Heuristic Usability Evaluation for

Shuddle App

Safe rides for busy kids

Scheduled rides
Last-minute rides
Carpools

Chia-Wei Tu
Psych 273 | Human Factors & Ergonomics Seminar
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</tr>
</tbody>
</table>
1. EXECUTIVE SUMMARY

1.1 PRODUCT AND OBJECTIVE

Shuddle is a San Francisco company that offers services for families to book rides for their kids to and from activities like school and sports. It is also considered as “Uber for Kids”. This report heuristically evaluated the usability of Shuddle app. Usability issues within the app and suggestions for improvement can be found in this report.

1.2 METHODOLOGY

In order to properly assess the users’ feedback of Shuddle app, two different inquiry methods were conducted to gather information of users’ real thought.

A) Web Literature Review: A web search and literature review was conducted to gather information about the company and users’ reviews and opinions of their service and app.

B) Follow-up Survey: A survey with follow-up questions was conducted to gather users’ thoughts of overall and details of Shuddle app.

1.3 RESULTS OF INQUIRY METHODS

According to the grading from both App Store and Google Play, Shuddle app has an average score of 4 stars. Besides, based on the survey we conducted, over 80% of the users are satisfied with the app. Therefore, overall speaking, Shuddle app is well designed. However, we still got some frustrating opinions from the users, which means the app still has space to improve itself.

12. Overall, how satisfied are you with the Shuddle app?

<table>
<thead>
<tr>
<th>Satisfaction Level</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very dissatisfied</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>16.7%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>18.7%</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>2 33.3%</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>2 33.3%</td>
</tr>
</tbody>
</table>

Very satisfied: 7 2 33.3%
1.4 HEURISTIC EVALUATION FINDINGS

We evaluated Shuddle app both in the Global/Principle level and the Local/Interface level.

A) Global Usability Issues

Global usability issues are systemic problems associated with user interface and usability. We assessed these problems based on a pool of defined usability design principles. Those issues that seriously violate any principles must be solved to give users the best experience of using the product. After evaluating, we found that several known usability principles were violated by the Shuddle app:

- Consistency
- Feedback
- Visibility
- Affordance
- Legibility and readability
- Visual Hierarchy
- Proximity

B) Local Usability Problems

Local usability problems are issues that directly found on user interfaces within each page. There are plenty of interface-level problems which Shuddle app faces, the most are in FAQ, Add Passenger, and Carpool/Single Family Ride pages. We also defined the priority of them to distinguish different levels of severity.

1.5 SUMMARY & RECOMMENDATIONS

Overall, Shuddle app is user-friendly enough to use. However, if the interface details we stated in this report can be adjusted, it would greatly improve user experience, especially those highly severe ones we marked as red priority. More importantly, Shuddle should listen to their users’ voice at all times, thus can find the precious feedbacks from real users of their app.
2. INTRODUCTION

2.1 PURPOSE

The purpose of this report is to heuristically evaluate the usability of Shuddle app. Usability means making products and systems easier to use, and matching them more closely to user needs and requirements. It is one of the goals of all products. We listed the usability issues and gave suggestion to each of them.

2.2 METHODOLOGY AND PROCESS

Both inquiry methods and inspection methods are used. For the inquiry methods, we conducted a web literature review and a follow-up user survey to gather information from users. For the inspection methods, usability issues both from the Global/Principle level and the Local/Interface level were considered.

2.3 THE APP AND COMPANY GOALS

Shuddle is a ride-sharing app for families that launched in San Francisco. The service allows parents to schedule paid rides for their children through a monthly subscription, plus fares. Furthermore, parents can use the app to review drivers and track rides. Carpools with friends to share fees are also a main function.
In order to guarantee safety, all Shuddle drivers must pass national and local background checks. In addition, every driver must have experience working with children. The Goal of the company is creating that environment everyone can trust, for drivers, parents, and passengers.
3. THE USERS

3.1 USER DEMOGRAPHICS

The main users of Shuddle app are parents that don't have much time picking up their children. Because that Shuddle is a very new company, and their Facebook fan number is few (about 4000), we surmised that Shuddle's user base is still small. Therefore, it’s hard to get the information of user demographics.

3.2 USER GOALS AND USE CASES

People use Shuddle app mainly to schedule rides for their children. The major tasks within the apps are:

- Sign up
- Edit account / profile
- Add passengers
- Schedule a carpool
- Schedule a single family ride
- Review drivers
- Track rides
- Do payment
- Review FAQ

3.3 PERSONAS

There were 6 people responded to my survey. This small sample may help to understand Shuddle’s typical user demographics. Their attributes are described as below:
<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>Age</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>User 1</td>
<td>F</td>
<td>25-40</td>
<td>Stay-at-home-mom/dad</td>
</tr>
<tr>
<td>User 2</td>
<td>F</td>
<td>41-55</td>
<td>Professional</td>
</tr>
<tr>
<td>User 3</td>
<td>F</td>
<td>25-40</td>
<td>Professional</td>
</tr>
<tr>
<td>User 4</td>
<td>F</td>
<td>41-55</td>
<td>Professional</td>
</tr>
<tr>
<td>User 5</td>
<td>F</td>
<td>41-55</td>
<td>Professional</td>
</tr>
<tr>
<td>User 6</td>
<td>F</td>
<td>41-55</td>
<td>Professional</td>
</tr>
</tbody>
</table>

