

“KidBox”

Team

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Problem and Solution Overview

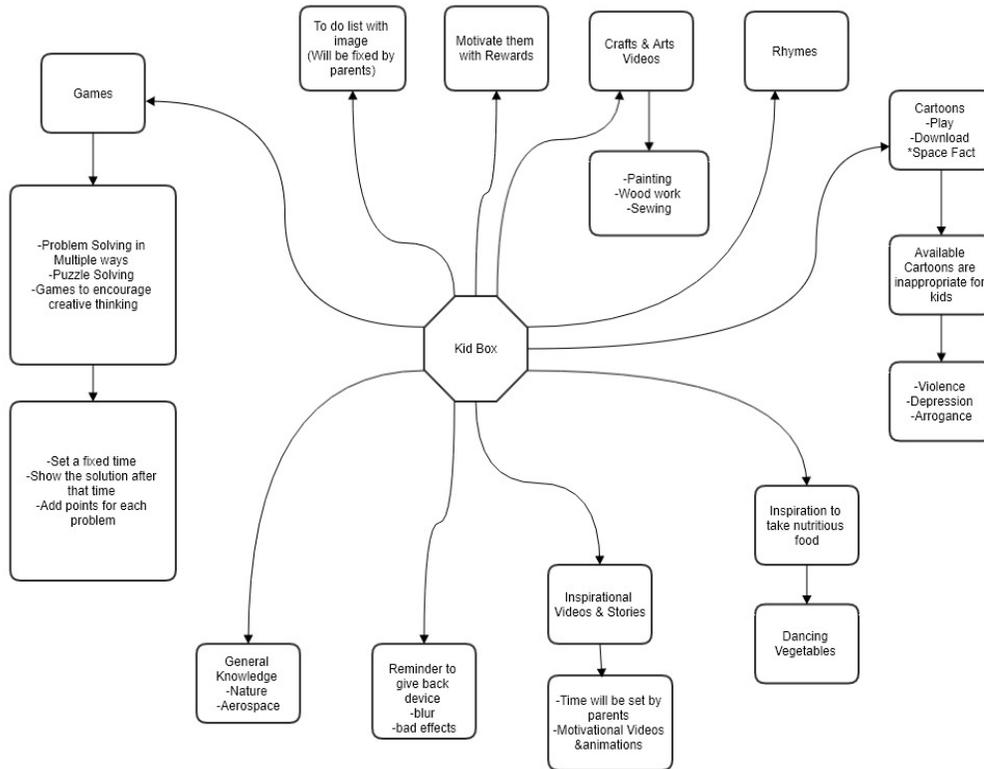
Smartphone is a blessing of modern technology. Nowadays children keep themselves busy with gadgets that is making them antisocial and which is also harmful for mental and physical health. The things they listen to or watch on the device screen put a great impact on them and they are getting used to it. Due to advancement of technology, we should not deprive them from knowing the world rather help them use it optimally which will inspire to socialize with parents as well - that is what we want to do in our project - “Kid Box”. Smart phones have positive and negative impact on our children. “Kid Box” is such kind of application that ensure the productive use of smart phone of parents by the kids. Actually it will be an interface to establish healthy parent-child relationship. We have tried to understand how children works and what they love to do whenever they have any devices. Actually now a days it’s very tough for the parents to keep away their kids from devices. Because kids always follow their parents. We just wanted to make sure that use will be productive by the kids with interaction of their parents.

Features are added keeping in mind child psychology and parenting. So our kidbox will contain this types of features that will help our kids to make a friendly and charming relationship with their parents. Our app will also inspired our children to have healthy food and grow social awareness like tree plantation activities.

Design Research Goals, Stakeholders, and Participants

We were able to find two sets of participants for contextual inquiries. One set people have 2-5 years child and one set of people without 2-5 years child. We have tried to know from the participants that, do children use smart phone in productive way or has any negative impact of smart phone on children. From our query we able to know that though smart phones are blessing but our children are negatively impacted by it a lot .We have made some survey to identify how we can make smart phones use productive. Then we have told the participants about

Kid Box and asked them to give suggestion about features of KidBox. From user survey we selected initial features of Kidbox.



Design Research Results and Themes

We have go through several website and links to find out applications that can help our children. We try to configure the features of that type of application and also try to figure out the problems of these applications. We have taken user survey from our participants about the features of the application. Our maximum participants appreciate our project and provide suggestions regarding it. We also try to understand how we can make a strong bonding between parents and children. Our each participants provide a positive feedback knowing about the main motivation of our projects. Maximum participants encourage to do these types of projects. There are a few participants who think that it will be tough to implement in practical. They also think that only application can not make parents child communication in a friendly way as nowadays our parents are so busy with their own activities, they have not enough time for their kids. And some parents are not concern about their child and the activities they have done . Some user provide some other features to add in our applications. So after researching a lot the maximum users provide positive feedback that was motivating to do these application that can help our kids to use smart phones in productive and efficient way and make parents child communication in a proper way.

