

# Group 5 - Usability Testing & Heuristic Evaluation

## Part 1: Usability Testing

### Binpeng's Part 1

----For a better improvement for later prototype development, we decide that each group member create a new prototype B that different with A (which we did for group submission 4)

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Prototype A link: (group work late due)

<https://www.figma.com/file/OOtjWHzajQE5xcpsRqFOTxLT/3002-Game-rating-app?node-id=0%3A1>

Prototype B link: (individual work)

<https://www.figma.com/file/ZdwgVVgMZEU62kANnNxaaX7D/BP's--prototype-B?node-id=0%3A1>

## Part 1: Usability Testing

Tester: Binpeng Wu

Session #: 2

Date: 12/02/2018

Time: 19:10 pm

Location: Boulder

Study participant info:

Occupation: Student

Age: 26

Gender: Male

### Observations from Prototype A:

----What happened when testing Prototype A?

----Test: Move around the app, try to click all the button, find a game and see its review

User started out checking the home screen buttons, and click the button by order, he first went to the Top 10 types, seems a little bit confused about these pages, click around and find can not write reviews, go back to by genres and By critics. Say that those slides are clearer.

### Observations from Prototype B:

-----What happened when testing prototype B?

-----Test: Move around the app, go through the major 3 categories of function. See the game detail, check its review and put a like to the reviews

User say the whole UI looks classical, User click around all the buttons in all the slides, checks about the MOBA and FPS category leaderboard, he checks the game's detail and the reviews. User also noticed the button that can switch between "search by time" and "search by rate". User want to write but it not allowed to type inside the box. He submits and see the confirmation page. He then sees his reviews and go back to home screen. He then goes through the Top 10 and reviews part. Finally, success put a like to one review.

Participant feedback:

-----What did you like about Prototype A?

He not talked much about the advantage about A prototype. Said it's a normal one

-----What did you dislike about Prototype A?

The home page looks too simply, can add more image to it. The button in home screen makes him confused, since there aren't some explanations about that. There is a lot of function that not works well. He got lost in the Top 10 page.

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-----What did you like about Prototype B?

The home screen is awesome, he thinks those one is a completed prototype that can operate easily. He likes the whole style of the app. And likes the colors and images at this prototype.

-----What did you dislike about Prototype B?

Although the font is nice, but when use this font to show a long paragraph of text, it will look a little messy. The back-up key works not so good at first time. And also he be confused about the "top reviews" (then I explain to him).

-----What was confusing about these prototypes?

It is most about the order of the page and sometimes the text with no explanation makes people confused. The page with too many unnecessary information makes people feel bad

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----- suggestions for improving these prototypes?

Could still add more functions to it. Such as write reviews to the reviews too make more fun. Could use more than one font to avoid some messy looking

## **Brian 's Part 1**

ProtoType A link:

<https://www.figma.com/file/OOtjWHzajQE5xcpsRqFOTxLT/3002-Game-rating-app>

ProtoType B link:

<https://www.figma.com/file/OTdBMCPNo0LPdckFzkiiTgnx/Game-app-Ideas?node-id=0%3A1>

Tester: Brian Satchell  
Session #: 1  
Date: 11/23/2018  
Time: 3:00pm  
Location: Colorado Springs

**Study participant info:**

Pseudonym: Alpha Bravo  
Occupation: Network Engineer  
Age: 28  
Gender: Male

**Observations from Prototype A:**

- What happened when testing prototype A?

Test: Find a game that is ranked and make a review.

User searched the home screen went to the "Rate Game" button did not work. Clicked the "top 10" button saw the number 2 game clicked in the frame. Found the title "Your Review" clicked the words, nothing happened, found the edit button clicked that, was unsure how to continue. Went back to the previous page then return to the edit screen. He said he was looking for something highlighted or some focus on the review, the pages looked too similar was unsure if he changed screens. Tried clicking the words again took to the "edit screen," made edits hit submit. When trying to exit clicked the words again went back then clicked the back button on the main tab navigator. Click back again twice to return to the home page.

- Did you notice anything surprising?