3.4 SUMMARY

Although we can barely find the real users of Shuddle, we can conclude from the personas that most of the user are female (mother), and cause they have children that go to school, their age is mostly between 41-55. Moreover, because the parents have to work and don’t have time to pick up their children, they use Shuddle’s service.
4. INQUIRY METHODS

4.1 INTRODUCTION

Usability inquiry is used to gather information about users' likes, dislikes, needs, behaviors, usage characteristics, and understanding of a product. There are a number of evaluative methods that fit within the usability inquiry framework, such as field observations, use logs, focus groups, interviews, and surveys. In this report, web literature review and user survey are conducted to gather information from users of Shuddle app.

4.2 WEB LITERATURE REVIEW

4.2.1 Methods and Materials

After reviewing the Shuddle mobile app, a Google search was performed to discover information in any articles which reviews Shuddle app or website. Keywords used in the search were: Shuddle, app, review, good, bad, sucks, poor, design, fail, usability, and interface. Unfortunately, probably because their user base is still small, there is very little information other than press released on the web. Moreover, most of the information is associated with safe and convenient issues of their service, not the usability of the app or website. Therefore, we checked App Store (for iOS), Google Play (for Android), and their Facebook Page to get reviews of their real users.

A) App Store

The Newest version for iOS is 2.5, which was released on 10/6/2015. There is no user review for this version. The average rating for all past versions is 4 stars out of 5 (total 22 ratings):
From the user reviews of the previous versions, we can see some frustrating points, and conclude that the main problems that users faced are: 1) change home address, and 2) add a passenger.
7. Frustrating
★★★★★ Pachinko2k - 2015年5月7日
There is no option to change home address once I've logged in. My home address is not in a Shuddle serviceable area, therefore I would like to enter my future home address. There is no option to get to personal profile to edit once the screen says “coming soon.”

8. Fantastic idea! I’ll be your 1st cus...
★★★★★ Benny & the kids - 2015年3月2日
I absolutely love the concept. How necessary it is to have a support system like this. My wife can get her life back! Thanks

9. Doesn’t let you change your hom...
★★★★★ Kjk64 - 2015年9月6日
Doesn’t let you check more than one route in various locations. Once you add home it blows you out of the app if it doesn’t offer service. Even though you may need to try in a city near by.

★★★★★ Bessie ☺️ - 2015年4月2日
I'm 15, if I need to sneak out can I be able to get a ride using this app or will they like call the cops or something?

11. No service in my area
★★★★★ punas - 2015年5月17日
I live in the Phoenix metro area. It is more populous than the Bay Area where Shuddle was started. No service in my area.

12. Good app
★★★★★ Mom 106 - 2014年10月15日
Awesome app for parents

13. Passengers?
★★★★★ Rustyreki - 2015年6月24日
App fails repeatedly to permit me to identify my son as a “passenger.” Hence, it is useless.

14. Bring Shuddle to D.C. Please
★★★★★ Koala Carla - 2015年2月19日
Just saw info on NBC Today news show. Your app seems like a good service.
B) **Google Play**

The average rating of Android Shuddle app is also 4 stars out of 5 (total 20 ratings) with about 1,000 downloads. However, there are no users writing down their reviews, so the users’ frustrating points cannot be defined.

![Google Play Screenshot]

C) **Facebook Page**

Shuddle has about 4,000 fans on Facebook, but we should notice that some of them could be the employers, employees and their friends, not the real users.
All comments under the posts in 2015 have been reviewed. Most of the comments are associated with the service, and there are all positive.
The only one comment associated with the app is as below (an install problem), but it seems more like a bug, not a usability issue.
4.2.2 Findings and Conclusion

The main feedbacks of using the app on web reviews are 1) Having trouble to change home address, and 2) Having trouble to add a passenger.

4.2.2.1 Change home address

Indeed, there is a problem to change home address in the newest version of iOS app, but it should be defined as a bug, not a usability issue.

![Edit Home Error](image1)

However, it is not very intuitive to change home address because the function is not under the Account section, where users may guess the location of it. Instead, it is on both pages: 1) the middle of Homepage, and 2) under one page of scheduling process (as the pictures below).

It’s better to add “home address” under the Account section, so that users can edit their profile information together.
4.2.2.2 Add a passenger

There is some usability problems associated with this function. First of all, the picker is not very easy to use. It is a double picker, but the words and intervals are too small. Hence it is hard to pick options that users really want. Second, instead of other input boxes or itself, users cannot touch the blank areas to close the picker. But when users touch an input box, the picker closes and keyboard shows. The quick switch is uncomfortable for human eyes.

