FunTravel
Final Presentation

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Motivation and goals

Motivations

Why FunTravel?

- Safe place for your children where they will not be bored during travelling
- Thay can also learn something new from the App

What can we offer?

- Destination-oriented app for children in the range of 6-9(middle childhood) years old
- Knowing about funny stories of the destination city in advance
- Interactions between the children and their parents

Motivations

User Persona and Scenario

Personality

Felix is an energetic kid aged 6 who loves being out in the sun . He likes to laugh watching prank videos and funny game shows. He's excited about visiting Grandma and wants to be entertained during long trips.

Felix

6 • pre-schooler • loves picnics and fishing

Goals

- read interactive stories
- play something new

Frustrations

- can't watch videos while travelling by bus

UX Needs

- changing themes
- fun effects

Devices

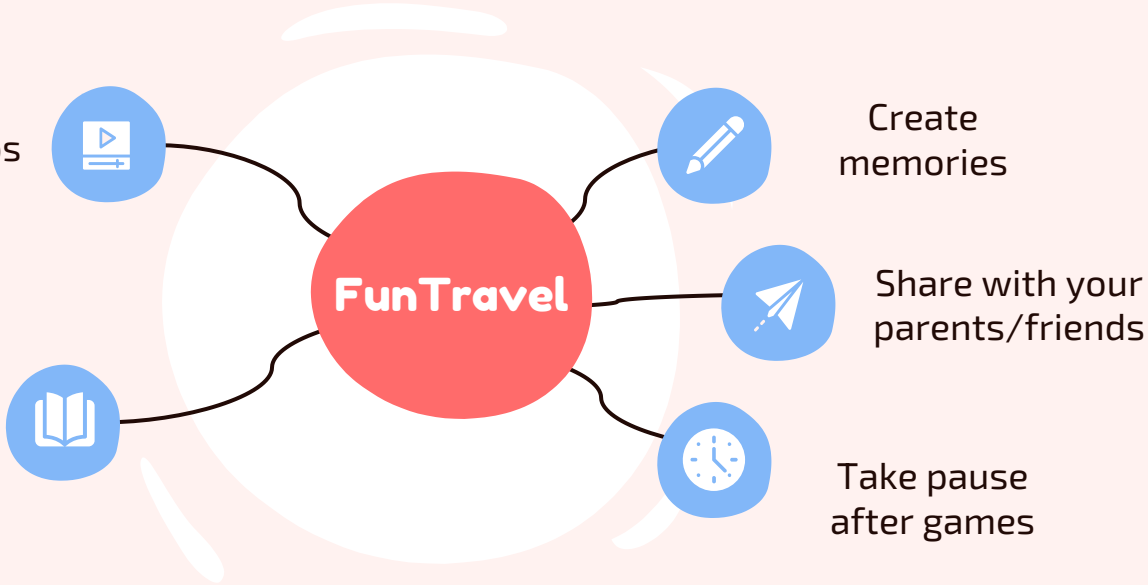
- Android Phone

Felix never misses an opportunity to go out with his family for long-distance travel.

Due to poor internet connection he can't watch his favourite shows but he still wants do something to kill the time during the driving.

Storytelling sessions with his grandparents is something he looks forward to and he would like to know about the destination in advance