Task Analysis

1. Who is going to use the design?

Based on our research work, this design would likely be used by individuals that have kids aged 2-5. We have found fewer people who told us that they actually want this type of applications for their kids.

2. What tasks do they now perform?

Our parents participants told us that as kids always try to follow their parents, they want to use smart phones. But they try to keep away their children from devices.

3. What tasks are desired?

Our interviewees reported that they had the desire to have an application that will help them to make a proper communication with their kids. They also want to have an app that will provide a platform to use our modern technology in productive and efficient way.

4. How are the tasks learned?

Most parents spoke of researching using the Internet, and using a trial and error approach to find the best solution for their kids. They have tried some existing applications that can help their kids. But they are not much working.

5. Where are the tasks performed?

From our interviews, we discovered that most working parents wants to have such kind of app that will help their kids. So the tasks performed on those family where the parents are working people and not enough time for their kids.

6. What is the relationship between the person and data?

The primary relationship between the person and the data results in their ability to accomplish their original motivation for using the app. And our parents have an sign up option for selecting the things that actually their kids can see in the apps.

7. What other tools does the person have?

The people of whom we have taken interview were pretty concern about their kids. Some of the parents have already using some educative apps for their kids. And some parents try to keep busy their kids by video game or other staffs

8. How do people communicate with each other?

For kids purpose the parents communicate with other parents to know how they handle their kids, how they keep their child away from devices or do they uses any kind of staffs that can help their child.

9. How often are the tasks performed?

When parents are busy with something they can give their smart phones to their kids to use app that will educative.

10. What are the time constraints on the tasks?

Our modern parents are too busy with their tasks. If they do not manage time for their kids, the app will not help them in proper way. So timing is a very important thing.

11. What happens when things go wrong?

Sometime it may happen parents are not watching that what kids doing with their smart phones. They thought that their kids using the app that they want but it may not happen. So our parents should be more careful about these things.

Related Research Works

Bear in Mind App: It is all at once a to-do-list, reminder, tasks for making task lists, setting alarms, and creating a quick phone contacts list that can be set by parent or kids. Parents may need to help kids discern how to best use the app and set up the first few reminders. Once a kid completes all their daily tasks, a positive message with a cute panda appears.

BRILI ROUTINES: To-do-list for children specially for inattentive children. Parents choose predesigned routine to include common tasks and based on completion, stars are added for long-term reward.

iEarnedThat: Parent sets a goal for kids and define rewards for it. Then s/he decides how many times this good behavior has to occur. Occurrence can be from 2 to 60.

Story Boarding

Written Scenarios - "1x3"

Task: Parent child interaction in productive work (storyboard 1)

Rini is a 3 years old child. She opens the app and selects to-do list option from the home screen.

- I. She goes to the points option to check how many coins she lacks to get her gift.
- II. After that she goes to the daily task option to check what she needs to do then to earn that required points.
- III. She then goes to to do her tasks and after finishing clicks done for those tasks.
- IV. Umm rini who is Rini's mother opens the app to check her daughter's activities. She approves the tasks that Rini has done. She also notices that Rini has gained the required points for her gift. Now she goes to prepare a gift for her beloved daughter.
- V. Rini gets a plant from her mother as her gift. She is very happy to have it.

Task: Healthy entertainment for children (storyboard 2)

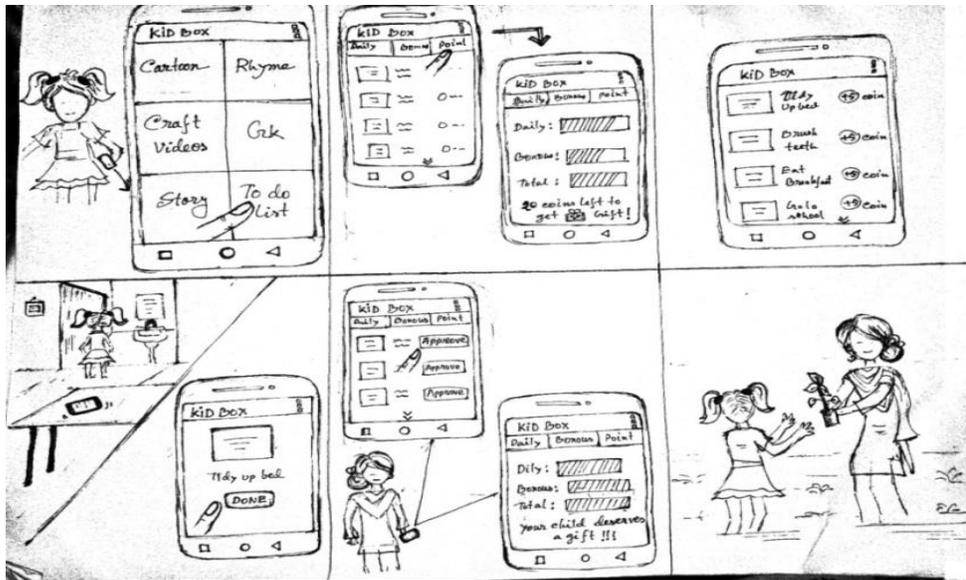
- I. Ayan is a 2 years old child. He wants to see cartoon in this app. He goes to the cartoon option in the home screen.
- II. He chooses his favourite “Tom & Jerry” to play and watches it.