Third, if a user chooses “Self” for the Relationship, the last two fields (“Shuddle Pass” and “Mobile Number”) would automatically disappear. It is because “self” doesn’t need a Pass to confirm who he/she is, and the Mobile Number is the same as what he/she entered when signing up. However, when we first used it, we thought it was a bug, and tried to figure out what’s going on repeatedly. It is better to use default or disable appearance other than directly taking the fields away.

Besides the usability of the picker, there are bugs in this section – the Relationship field sometimes shows unselected after selecting.
4.2.2.3 Conclusion

There are very few feedbacks from users of Shuddle app. They seem to care more about the service (especially safety and convenience) than the app. It is probably because the app has been designed user friendly enough. However, there are still some usability problems that need to be solved.

4.3 FOLLOW-UP USER SURVEYS

4.3.1 Methods and Materials

An online survey of user experience in a form of questionnaire has been conducted. There are 13 questions associated with easiness, visually appealing, reliability, and satisfaction in this survey.
Shuddle App Usability Evaluation

Hello, my name is Chia-Wei. I’m a graduate student of Human Factors / Ergonomics program at San Jose State University. I have a project report on evaluating Shuddle’s mobile app, so I conducted a short survey. The purpose of this survey is to know your experience and feedbacks of using the app.

Please take your valuable 5 minutes to answer the following questions. I really appreciate your help! 😊

1. Gender *
   - Female
   - Male

2. Age *
   - under 18
   - 18-24
   - 25-40
   - 41-65
   - 65+
   - Others

3. Occupation *
   - Professional
   - Stay-at-home-mom/dad
   - Retired
   - Student
   - Others

4. Who have you used Shuddle app for? *
   - Your child or children
   - Yourself
   - Your significant other
   - Others

5. How often do you use Shuddle app? *
   - less than once a month
   - 1-3 times a month
   - once a week
   - 2-4 times a week
   - more than 4 times a week

About the Shuddle App

6. How EASY is it to use the following features in this app? *

<table>
<thead>
<tr>
<th>Feature</th>
<th>Very easy</th>
<th>Moderately easy</th>
<th>Slightly easy</th>
<th>Neither easy</th>
<th>Moderately difficult</th>
<th>Slightly difficult</th>
<th>Very difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sign up</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edit account / profile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add passengers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schedule a carpool</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schedule a single family ride</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review drivers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Track rides</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review F-H2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The questions of this survey are:
1. Gender
2. Age
3. Occupation
4. Who have you used Shuddle app for?
5. How often do you use Shuddle app?
6. How EASY is it to use the following features in this app? (Sign up, Edit account / profile, Add passengers, Schedule a carpool, Schedule a single family ride, Review drivers, Track rides, Payment, Review FAQ)
7. If you find any feature is NOT perfect, describe why it is lower than "Very easy".
8. Do you think this app visually appealing?
9. If you think this app is NOT very visually appealing, please write down the reasons.
10. Do you think this app reliable?
11. If you think this app is NOT very reliable, please write down the reasons.
12. Overall, how satisfied are you with the Shuddle app?
13. Do you have any comments or frustrating points on Shuddle app?

We messaged some users in Suddle’s Facebook Page and asked them to do the survey. However, only 6 users out of 50 have answered.

4.3.2 Findings and conclusion

4.3.2.1 Survey outcomes

The responses of the six users are as follows:

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>OUTCOME</th>
</tr>
</thead>
</table>
| 1. Gender | User 1: Female  
User 2: Female  
User 3: Female  
User 4: Female  
User 5: Female  
User 6: Female |
| 2. Age | User 1: 25-40  
User 2: 41-55  
User 3: 25-40  
User 4: 41-55 |
<table>
<thead>
<tr>
<th>Question</th>
<th>User 1</th>
<th>User 2</th>
<th>User 3</th>
<th>User 4</th>
<th>User 5</th>
<th>User 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4. Who have you used Shuddle app for?</strong></td>
<td>User 1: Your child or children</td>
<td>User 2: Your child or children</td>
<td>User 3: Your child or children, Yourself</td>
<td>User 4: Your child or children</td>
<td>User 5: Your child or children</td>
<td>User 6: Your child or children</td>
</tr>
<tr>
<td><strong>5. How often do you use Shuddle app?</strong></td>
<td>User 1: 1-3 times a month</td>
<td>User 2: 2-4 times a week</td>
<td>User 3: less than once a month</td>
<td>User 4: 1-3 times a month</td>
<td>User 5: more than 4 times a week</td>
<td>User 6: more than 4 times a week</td>
</tr>
<tr>
<td><strong>6. How EASY is it to use the following features in this app? [Sign up]</strong></td>
<td>User 1: Moderately easy</td>
<td>User 2: Moderately easy</td>
<td>User 3: Moderately easy</td>
<td>User 4: Very easy</td>
<td>User 5: Very easy</td>
<td>User 6: Neither easy nor difficult</td>
</tr>
<tr>
<td><strong>6. How EASY is it to use the following features in this app? [Edit account / profile ]</strong></td>
<td>User 1: Very easy</td>
<td>User 2: Moderately easy</td>
<td>User 3: Moderately easy</td>
<td>User 4: Very easy</td>
<td>User 5: Very easy</td>
<td>User 6: Neither easy nor difficult</td>
</tr>
<tr>
<td><strong>6. How EASY is it to use the following features in this app? [Add passengers]</strong></td>
<td>User 1: Slightly easy</td>
<td>User 2: Slightly easy</td>
<td>User 3: Slightly difficult</td>
<td>User 4: Moderately easy</td>
<td>User 5: Very easy</td>
<td>User 6: Moderately easy</td>
</tr>
<tr>
<td>Feature</td>
<td>User 1</td>
<td>User 2</td>
<td>User 3</td>
<td>User 4</td>
<td>User 5</td>
<td>User 6</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Schedule a carpool</td>
<td>Moderately easy</td>
<td>Slightly easy</td>
<td>Slightly easy</td>
<td>Moderately easy</td>
<td>Very easy</td>
<td>Moderately easy</td>
</tr>
<tr>
<td>Schedule a single family ride</td>
<td>Moderately easy</td>
<td>Moderately easy</td>
<td>Moderately easy</td>
<td>Moderately easy</td>
<td>Very easy</td>
<td>Moderately easy</td>
</tr>
<tr>
<td>Review drivers</td>
<td>Moderately easy</td>
<td>Moderately easy</td>
<td>Moderately easy</td>
<td>Moderately easy</td>
<td>Very easy</td>
<td>Slightly easy</td>
</tr>
<tr>
<td>Track rides</td>
<td>Moderately easy</td>
<td>Moderately easy</td>
<td>Moderately easy</td>
<td>Moderately easy</td>
<td>Very easy</td>
<td>Slightly easy</td>
</tr>
<tr>
<td>Payment</td>
<td>Moderately easy</td>
<td>Moderately easy</td>
<td>Moderately easy</td>
<td>Moderately easy</td>
<td>Very easy</td>
<td>Slightly easy</td>
</tr>
<tr>
<td>Review FAQ</td>
<td>Moderately easy</td>
<td>Slightly easy</td>
<td>Slightly easy</td>
<td>Moderately easy</td>
<td>Very easy</td>
<td>Slightly easy</td>
</tr>
</tbody>
</table>
7. If you find any feature is NOT perfect, describe why it is lower than "Very easy".

<table>
<thead>
<tr>
<th>User 1: (blank)</th>
</tr>
</thead>
<tbody>
<tr>
<td>User 2: The pickup procedure part is easily to be ignored, so I couldn't proceed to next step at first.</td>
</tr>
<tr>
<td>User 3: Had some trouble when added myself as a passenger, because the picker sometimes went wrong.</td>
</tr>
<tr>
<td>User 4: (blank)</td>
</tr>
<tr>
<td>User 5: (blank)</td>
</tr>
<tr>
<td>User 6: (blank)</td>
</tr>
</tbody>
</table>

8. Do you think this app visually appealing?  
1 (Not visually appealing at all) to 7 (Very visually appealing)

| User 1: 6 |
| User 2: 7 |
| User 3: 5 |
| User 4: 6 |
| User 5: 7 |
| User 6: 5 |

9. If you think this app is NOT very visually appealing, please write down the reasons.

<table>
<thead>
<tr>
<th>User 1: (blank)</th>
</tr>
</thead>
<tbody>
<tr>
<td>User 2: (blank)</td>
</tr>
<tr>
<td>User 3: Don't like the color.</td>
</tr>
<tr>
<td>User 4: (blank)</td>
</tr>
<tr>
<td>User 5: (blank)</td>
</tr>
<tr>
<td>User 6: (blank)</td>
</tr>
</tbody>
</table>

10. Do you think this app reliable?  
1 (Totally unreliable) to 7 (Very reliable)

| User 1: 7 |
| User 2: 7 |
| User 3: 5 |
| User 4: 6 |
| User 5: |
| User 6: |

11. If you think this app is NOT very reliable, please write down the reasons.

<table>
<thead>
<tr>
<th>User 1: (blank)</th>
</tr>
</thead>
<tbody>
<tr>
<td>User 2: (blank)</td>
</tr>
<tr>
<td>User 3: (blank)</td>
</tr>
<tr>
<td>User 4: (blank)</td>
</tr>
<tr>
<td>User 5: (blank)</td>
</tr>
<tr>
<td>User 6: (blank)</td>
</tr>
</tbody>
</table>

12. Overall, how satisfied are you with the Shuddle app?  
1 (Very dissatisfied) to 7 (Very satisfied)

| User 1: 6 |
| User 2: 7 |
| User 3: 5 |
| User 4: 6 |
13. Do you have any comments or frustrating points on Shuddle app?

User 5: I used Shuddle for my 24 year old daughter who has special needs. I loved that I knew who drivers were and that I could easily track her rides.