Functionality



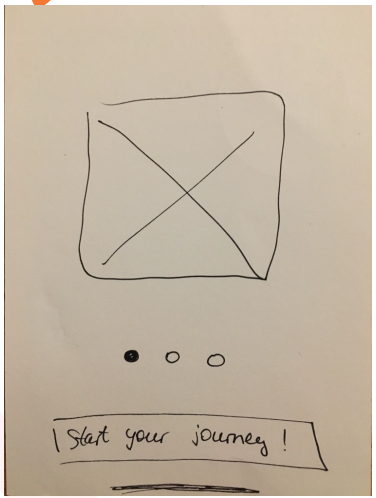
02

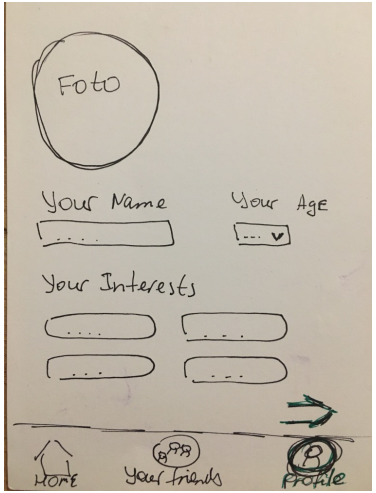
Overview of process iterations

Iteration 1

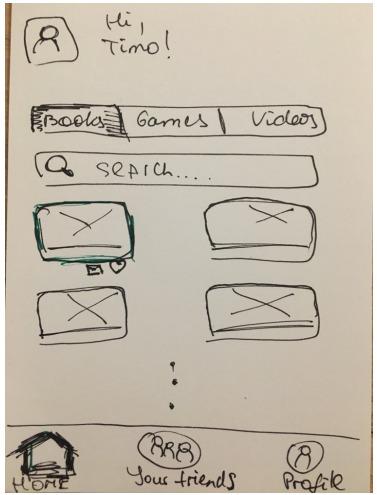
Paper prototype

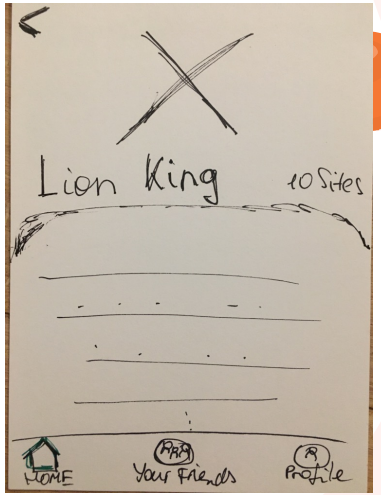
Onboarding & Login





Reading Stories

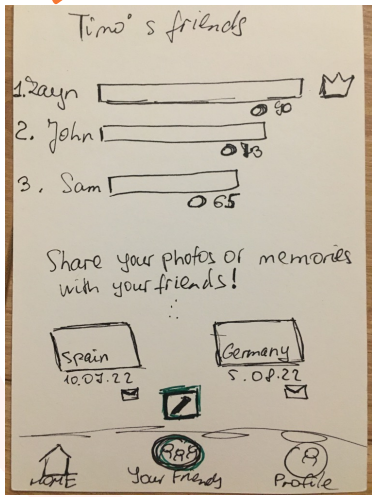


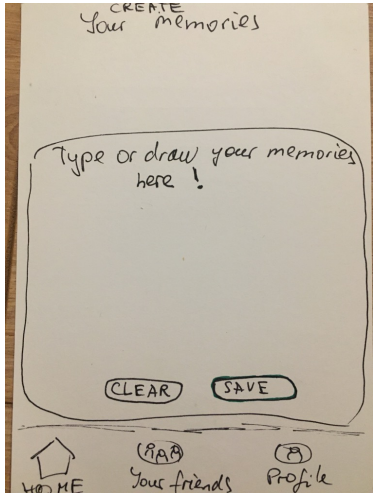


Iteration 1

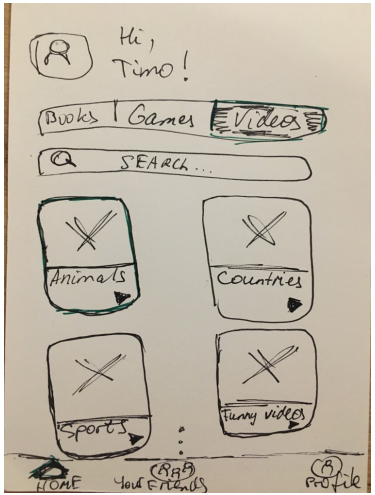
Paper prototype

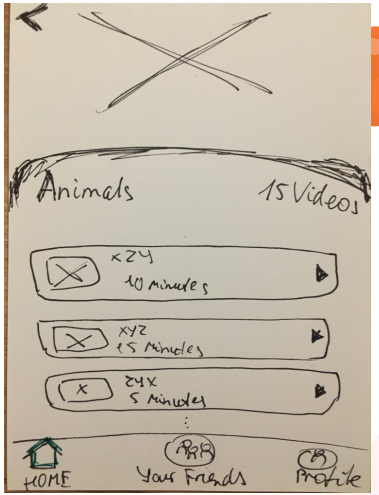
