Cognitive Walkthrough Analysis

Task 1 – Use the id to create an account then login.

Success stories –

A user is doing and completing the sign up and sign in process successfully.

Failure stories –

A user cannot finish the account-creating and login process because of some reasons.

Cognitive –

Users know they need to fill in the forms for signup and sign in.

Users know they need to click the buttons to the next page or submit.

If it turns to another page, users know it works well.

Problems –

Users didn’t know how to create an account.

Users didn’t know how to use their ID.

Failure reasons –

The signup page is missing and the user cannot find it.

There are various IDs from different countries, only one type of ID can be identified, making users unable to login with their ID from their own countries.

Potential solutions –

1. Adding one more signup page with selecting regions for different IDs to identify their identity.

Task 2 – Go to the homepage and check broadcasting disasters’ news in your locations.

Question 1 - What do you think about browsing broadcast disasters news based on locations on the homepage? Any improvements could be made? Any confusion?

Success stories –

Users click on the navigation bar with the correct icon to the right page and check news on this page.

Failure stories –

Users try to figure out which one is the correct page but go to the wrong page.

Users try to access the broadcasting news, however, they are confused about what exactly it is.

Cognitive –

Users know they need to click related icons to aim pages.

Users know they could get some information through browsing the page.

Problems –

Users didn’t know which icons can be clicked for them to go to the homepage and they tried all different icons one by one.

Users feel confused about broadcasting news and buttons.

Failure reasons -

Icons have no explanations or they are considered as the one which are not the most suitable for the meaning.

Broadcasting news is not listed clearly. Without introduction, users have no idea on how to interact with this page.

Potential solutions –

1. Add page name with the icons to make it clear. Like “Icon1”

Home

1. Make the broadcasting page much easier. Only listing a few information.
2. Adding onboarding pages for a guide to help users know how to interact with buttons and introduce their features and goals.

Task 3 - Send emergency help requests if you are in danger in a fire accident.

Question 2 – What do you think about the current way to send emergency help requests if you are in danger? Do you have a better idea on improving that?

Success stories –

Users send help requests with the correct disaster’s types. For example, John is in a fire accident, he sends an emergency request with fire accident’s types.

Failure stories –

1. Users send help requests with the wrong disaster’s types. For example, John is in a fire accident, he sends an emergency request with a flood type.
2. Users cannot tell how to submit and send an emergency request. For example, John feels confused on how to interact with buttons.
3. Users cannot receive responses on their emergency request immediately. For example, John is waiting for a response but he doesn’t know how to find it. It’s not like a phone call. He can get a response at once with the phone call.

Cognitive –

1. Users know sending emergency requests can be done with some easy ways like making phone calls or sending signals.
2. Users know responses for emergency requests can be checked at once.

Problems –

1. Users don’t know how to send emergency requests.
2. Users don’t know if they have received a response or not.
3. Users don’t know if it is necessary to ask for help in such a complex way, compared with making phone calls.

Failure reasons -

1. Asking an emergency request is not as easy as what everyone knows in their daily life like making phone calls.
2. Interactions are not clear to everyone on what they should do.
3. Users prefer the normal way in daily life which is considered as the most efficient way.

Potential solutions –

1. Adding onboarding pages to introduce how to interact with sending emergency help pages like a guideline.
2. Adding an additional page which will appear once users send emergency help requests for checking response.
3. Find out another way to ask for emergency help which should be much easier and more efficient than the current one in our daily life.

Question 4 - What do you think about the whole prototyping process?

Success stories –

Users completed the whole process without any doubts in quite a short time.

Failure stories –

Users find the whole process is hard to follow with a lot of confusion and complete it in a long time or they cannot complete the whole process.

Cognitive –

1. Users know a prototype for disasters’ rescuing should be easy to use.
2. Users know how to ask for help with the current way in daily life.

Problems –

1. Users feel that is not convenient and useful to use for asking help in an emergency. Most of them take quite a long time to complete the process. And they all consider that they don’t need to use this app if they can make a phone call.