User 6: I don’t like that I cannot put requests for divers my kids like or that my son needs his bike and needs a driver with a truck…I list it but no one pays attention. Another frustrating part is that sometimes they forget us and don’t schedule us and I am stuck because they don’t inform you. This has happened more than 4 times.

4.3.2.2 Findings and conclusion

The outcomes could be arranged as below:

1. Gender: 100% of the users are female.
2. Age: 33% of the users are 25-40, and 66.7% of the users are 41-55.

3. Occupation: 16.7% of the users are stay-at-home-mom, and 83.3% of the users are professional.

4. For whom has the user used Shuddle app: 100% of the users used it for their child / children, and 16.7% of the users used it for herself.

5. Frequency of use the app: 33.3% of the users used it more than 4 times a week, 33.3% of the users used it 1-3 times a month, 16.7% of the users used it 2-4 times a week, and 16.7% of the users used it less than once a month.
6. Easiness of each task:

6-1. the easiness of signing up: 50% of the users feel moderately easy, 33.3% of the users feel very easy, and 16.7% of the users feel neither easy nor difficult.

6-2. the easiness of editing account/profile: 50% of the users feel very easy, 33.3% of the users feel moderately easy, and 16.7% of the users feel neither easy nor difficult.
6-3. The easiness of adding passengers: 33.3% of the users feel moderately easy, 33.3% of the users feel slightly easy, 16.7% of the users feel very easy, and 16.7% of the users feel slightly difficult.

6-4. The easiness of scheduling a carpool: 50% of the users feel moderately easy, 33.3% of the users feel slightly easy, and 16.7% of the users feel very easy.

6-5. The easiness of scheduling a single family ride: 83.3% of the users feel moderately easy, and 16.7% of the users feel very easy.
6-6. The easiness of reviewing drivers: 66.7% of the users feel moderately easy, 16.7% of the users feel slightly easy, and 16.7% of the users feel very easy.

6-7. The easiness of tracking rides: 66.7% of the users feel moderately easy, 16.7% of the users feel slightly easy, and 16.7% of the users feel very easy.

6-8. The easiness of payment: 66.7% of the users feel moderately easy, 16.7% of the users feel slightly easy, and 16.7% of the users feel very easy.
6-9. the easiness of reviewing FAQ: 50% of the users feel slightly easy, and 33.3% of the users feel moderately easy, and 16.7% of the users feel very easy.

| Review FAQ [6. How EASY is it to use the following features in this app?] |
|-----------------------------|-----|-----|
| Very difficult              | 0   | 0%  |
| Moderately difficult        | 0   | 0%  |
| Slightly difficult          | 0   | 0%  |
| Neither easy nor difficult  | 0   | 0%  |
| Slightly easy               | 3   | 50% |
| Moderately easy             | 2   | 33.3% |
| Very easy                   | 1   | 16.7% |

7. Users’ opinion about easiness:

User 2: The pickup procedure part is easily to be ignored, so I couldn't proceed to next step at first.

User 3: Had some trouble when added myself as a passenger, because the picker sometimes went wrong.

It can be conclude that the app is quite easy to use, except the task of adding passengers. Besides, there may be some problems with interfaces of the “slightly easy” tasks: scheduling a carpool and reviewing FAQ.

8. Visually appealing (1-7): the average rating is 6.

9. Users’ opinion about visually appealing:

User 3: Don't like the color.
10. Reliable (1-7): the average rating is 5.83.


12. Satisfaction (1-7): the average rating is 5.67.

13. Other Users’ feedbacks:

User 5: I used Shuddle for my 24 year old daughter who has special needs. I loved that I knew who drivers were and that I could easily track her rides.

User 6: I don’t like that I cannot put requests for divers my kids like or that my son needs his bike and needs a driver with a truck…I list it but no one pays attention. Another frustrating part is that sometimes they forget us and don’t schedule us and I am stuck because they don’t inform you. This has happened more than 4 times.
In conclusion, most of the users are quite satisfied with the app, including appearance, reliability and functions. However, one of them has terrible experience of using. Her problems are mainly associated with Shuddle’s service, such as unanswered requests and the reliability, but we can still discuss the interface of those functions.
5. GLOBAL USABILITY ISSUES

5.1 CONSISTENCY

5.1.1 Definition

Consistency is the level to which familiar interfaces, features, and other aspects a user has previously experienced continue across a product. For example, if the first level buttons in the homepage are blue, then first level buttons on the other pages should be blue, too.

5.1.2 Evaluation

Shuddle violates the consistency principle within their app repeatedly. It is the most critical global problem of the app.

5.1.3 Violation

A) Buttons: The first level buttons in the homepage are blue color and rectangles. However, the buttons in the FAQ pages are gray, and those in sign in page have rounded corners.
B) Input boxes: There are different types of input boxes in the app.
C) Appearance of status: The different appearances represent the same status – selected, in a single page.

D) Lists: Total different style of content lists in the Rules of the Road and FAQ pages.
5.1.4 Impact

The inconsistency of design will make users confused. For example, they might not sure if they selected an option if it appears gray. Besides, too many different styles in a product makes users feel unprofessional, and think the product is not very visually appealing.