Create and share memories





Watching Videos





Thinking aloud Experiment

5 children

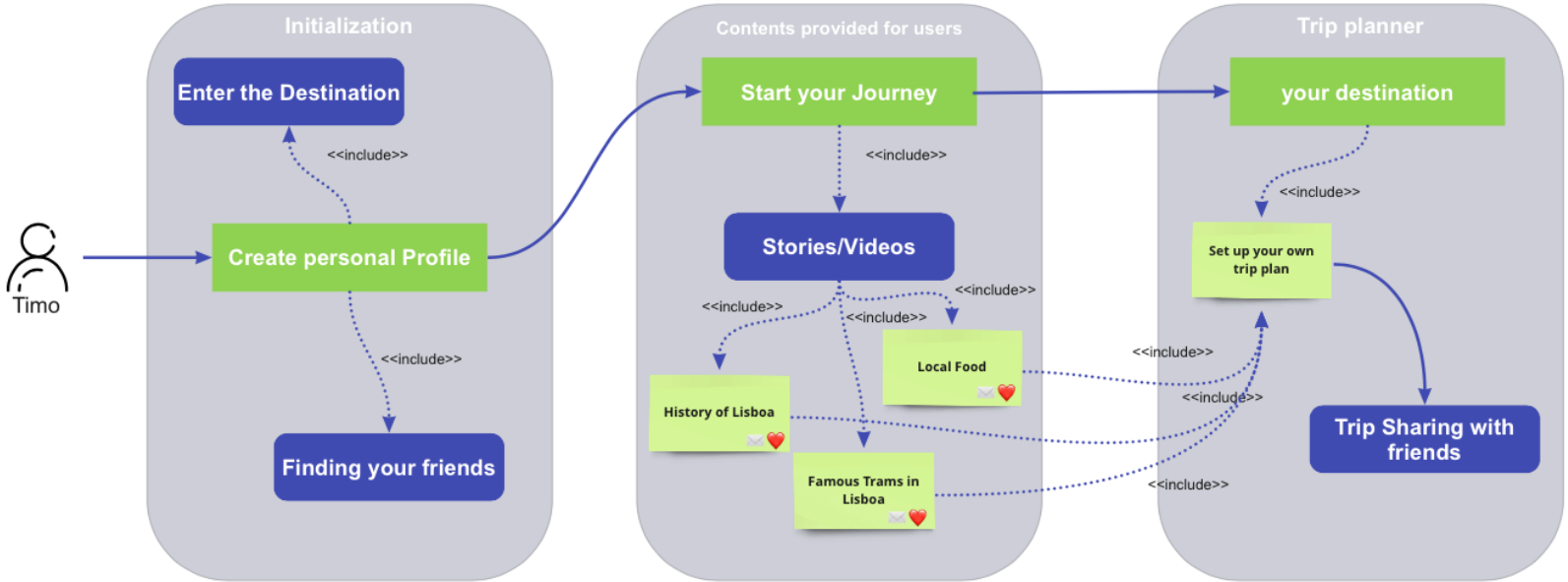
Average time complexity: 1,75
Average satisfaction: 3,5
Average clarity (Interface UI): 4,5

Improvements:

- Providing beginners guidance for the first time;
- Personal settings for the users;
- Image editing and still need more options in hand-writing for the diary part;
- Function to add other friends via address book or same interests;