I found it interesting that he couldn't find the "Done" button on the edit screen. Seeing the confusing with actually making the edit makes sense seeing it from someone else's perspective. The back button was the "default" escape when he was confused with a screen.

- Any confusion or mistakes?

1. Rate Games button has no purpose.
2. No home button when done.
3. Unsure when edit started.
4. Didn't "save" changes by selecting the "Done" button

**Observations from Prototype B:**

- What happened when testing prototype B?

Test: Find a user that has a similar taste in games as you do. Note: you just created an account.

The user clicked the “start” button was unsure where he went back click the menu bar found “start matching”. Started making his game ratings unsure what the yellow middle button was, just used thumbs up and down buttons. Clicked the middle button the see his gamer matches games. Went back and returned to the home screen.

- Did you notice anything surprising?

It was surprising that the first thing he did was press start, then returned to use the menu tab. It was also interesting to see him understand what he was doing with the game ratings. When he didn't know what a game was he didn't know to click the game cover to see reviews on the title.

- Any confusion or mistakes?

1. Start button needs a splash screen to explain what is happening.
2. Neutral button or not played needs to be explained.
3. Explain how to see reviews when matching with games.
4. Escape home or a continuation of gamer matches screens need to be added.

#### **Participant feedback:**

- What did you like about Prototype A?
  - A had a very familiar feel to it and felt like a site I used before. Some interesting pages and ability to change your review and add new ones for games I played.
- What did you dislike about Prototype A?
  - A lot of the buttons don't work or need very specific clicks to continue navigation, would be better to just press the game box to navigate or rate a game. I don't like the navigation on some of the screens, the back button doesn't take me back, like when looking at the new game. There's no home screen button when I wanted to start a new search I have to press back until I return to the home screen.
- What did you like about Prototype B?
  - Very interesting idea matching people to other gamers, like tinder for games. Making the rating system easy just “yes I liked it” or “no I didn't” was nice, I don't like having to figure if a game was an 8 or a 9 compared to another game. It was also very easy to navigate to different screens.
- What did you dislike about Prototype B?

- Again no home button. I didn't know what to do if I didn't play a game, guess if I would like it, or rate it based on the interest I have in a game?
- What was confusing about these prototypes?
  - Navigating between pages and buttons that didn't work or needed specific presses were all confusing about the prototypes.
- Do you have any suggestions for improving these prototypes?
  - Add a home button or some navigation system that is simple. Fix the button issues. Try not to be "cookie cutter" like prototype A, I would rather just use a well-known app if there is nothing unique about your app.

## Andres 's Part 1

Tester: Andres Salinas

Session #: 2

Date: 12/1/2018

Time: 10:00 am

Location: Boulder

Study participant info:

Occupation: Student

Age: 22

Gender: Male

Observations from Prototype A:

What happened when testing prototype A?

Test: Move around the app, make sure you can get where you want.

User started out checking the home screen buttons, found out they all work and he could get back to the home screen after going to another screen. He wasn't sure at first what the buttons were supposed to take him. He tried to write a review but wasn't able, since that part hasn't been added yet. Couldn't scroll down, which is also not yet implemented.

Observations from Prototype B:

What happened when testing prototype B?

Test: Move around the app, make sure you can get where you want.

User started out checking the home screen buttons, found out they all work and he could get back to the home screen after going to another screen. He found the pictures to be distracting and confusing. Had a hard time getting around.

Participant feedback:

What did you like about Prototype A?

It was straight forward. I liked the font used, very gamer like. The way the by genre tab is design looks great.

What did you dislike about Prototype A?

Well I can't scroll down or add a review. I also would have like to have links to youtube or have the actual review of the game.

What did you like about Prototype B?

It was different from other similar apps. Was fun to use for a while.

What did you dislike about Prototype B?

The pictures are distracting and makes it hard to navigate the app. There is not much to it so it's fun for a while but gets repetitive.

What was confusing about these prototypes?

The way to navigate requires too much effort and is confusing.

Do you have any suggestions for improving these prototypes?

Should add a menu tab to move around easier.