5.1.5 Recommendations

Unify the design of the buttons, links, list, color usage, and status appearance. Make them consistent in all pages in the app.

5.2 FEEDBACK

5.2.1 Definition

The design should keep users informed of actions or interpretations, changes of state or condition, and errors or exceptions that are relevant and of interest to the user through clear, concise, and unambiguous language familiar to users.

5.2.2 Evaluation

Shuddle does good feedbacks in most parts of the app. However, it does not offer enough feedback in the sign up page. When users enter their passwords, there is no information to let them know why their passwords are not accepted.

5.2.3 Violation

In the sign up page, we don’t know why the password cannot pass the verification.
5.2.4 Impact

Without enough information of feedback, users could be jammed in the sign up process, and give up using the app.

5.2.5 Recommendations

Add the error message, such as “password is too short” or “needs at least 1 number” besides the input box. The interface of a system should always let its users know what is happening to the system. Therefore, we should show enough feedback information, such as error messages, dialogs, and loading process on the interface.

5.3 VISIBILITY

5.3.1 Definition

A user interface is only valued when the user interactions achieve their purpose. The first element of user interaction is what the user sees in the interface. Visibility is all about how clearly the user sees the state of the interface and all the possible actions.

5.3.2 Evaluation

Shuddle has some violations about visibility. Most of them are associated with bad design. For example, user cannot figure out the expected function by the shape and color of a button or icon.

5.3.3 Violation

A) Unable to access a specific function: An ad blocks the function of reviewing drivers, and it cannot be closed.
B) Undefined star icons: The star is designed as it has some functions, such as “add to favorite list”, but actually it does not.

C) The design of the “Pickup Procedure” function makes it very easy to be ignored.
5.3.4 Impact

Invisibility could make users frustrated when they use the app. For example, in the survey we conducted, User 2 responded that “The pickup procedure part is easily to be ignored, so I couldn't proceed to next step at first.”

5.3.5 Recommendations

Make sure that which functions are important in the page, and redesign the ambiguous appearance of the functions, such as the stars in the FAQ list page.

5.4 AFFORDANCE

5.4.1 Definition

An affordance is a relation between an object or an environment and an organism that, through a collection of stimuli, affords the opportunity for that organism to perform an action. For example, a knob affords twisting, and perhaps pushing, while a cord affords pulling.

5.4.2 Evaluation

Shuddle app makes some of their function unexpected or very hard to use, which violates some affordance principle.

5.4.3 Violation

A) Logo image unexpectedly lead to the main page of FAQ. Generally, a logo image brings users to the homepage of a web or app.
B) The picker is hard “close” after picking an option. Users should double click the picker or click the other input box to close it.

5.4.4 Impact

Bad design leads to bad affordances, and bad affordances cause frustrating. The User 3 in our survey responded that “Had some trouble when added myself as a passenger, because the picker sometimes went wrong.”

5.4.5 Recommendations

In the FAQ pages, Shuddle should substitute a back button to the logo image, and change the function to “back to the previous screen”. This is just makes sense in mobile devices. Besides, Shuddle should adjust their picker, make the interval and font size larger, and the closing of the picker easier.

5.5 LEGIBILITY AND READABILITY

5.5.1 Definition

It consists in enabling easy reading and fostering a good understanding of what is displayed on the screen. This principle covers two dimensions: the physiological process of reading but also the understanding of what is read.
Make it legible: information is noticeable and distinguishable

Make it readable: information is identifiable, interpretable and attractive: it can be understood.

5.5.2 Evaluation

Shuddle app violates the legibility and readability mainly because its design style. Mostly the contrast of text and background in this app is too low, and makes the words hard to read.

5.5.3 Violation

A) Color contrast: The color of the words is too light to read.
B) Mixed words and sentences: The intervals and font sizes of the FAQ search result page are too small, makes the sentences mix up.

5.5.4 Impact

Users could become tired easily when using an app with low legibility and readability. They will be less willing to use the function, or the whole app. In our survey, the easiness of FAQ section is also relatively low.

5.5.5 Recommendations

Increase the contrast of the text and background: make the words darken. Besides, make the intervals and font sizes of the FAQ search result list larger as well.
5.6 VISUAL HIERARCHY

5.6.1 Definition

Visual hierarchy refers to the arrangement or presentation of elements in a way that implies importance.

5.6.2 Evaluation

Shuddle did not do very well in visual hierarchy. First of all, they use different color theme in different pages, which may make users confused the color implication of importance. Besides, they use more than one color that has very high contrast in a single page, which could make users feel uncomfortable and think neither of the information is more important.

5.6.3 Violation

A) Home: Both the yellow and pink color jump to the screen, but the title of the page (HOME) is much less important by comparison.

B) Carpool: All parts of this page seem equally important. User might not know which button they should press, or what else to do when they firstly see the page.
5.6.4 Impact

Bad visual hierarchy could make users distract, and mix up the importance of information.