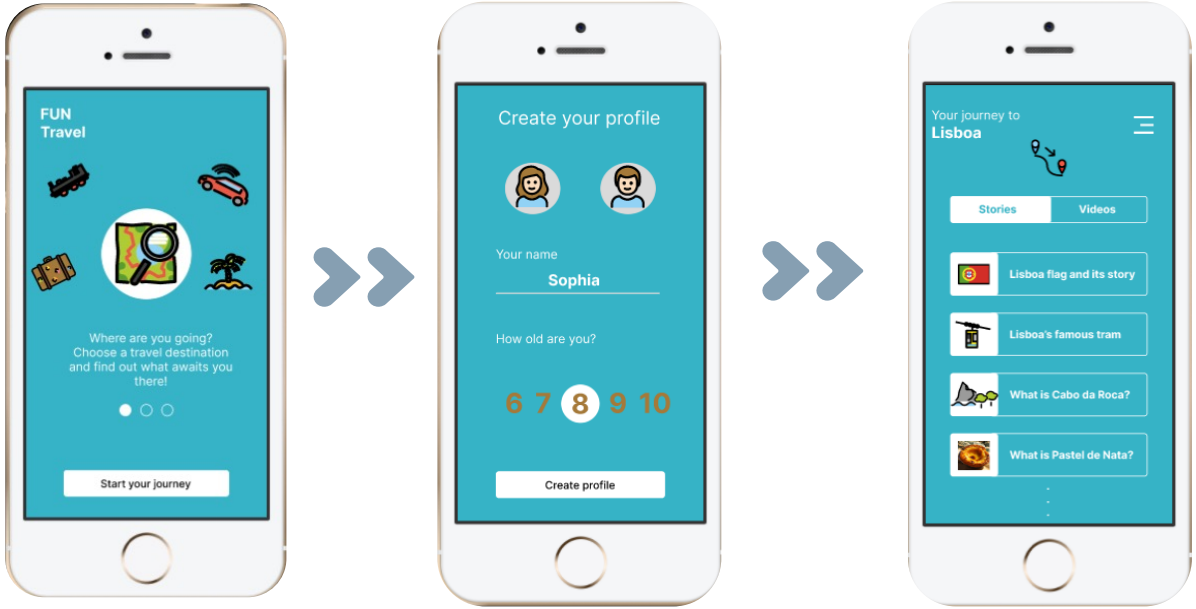
Iteration 2

Use Cases



Iteration 2

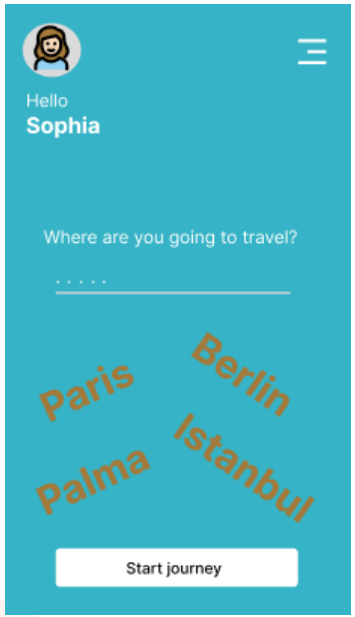
HiFi Prototype and Usability requirements

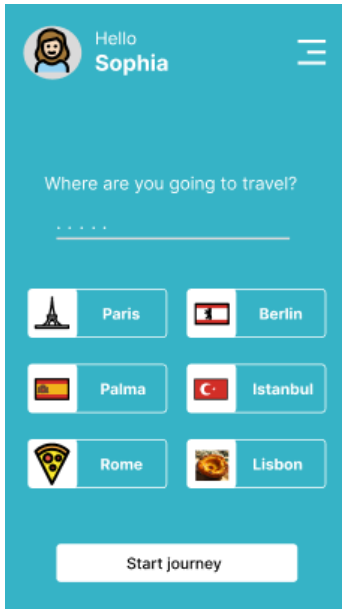


We decided to keep 2 main functions "Reading stories" and "Sharing with your parents" based on the selected travel destination.