## Part 2: Heuristic Evaluation

Prototype	Heuristic	Tester
A	Visibility of system status	Brian
A	Match between system and the real world	Brian
A	User control and freedom	Brian
A	Consistency and standards	Brian
A	Error prevention	Binepeng
A	Recognition rather than recall	Binepeng
A	Flexibility and efficiency of use	Binepeng
A	Aesthetic and minimalist design	Andres
A	Help users recognize, diagnose, and recover from errors	Andres
A	Help and documentation	Andres
B	Visibility of system status	Brian
B	Match between system and the real world	Brian
B	User control and freedom	Brian

B	Consistency and standards	Brian
B	Error prevention	Binepeng
B	Recognition rather than recall	Binepeng
B	Flexibility and efficiency of use	Binepeng
B	Aesthetic and minimalist design	Andres
B	Help users recognize, diagnose, and recover from errors	Andres
B	Help and documentation	Andres

-----Heuristic Evaluation (A 1-4 B 1-4) by Brian-----

UAR #: HE 2A	Problem/Good: Problem	Rated by: Brian
<b>Name:</b> Home screen navigation menu confusion		
<b>Relevant heuristic:</b> Match between system and the real world		
<b>Steps to reproduce:</b> Button labels on home screen are causing confusion.		
<b>Detailed explanation:</b> Users experience confusion with what the buttons; Top 10, By Genre, By User, By Critic relations are.		
<b>Possible solution:</b> Move Top 10 to its own container and add Reviews... before the other buttons. Another way would be changing the ...By labels to be clearer what they are for or where they are taking the user.		
<b>Severity (low, medium, high, critical):</b> High		<b>See also:</b>

UAR #: HE 1A	Problem/Good: Good	Rated by: Brian
<b>Name:</b> System feedback when navigating pages.		
<b>Relevant heuristic:</b> Visibility of system status		
<b>Steps to reproduce:</b> Navigation between pages.		
<b>Detailed explanation:</b> When the user is navigating between pages, they <u>are able to see</u> where they are at from the title bar on the top of the page and navigation is quick and gives proper feedback of where in the app the user is.		
<b>Possible solution:</b> No solution needed, just ensure all future pages are the same.		
<b>Severity (low, medium, high, critical):</b> Low		<b>See also:</b>



<b>UAR #:</b> HE 3A	<b>Problem/Good:</b> Problem	<b>Rated by:</b> Brian
<b>Name:</b> No home button or escape button for the user to quickly being a new search.		
<b>Relevant heuristic:</b> User control and freedom		
<b>Steps to reproduce:</b> Enter any page 2 steps deep and you are unable to return to the home screen.		
<b>Detailed explanation:</b> When the user enters a page or want to start a new search, they are unable to return to the home screen without going back through all the previous screens.		
<b>Possible solution:</b> Add a traveling HOME button		
<b>Severity (low, medium, high, critical):</b> medium		<b>See also:</b>

<b>UAR #:</b> HE 3A.1	<b>Problem/Good:</b> Problem	<b>Rated by:</b> Brian
<b>Name:</b> User unable to edit reviews, see review they made or submit reviews on all the rating screens except for top 10.		
<b>Relevant heuristic:</b> User control and freedom		
<b>Steps to reproduce:</b> Go to the user, genre or critic sections and try to look for reviews or submit a review for any game.		
<b>Detailed explanation:</b> When users try to leave a review on the Game Review app, they are unable to do so.		
<b>Possible solution:</b> Add the feature to the app by creating the relevant screens and navigation from the button or nav menu.		
<b>Severity (low, medium, high, critical):</b> Critical		<b>See also:</b>

<b>UAR #:</b> HE 4A	<b>Problem/Good:</b> Good	<b>Rated by:</b> Brian
<b>Name:</b> Button and navigation language		
<b>Relevant heuristic:</b> Consistency and standards		
<b>Steps to reproduce:</b> Navigate to any page in the app		
<b>Detailed explanation:</b> Language and information delivered to the user in the app is easy to understand.		
<b>Possible solution:</b> Continue to use the same language for action that preform the same thing throughout the app.		
<b>Severity (low, medium, high, critical):</b> Low		<b>See also:</b>