5.6.5 Recommendations

Drop unnecessary usage of colors, especially those have high contrast with background. Use only one emphasizing color to highlight the most important things. For example, make the title of Shuddle app’s homepage gray, and make the notification yellow.

5.7 PROXIMITY

5.7.1 Definition

Elements that are close together are perceived to be more related than elements that are further apart.

5.7.2 Violation

There is no function to edit the user’s home address, which is expected to be under the account section.
5.7.3 Impact

User cannot find the function of editing home address intuitionally. There are two user reviews in iOS App Store associated with complaining this.

5.7.4 Recommendations

Add “home address” under the Account section, so that users can edit their profile information together.
6. LOCAL USABILITY PROBLEMS

6.1 SIGN UP PROCESS

Because users should sign up first to use Shuddle app, we start to evaluate from the user interface of this process.

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>IMAGE</th>
<th>SOLUTION</th>
<th>PRIORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not enough information to let the user know why his/her password is not accepted.</td>
<td>Choose Password</td>
<td>Show error message, such as “password is too short” or “needs at least 1 number” besides the input field.</td>
<td></td>
</tr>
</tbody>
</table>
### 6.2 HOME

There are too many colors in Home page, which may distract users’ attention. Besides, the color scheme is a little bit weird.

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>IMAGE</th>
<th>SOLUTION</th>
<th>PRIORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are too many colors in Home page, which may distract users’</td>
<td><img src="image.png" alt="Image" /></td>
<td>Drop unnecessary information, such as “MY RIDES”, and adjust the color</td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>attention. Besides, the color scheme is a little bit weird.</td>
<td></td>
<td>usage: choose only one color to highlight important information.</td>
<td></td>
</tr>
<tr>
<td>The contract of background color and text color is too small, which makes the words very hard to read.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This ad cannot be closed, which makes users unable to access the information (drivers in the neighborhood) below it.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Increase the contrast of background color and text color.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add a close button on the ad.</td>
</tr>
</tbody>
</table>
6.3 MENU

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>IMAGE</th>
<th>SOLUTION</th>
<th>PRIORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background image (randomly selected from passengers’ photos) makes the words very difficult to read.</td>
<td><img src="image1.png" alt="Image" /></td>
<td>Take away the background image. It is an unnecessary function.</td>
<td>●</td>
</tr>
<tr>
<td>The space of “Someone referred me” is too closed to the main screen.</td>
<td><img src="image2.png" alt="Image" /></td>
<td>Change the wording or adjust the width of the menu section.</td>
<td>●</td>
</tr>
</tbody>
</table>
The pink notification is not that important, but it cannot be eliminated after reading, which is annoying.

Eliminate the notification after the user read it.

6.4 ACCOUNT

```
Account

First Name
Chia-Wei

Last Name
Tu

Email
weiduck@hotmail.com

Choose Password

Save
```
<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>IMAGE</th>
<th>SOLUTION</th>
<th>PRIORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is no function to edit the user’s home address, which is expected to be under the account section.</td>
<td><img src="image" alt="Image of account section" /></td>
<td>Add the function of editing home address under the account section.</td>
<td>🟢</td>
</tr>
</tbody>
</table>
### 6.5 ADD / EDIT PASSENGER

![Image of the passenger add/edit interface](image-url)

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>IMAGE</th>
<th>SOLUTION</th>
<th>PRIORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>The font size and interval of the double picker are too small.</td>
<td><img src="image-url" alt="Image of the picker" /></td>
<td>Increase the font size and interval of the picker.</td>
<td>![Priority Level]</td>
</tr>
</tbody>
</table>
When choosing “Self” for the Relationship, the last two fields (“Shuddle Pass” and “Mobile Number”) would automatically disappear, which looks weird and may be considered as a bug.

Use default or disable appearance to substitute directly taking the field away.

The Relationship often shows “Select” after selecting.

Fix the bug.
6.6 RULES OF THE ROAD

**PROBLEM**
The spaces between text and edge of each row are different.

**SOLUTION**
Unify the spaces.
6.7 FAQ

6.7.1 FAQ Main Page

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>IMAGE</th>
<th>SOLUTION</th>
<th>PRIORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>The style of these buttons and links are totally different from other button of the app.</td>
<td><img src="image_url" alt="Image" /></td>
<td>Change the color of the buttons and links.</td>
<td><img src="priority_url" alt="Priority" /></td>
</tr>
</tbody>
</table>
The “Sign in” link will lead users to the sign page, whether they are in login status or not.

Add a login status check in the flow.

The “Go to full site” link will lead user to the FAQ website. However, there is no way to go back to app’s FAQ section.