Iteration 2

Heuristic Evaluation

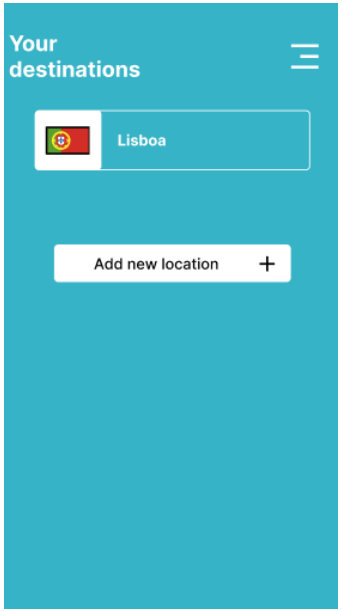


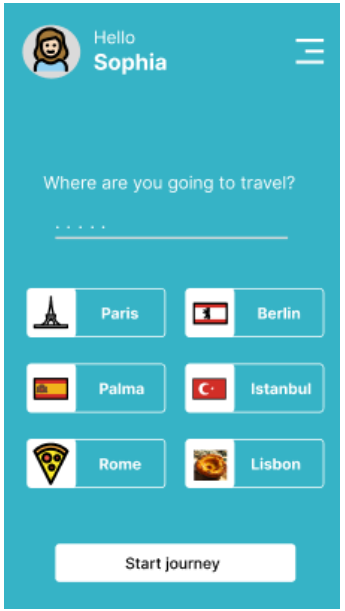


- City suggestions don't look aesthetic [1];
- Use Flags and redesign the city icon to make it more attractive ;

Iteration 2

Heuristic Evaluation





- Transfer sharing function to your destination part
- Add bin icon to make the user edit his/her own trip plan

Design and style

Design

- Implement our Web App under the structure and work flow of Framework7
- Material Design for the style of our app due to its simplified physics to support intuitive user understanding;

Style and Colour

- Using **Builder.io** to transfer the unique icons in Figma into CSS files for the UI design.
- Implementing Analogous colour style so as to keep low contrast and look more attractive for the children from 6-9 years old [2].

Qualitative evaluation

Two interviewers took part in the test of our LoFi Web App and here are their feedbacks after the test:

Pros:

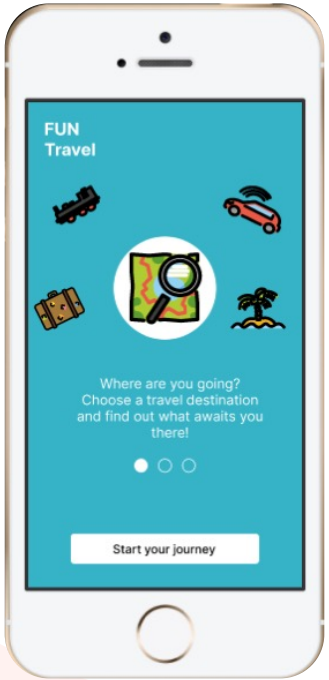
- The onboarding screens are pretty interesting;
- All buttons were immediately recognized correctly;

Cons:

- There are still some functions missing in the app such as a „navbar“ for the whole app;
- The stories seem too complex and boring for the kids;

Iteration 4

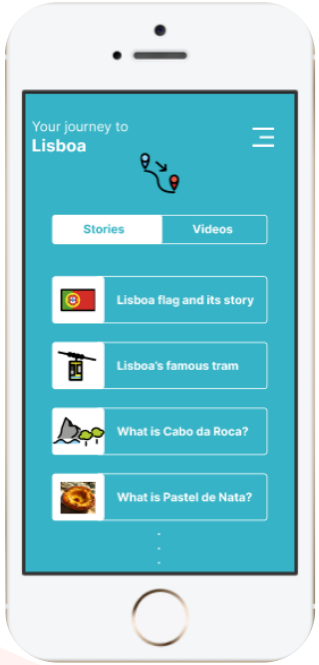
HiFI Web prototype

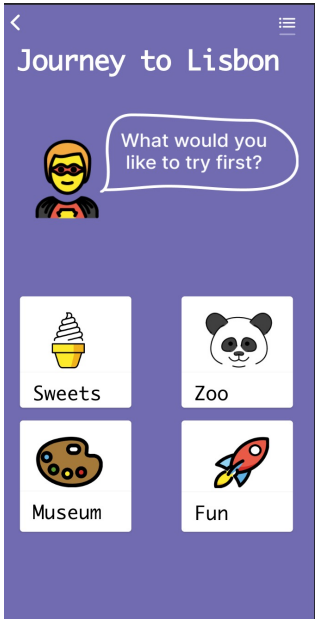


- Changed the background-colour of prototype
- Added menu-button for quick switch to destinations page

Iteration 4

HiFI Web prototype





- Redesigned options for activities
- The font was enlarged and made child friendly

