?
Fix: live update the background from initially blank, then adding matches as the user swipes, or just don't display matches until the user is done.

27: [H2–7. Flexibility and efficiency of use][Severity 0][A,D]
Should the app know certain persistent preferences (i.e. surfing, not the fall harvest) and auto-fill them on the interests screen?

28: **[H2-4 Consistency and Standards][Severity 0][D]**
On screen 12, the game selection screen, the game symbol is highlighted, but why? There's no apparent reason for it to be.

Fix: Unhighlight the green.

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			**2**
[H2-2: Match Sys & World]		1		1	1	**3**
[H2-3: User Control]			1	2	2	**5**
[H2-4: Consistency]	1		2	2		**5**
[H2-5: Error Prevention]			1	1		**2**
[H2-6: Recognition not Recall]						**0**
[H2-7: Efficiency of Use]	1		1			**2**
[H2-8: Minimalist Design]	2	1	2	3		**8**
[H2-9: Help Users with Errors]						**0**
[H2-10: Documentation]		1				**1**
Total Violations by Severity	**4**	**4**	**8**	**9**	**3**	**28**
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	3	0	1	1
sev. 1	3	2	1	0
sev. 2	3	6	1	3
sev. 3	5	7	8	5
sev. 4	3	3	1	3
total (sev. 3 & 4)	8	10	9	8
total (all severity levels)	17	18	12	12

5. Summary Recommendations

Overall the design is text heavy. Straight, dense text is hard to read and does not make for an intuitive interface. In this case a picture is definitely worth a thousand words. Also it would be good to up the contrast on most of the text. The bold pops out but most of the other text is unreadable. Navigation issues throughout the application are also a big problem.

A back button is necessary for users to navigate around the app. There are some screen where there is nothing to press and it is impossible to navigate away from the page. On other screens there's a home button, but that takes the user back to the very beginning and they have to reenter in all of their information.

There are also not very many features for power users. It would be good to have a way for people to swipe on a few categories and then skip straight to the matching screen. Also there's no way for people to communicate with their matches. I would recommend adding a message option so that people can coordinate meeting.

Names of users are critical both for trust and recognition. People like developing relationships and if they don't know each others name it is hard to build a relationship. Other information that would be helpful to provide would be a list of people I've matched with in the past and whether they are again on the same train.

Overall some good ideas but needs work on the UI side of things.