Add a function to recover the app view.
### Problem

The stars on the right side of each question seem to be “add to favorite” or something, but actually have no function.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Image</th>
<th>Solution</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>How does Shuddle Carpool work?</td>
<td><img src="image.png" alt="Image" /></td>
<td>Take away the stars, or change their design to make sense to their function.</td>
<td></td>
</tr>
</tbody>
</table>
### 6.7.3 FAQ Content

![Image of FAQ screen]

**What is Shuddle Carpool?**
Sadie Bascom 08/14/2015

Shuddle carpools are private trips with families you already know. Your school carpool, your soccer carpool - leave it to Shuddle to coordinate and drive your kids. Through the convenience of our app, you provide basic information, invite parents from your contact book, and we’ll find a safe, reliable driver with childcare experience for you!

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>IMAGE</th>
<th>SOLUTION</th>
<th>PRIORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are 3 levels of titles, which occupy too much height of the screen.</td>
<td>![Image of FAQ screen]</td>
<td>Drop unnecessary titles.</td>
<td>🔴</td>
</tr>
<tr>
<td>There’s no way to go back to the forward page (FAQ list). If users tab the logo image, it will turn to the FAQ main page. This circulation</td>
<td>![Image of logo]</td>
<td>Change the function of this logo image to a “back” button.</td>
<td>🔴</td>
</tr>
</tbody>
</table>
is not consistent with iOS design principles.

The bottom part of this page is messy with different style buttons and links, and the style is not consistent with the app as well.

Redesign this part of the page, adjust the arrangement and style of buttons and links.
### PROBLEM
The interval and font size are too small, and it’s hard to distinguish each question.

### IMAGE
What is Shuddle Carpool?  
Who can use Shuddle Carpool?  
How does Shuddle Carpool work?  
How much does Shuddle Carpool cost?  
What types of carpools does Shuddle support?  
How do cancellations for carpools work?  
Who can I invite to a Shuddle Carpool?  
Can more than one of my kids join a carpool? Is there any extra charge?  
What happens if I create a Shuddle Carpool, invite others, and nobody accepts the invitation?  
I don’t want my child to ride in the front seat. Can I still schedule a Shuddle carpool?

### SOLUTION
Make the font size and intervals larger, and add numbers of bullets to each question.

### PRIORITY
○
# 6.8 CARPOOL / SINGLE FAMILY RIDE

## 6.8.1 Main page

### Problem

The contrast of text and background color is too small, which makes the words hard to read.

### Image

#### Select Your Family's Passengers:
- Eka
- Chia-Wei
- Add

#### Add Families to Invite (they'll add their details):
- Add

#### Everyone will be:
- Select

#### Date & Time:
- Select

#### Carpool Pickup Location:
- Home
- Add

### Solution

Increase the contrast. For example, make the color of text darker.

### Priority

- [ ]
The design of buttons makes them all look disable.

The appearance “selected status” of each field is not the same.

The appearance of the “location details” section is not welcome people to edit it. Moreover, the address is automatically plugged in, but it looks totally the same with the “pickup procedure”, so the latter on is easily be ignored by users.

### Change the design of the buttons. For example, change their colors.

### Make the appearance consistent.

### Change the color of the background and text to make them not too looks so disable. Besides, make fields with default information and blank fields look different.
6.8.2 Add Location

The font size and interval of the double picker are too small.

The appearance of the switch button is quite weird when it switches off.

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>IMAGE</th>
<th>SOLUTION</th>
<th>PRIORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>The font size and interval of the double picker are too small.</td>
<td>![Image of double picker with text: Park and sign out from school... 4 mins, Sign out in pickup queue 5 mins, Find passenger inside 6 mins, Passenger will be waiting outside... 7 mins, None of the above 8 mins.]</td>
<td>Increase the font size and interval of the picker.</td>
<td>![Priority level: low]</td>
</tr>
<tr>
<td>The appearance of the switch button is quite weird when it switches off.</td>
<td>![Image of switch button]</td>
<td>Change the design of this button.</td>
<td>![Priority level: low]</td>
</tr>
</tbody>
</table>
7. SUMMARY AND DISCUSSION

From the sections above, the usability principles that Shuddle app violates are:

<table>
<thead>
<tr>
<th>Global Issues</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistency</td>
<td></td>
</tr>
<tr>
<td>Feedback</td>
<td></td>
</tr>
<tr>
<td>Visibility</td>
<td></td>
</tr>
<tr>
<td>Affordance</td>
<td></td>
</tr>
<tr>
<td>Legibility and readability</td>
<td></td>
</tr>
<tr>
<td>Visual Hierarchy</td>
<td></td>
</tr>
<tr>
<td>Proximity</td>
<td></td>
</tr>
</tbody>
</table>

Each of them is important and need to be solved.

Besides, there are a number of interface problems as well. The most are in FAQ, Add Passenger, and Carpool/Single Family Ride pages. Because that Carpool and Single family right are the main function of the app, the problems of these pages need to be fixed quickly.

Overall, Shuddle app is designed well enough to use. However, if the interface details we stated in this report can be adjusted, it would greatly improve user experience. More importantly, Shuddle should listen to their users’ voice at all times, thus can find the precious feedbacks from real users of their app.
8. CONTACT INFORMATION

For future considerations, questions, comments, or suggestions, please contact:

Chia-Wei Tu

(weiduck@hotmail.com)