<b>UAR #:</b> HE 3B	<b>Problem/Good:</b> Problem	<b>Rated by:</b> Brian
<b>Name:</b> Back button doesn't lead to the previous page.		
<b>Relevant heuristic:</b> Consistency and Standards		
<b>Steps to reproduce:</b> Enter any page on matching and select the game title and when you select the back button it takes you back the the beginning of the matching session.		
<b>Detailed explanation:</b> When the user looks at the game review while match the back button takes them back to the beginning of matching instead of back to the game they were looking at.		
<b>Possible solution:</b> Fix the navigation error.		
<b>Severity (low, medium, high, critical):</b> medium		<b>See also:</b>

<b>UAR #:</b> HE 3B.1	<b>Problem/Good:</b> Problem	<b>Rated by:</b> Brian
<b>Name:</b> User is unclear on how view the game reviews when making match selections.		
<b>Relevant heuristic:</b> User control and freedom		
<b>Steps to reproduce:</b> Go matching section and there is no clear indication of how to see what a game is about.		
<b>Detailed explanation:</b> When users are in the matching section, they need to be able to understand that there is a way to look at game reviews in this section.		
<b>Possible solution:</b> Add the feature to the app by creating the relevant screens and navigation from the button or nav menu.		
<b>Severity (low, medium, high, critical):</b> Critical		<b>See also:</b>

<b>UAR #:</b> HE 2B	<b>Problem/Good:</b> Problem	<b>Rated by:</b> Brian
<b>Name:</b> Start button on the home screen takes the user directly to the matching screen.		
<b>Relevant heuristic:</b> Match between system and the real world		
<b>Steps to reproduce:</b> Pressing the start button on home screen takes you directly to the matching screens.		
<b>Detailed explanation:</b> Users experience confusion with the navigation from the home screen.		
<b>Possible solution:</b> Add a slash screen that informs the user of the screen that they are being taken to and how to use it.		
<b>Severity (low, medium, high, critical):</b> Medium		<b>See also:</b>

<b>UAR #:</b> HE 1B	<b>Problem/Good:</b> Good	<b>Rated by:</b> Brian
<b>Name:</b> System feedback when navigating pages.		
<b>Relevant heuristic:</b> Visibility of system status		
<b>Steps to reproduce:</b> Navigatie in the matching section.		
<b>Detailed explanation:</b> When the user the screens have the same layout and when done there is a clear end saying that you have a match.		
<b>Possible solution:</b> No solution needed, just ensure all future match pages have the same conclusion.		
<b>Severity (low, medium, high, critical):</b> Low		<b>See also:</b>

<b>UAR #:</b> HE 4B	<b>Problem/Good:</b> Problem	<b>Rated by:</b> Brian
<b>Name:</b> Button and navigation language		
<b>Relevant heuristic:</b> Consistency and standards		
<b>Steps to reproduce:</b> On the screen that tells you the users matches has a bottom nav button with pictures.		
<b>Detailed explanation:</b> The buttons in the menu bar need to have clear meaning to where they navigate or what they are		
<b>Possible solution:</b> Add labels to the nav bar.		
<b>Severity (low, medium, high, critical):</b> Medium		<b>See also:</b>

-----Heuristic Evaluation (A 5-7 B 5-7) by Binpeng-----

<b>UAR #:</b> HE 5A	<b>Problem/Good:</b> Good	<b>Rated by:</b> <u>Binpeng Wu</u>
<b>Name:</b> System highlight the available button to limit the error operations		
<b>Relevant heuristic:</b> Error prevention		
<b>Steps to reproduce:</b> all the input and button should have frame or be highlighted. Add some page for remind or double-check if necessary		
<b>Detail explanation:</b> To avoid the error operating, System limit the range that Users could interact with and stand out the right one by color or frame.		
<b>Possible solution:</b> adding some confirmation page when submit User's rating and review.		
<b>Severity (low, medium, high, critical):</b> Medium		<b>See also:</b>