03

Live Presentation

04

Final Evaluation

Final Evaluation

Hypotheses

- **User's Performance**: The menu and functionalities of this app are able to be recognized by the children from 6-9 years old;
- **Effectiveness**: The users can make their own wish-list without the help of their parents;
- **SUS-Evaluation:** The Web App can achieve at least a score in the range of 60-80(Good) in the SUS report [3];

Metrics

- Number of the user errors during the test case[4,5] ;
- Number of the tasks completed by the user without the help of the developer during the test: Effectiveness=(number of completed tasks/number of the total tasks)*100% [4];
- System Usability Scale(SUS) ;

Final Evaluation

Test Cases

1. **Onboarding**: Go through the onboarding screens and then create your profile
2. **Set up your destination**: Set up your trip to Lisbon and then go to the main menu
3. **Personalize your wish-list**: Go through the options provided in the menu and then try to find the fun facts of pastel in ‘sweets’
4. **Adding the pastel to your wish-list**: Reading the fun facts of pastel, then adding the ‘pastel’ to your own wish-list;
5. **Editing your wish-list**: Go to your own wish-list, delete the Lisbon as your destination and then go back to find your new destination;

Final Evaluation

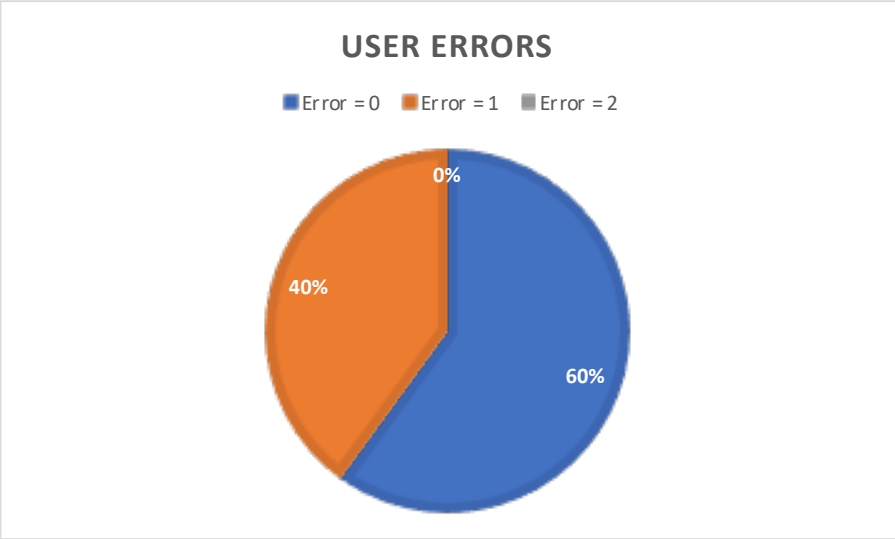
Quantitative Evaluation

Result from test with children from 6 to 9 years old				
Test Subjective	Gender	Age	Errors	Tasks completed
Subject 1	Female	8	1	5
Subject 2	Male	9	0	5
Subject 3	Male	7	1	4
Subject 4	Female	9	0	5
Subject 5	Male	9	0	5

$$Effectiveness = (\sum_{1}^{i} \frac{number\ of\ complete\ tasks\ of\ subjective_i}{number\ of\ total\ tasks}) \cdot \frac{1}{i} \cdot 100\% = 96\%$$