Failure reasons -

1. The current prototype cannot meet users’ requirements on both features and goals which only provided a complex and useless way for emergency requests. It’s even not as useful as making a phone call when they are in danger.
2. Some pages are missing which make a logical misunderstanding and confusion.

Potential solutions –

1. Making the process much easier and simple but useful, which also should be done for sending emergency requests.
2. Adding more detailed and essential pages to make it consistent with suitable response.

TAM Analysis

PU1 I can accomplish asking for emergency help more quickly using RescueMe

Results Avg – 2.428 out of 4 which means disagree.

PU2 I can accomplish asking for emergency help more easily using RescueMe

Results Avg – 2.285 out of 4 which means disagree.

PU3 RescueMe enhances my effectiveness in utilizing self-rescuing

Results Avg – 2.785 out of 4 which means disagree.

PU4 RescueMe enhances my effectiveness in utilizing disaster prevention

Results Avg – 2.571 out of 4 which means disagree.

PU5 RescueMe enables me to make better choices on sending emergency help requests

Results Avg – 2.214 out of 4 which means disagree.

PU6 Overall, I find this app useful

Results Avg – 2.642 out of 4 which means disagree.

PEOU1 Learning to use RescueMe is easy for me

Results Avg – 2.928 out of 4 which means disagree.

PEOU2 It is easy to use RescueMe to accomplish both self-rescuing and providing help to others who needed

Results Avg – 3.214 out of 4 which means agree.

PEOU3 Overall, I believe RescueMe is easy to use

Results Avg – 2.571 out of 4 which means disagree.

We can find easily that most of the dimensions achieve a grade less than 3 which means disagree. The app that we designed can hardly meet the basic goals and we need to figure out the reasons.

For PU1, PU2, PU3 and PU5 -

These two dimensions are all about asking for emergency help features. From the grade, we can find that users don’t like this feature. They find this feature is not easy and quick to interact with. As one of our main features, we can prove that our analysis on sending emergency requests’ failure reasons from cognitive walkthrough are correct.

Failure reasons -

1. Asking an emergency request is not as easy as what everyone knows in their daily life like making phone calls.
2. Interactions are not clear to everyone on what they should do.
3. Users prefer the normal way in daily life which is considered as the most efficient way.

For PU3 and PU4 –

These two dimensions are about checking broadcasting news nearby for disasters’ prevention. Users all consider it’s not easy to meet goals for the features. That’s the same situation as the one shown from cognitive walkthrough.

Failure reasons –

1. Icons have no explanations or they are considered as the one which are not the most suitable for the meaning.
2. Broadcasting news is not listed clearly. Without introduction, users have no idea on how to interact with this page.

For PU6 –

This dimension is related to this prototype’s whole process. The grade shows the results disagree on the whole process which also means our current prototype cannot meet basic goals and users’ requirements. From the cognitive walkthrough, the problems are confirmed to exist with some failure reasons.

Failure reasons -

1. The current prototype cannot meet users’ requirements on both features and goals which only provided a complex and useless way for emergency requests. It’s even not as useful as making a phone call when they are in danger.
2. Some pages are missing which make a logical misunderstanding and confusion.

For PEOU1, PEOU3 –

This dimension is related to the prototype’s accessibility and usability. Most participants consider this app is not easy to use or learn how to use. According to our cognitive walkthrough, users have no idea on how to interact with some features even for the main/ key features like sending emergency help, lacking essential guidelines such as tutorials on interactions.

For PEOU2 –

This dimension is related to a part of our goals which is based on broadcasting news features and locating features. According to our cognitive walkthrough, a conflict exists which means users can get what these features work for but don’t know how to interact with them just like what’s mentioned above, the failure reasons may be

1. Icons have no explanations or they are considered as the one which are not the most suitable for the meaning.

2. Broadcasting news is not listed clearly. Without introduction, users have no idea on how to interact with this page.