<b>UAR #:</b> HE 6A	<b>Problem/Good:</b> Good	<b>Rated by:</b> <u>Binpeng Wu</u>
<b>Name:</b> System contains enough explanation image to give Users the direct recognition		
<b>Relevant heuristic:</b> Recognition rather than recall		
<b>Steps to reproduce:</b> There are already some recognition factor		
<b>Detail explanation:</b> the image near some buttons especially at the By Genres page give Users the clear visual recognition, easy to find and understand the UI.		
<b>Possible solution:</b> Not necessary to fix a lot about it		
<b>Severity (low, medium, high, critical):</b> High	<b>See also:</b>	

<b>UAR #:</b> HE 7A	<b>Problem/Good:</b> Problem	<b>Rated by:</b> <u>Binpeng Wu</u>
<b>Name:</b> System do not contain much functions for flexibility and efficiency		
<b>Relevant heuristic:</b> Flexibility and efficiency of use		
<b>Steps to reproduce:</b> No default or recommendation information, exist some unnecessary information at each page.		
<b>Detail explanation:</b> The Home Screen and Game listed Page both contain some information that can be detailed to improve the efficiency for reading.		
<b>Possible solution:</b> modify the page to reserve the only important information, and add some functions that work for the flexibility		
<b>Severity (low, medium, high, critical):</b> low	<b>See also:</b>	

<b>UAR #:</b> HE 5B	<b>Problem/Good:</b> Good	<b>Rated by:</b> <u>Binpeng Wu</u>
<b>Name:</b> System highlight the available button to limit the error operations, also have confirmation page		
<b>Relevant heuristic:</b> Error prevention		
<b>Steps to reproduce:</b> error prevention should be <u>OK</u> , interaction area are clear		
<b>Detail explanation:</b> To avoid the error operating, System limit the range that Users could interact with and stand out the right one by color or frame. <u>Also</u> the confirmation page prevent the mis-click when submit the reviews and add likes		
<b>Possible solution:</b> No need for solution		
<b>Severity (low, medium, high, critical):</b> <u>high</u>	<b>See also:</b>	

<b>UAR #:</b> HE 6B	<b>Problem/Good:</b> Good	<b>Rated by:</b> <u>Binpeng Wu</u>
<b>Name:</b> System contain much image and tips to reduce User's recalling when operate		
<b>Relevant heuristic:</b> Recognition rather than recall		
<b>Steps to reproduce:</b> There are already a lot recognition factor		
<b>Detail explanation:</b> the background image for buttons in both hemiscreen and other branch pages giving a good navigation to save User's thinking time.		
<b>Possible solution:</b> No need for solution		
<b>Severity (low, medium, high, critical):</b> high	<b>See also:</b>	

<b>UAR #:</b> HE 7B	<b>Problem/Good:</b> Problem	<b>Rated by:</b> Binpeng Wu
<b>Name:</b> most of the page looks clear, but could do more on Flexibility and efficiency		
<b>Relevant heuristic:</b> Flexibility and efficiency of use		
<b>Steps to reproduce:</b> need to improve some flexibility.		
<b>Detail explanation:</b> the pages are all narrow down to the key information and looks clear enough, but there <u>isn't</u> some functions that improve Users flexibilities		
<b>Possible solution:</b> adding some Default choice or and more shortcut key		
<b>Severity (low, medium, high, critical):</b> low	<b>See also:</b>	

-----Heuristic Evaluation (A 8-10 B 8-10) by Andres-----

<b>UAR #:</b> HE 8A	<b>Problem/Good:</b> Good	<b>Rated by:</b> Andres
<b>Name:</b> Minimalist design on buttons		
<b>Relevant heuristic:</b> Aesthetic and minimalist design		
<b>Steps to reproduce:</b> There are few buttons		
<b>Detail explanation:</b> Users have a straight forward intuition to use the few buttons presented to them.		
<b>Possible solution:</b> No solution needed, don't add unnecessary buttons.		
<b>Severity (low, medium, high, critical):</b> Low	<b>See also:</b>	