Final Evaluation

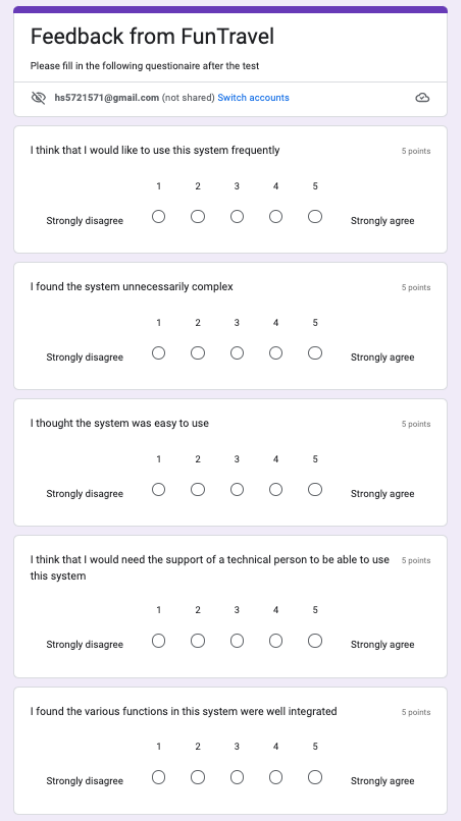
Quantitative Evaluation



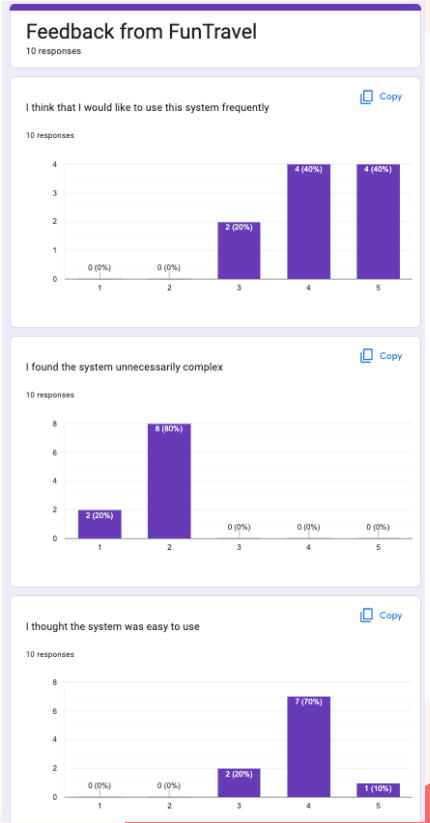
- Results reveals that most of the test subjects meet no more than 1 error during the whole test procedure;
- According to performance measurement the evaluation result can be seen as high efficiency of use [4,6];

Final Evaluation

System Usability Scale Report



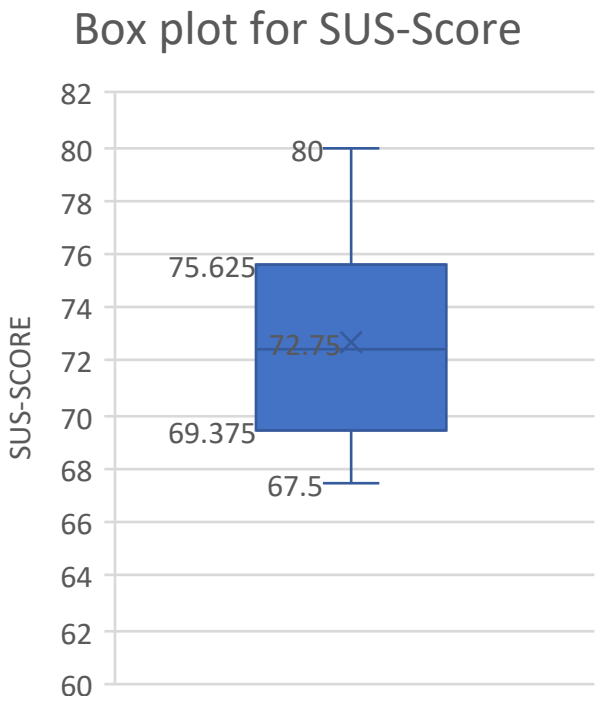
- Conduct SUS-questionnaire with 10 test subjects('parents') after the test case;
- Collect their feedback via Google Form and then calculate the SUS-Score;



Final Evaluation

Quantitative Evaluation

- Subjects from the test achieved an average score of 72.75 which means the evaluation result lies in the range of 60-80(Good);
- The minimum score(7.5) from the report also exceeds the lower bound of the evaluation for 'Good';



Thank you for your attention!

References

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[2] Christian Vizcarra. 2019. All you need to know about colors in UI Design — theory & practice. https://uxdesign.cc/all-you-need-to-know-about-colors-in-ui-design-theory-practice-235179712522

[3] Brooke, J. (1996) SUS—A Quick and Dirty Usability Scale. Usability Evaluation in Industry, 189, 4-7.

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[5] Nielsen, J., & Levy, J. (1994). Measuring usability: preference vs. performance. Commun. ACM, 37, 66-75.

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