<b>UAR #:</b> HE 10A	<b>Problem/Good:</b> Problem	<b>Rated by:</b> Andres
<b>Name:</b> There is no documentation		
<b>Relevant heuristic:</b> Help and documentation		
<b>Steps to reproduce:</b> There is no way to get help.		
<b>Detail explanation:</b> Even though we try to make the app as straightforward as possible, if someone is unsure of how to write a review and post it there is no page to help them find out the steps required to do so.		
<b>Possible solution:</b> Adding a documentation page with all the common questions that could be asked with their respective answers.		
<b>Severity (low, medium, high, critical):</b> High	<b>See also:</b>	

<b>UAR #:</b> HE 9A	<b>Problem/Good:</b> Problem	<b>Rated by:</b> Andres
<b>Name:</b> No error messages		
<b>Relevant heuristic:</b> Help users recognize, diagnose, and recover from errors		
<b>Steps to reproduce:</b> Trying to add a review		
<b>Detail explanation:</b> Users are no able to add reviews and there is no error message to tell them the reason for this.		
<b>Possible solution:</b> Make the add reviews button functional or add an error message explaining what the problem is.		
<b>Severity (low, medium, high, critical):</b> High	<b>See also:</b>	

<b>UAR #:</b> HE 8A	<b>Problem/Good:</b> Problem	<b>Rated by:</b> Andres
<b>Name:</b> No explanation of genre		
<b>Relevant heuristic:</b> Aesthetic and minimalist design		
<b>Steps to reproduce:</b> Going to the genre tab		
<b>Detail explanation:</b> The design of the By Genre tab could be too minimalistic for people who do not understand the abbreviation of the genre names.		
<b>Possible solution:</b> Write the full genre name, or add a description on the documentation page.		
<b>Severity (low, medium, high, critical):</b> medium	<b>See also:</b>	

<b>UAR #:</b> HE 10A	<b>Problem/Good:</b> Good	<b>Rated by:</b> Andres
<b>Name:</b> Straightforward design		
<b>Relevant heuristic:</b> Help and documentation		
<b>Steps to reproduce:</b> Most people do not need documentation to understand the way the app works.		
<b>Detail explanation:</b> The app is straightforward enough that most people shouldn't need documentation or help to use it.		

<b>Possible solution:</b> Adding a documentation page could help, but is not entirely necessary.	
<b>Severity (low, medium, high, critical):</b> low	<b>See also:</b>

<b>UAR #:</b> HE 8B	<b>Problem/Good:</b> Good	<b>Rated by:</b> Andres
<b>Name:</b> Minimalist design menu		
<b>Relevant heuristic:</b> Aesthetic and minimalist design		
<b>Steps to reproduce:</b> Home screen is minimalistic		
<b>Detail explanation:</b> Users have a straight forward intuition of how to use the home screen.		
<b>Possible solution:</b> No solution needed.		
<b>Severity (low, medium, high, critical):</b> Low	<b>See also:</b>	

<b>UAR #:</b> HE 10B	<b>Problem/Good:</b> Problem	<b>Rated by:</b> Andres
<b>Name:</b> There is no documentation		
<b>Relevant heuristic:</b> Help and documentation		
<b>Steps to reproduce:</b> There is no way to get help.		
<b>Detail explanation:</b> Even though we try to make the app as straightforward as possible, if someone is unsure of how to write a review and post it there is no page to help them find out the steps required to do so.		
<b>Possible solution:</b> Adding a documentation page with all the common questions that could be asked with their respective answers.		

<b>Severity (low, medium, high, critical):</b> High	<b>See also:</b>
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<b>UAR #:</b> HE 9B	<b>Problem/Good:</b> Problem	<b>Rated by:</b> Andres
<b>Name:</b> There are no error messages		
<b>Relevant heuristic:</b> Help users recognize, diagnose, and recover from errors		
<b>Steps to reproduce:</b> Some buttons don't work and have no error message		
<b>Detail explanation:</b> Users are no able to navigate to all tabs and there is no error message to tell them the reason for this.		
<b>Possible solution:</b> Make the navigation functional or add an error message explaining what the problem is.		
<b>Severity (low, medium, high, critical):</b> High	<b>See also:</b>	