Task: Parental control in choosing the content of entertainments (storyboard 3)

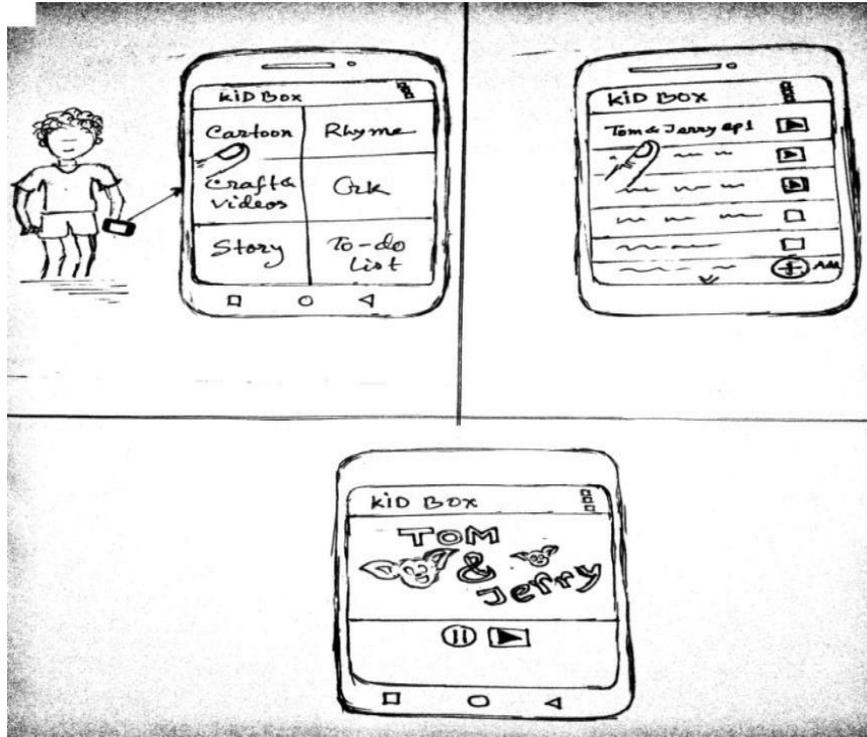
- I. Mr. Karim is a service holder. In break time he discusses with his colleagues about the cartoons that children watches. From that discussion he comes to know about some educative cartoon. He plans to add those cartoon in the app for his(2.5 years old) little son.
- II. He opens the app and goes to the cartoon option.
- III. After that he goes to add option and after inserting the secret code he searches those cartoons that he heard in his office. He also gets a good rivew of those cartoons and finally adds them

Storyboards

Story board 1



Story board 2



Story board 3



Testing Process

Heuristic Evaluation :

We had evaluated our initial paper prototype in CSE department, DU on 2 persons in the office. It took nearly 10 minutes and we have had initial feedback about our application.

Usability Testing :

For each usability test, Ifshita was the facilitator and Hosneara was observer. We gave each participant our prototype for testing purpose and told them to use it. Then we observed how they are opening, where they are navigating through, whether they are taking unusual action or feeling hesitated. We took notes on their behavior.

Our first participant was Sumon bhai in CSE department who is a parent of one child aged 2 years. The environment was calm and he was not busy so we had a good test there.

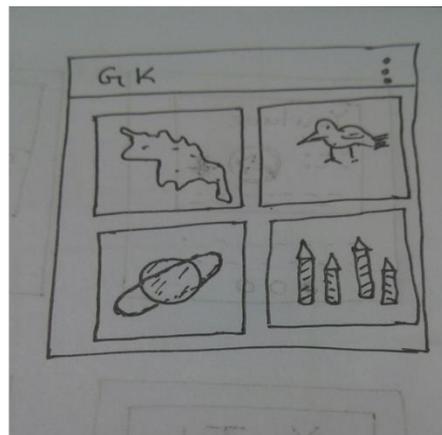
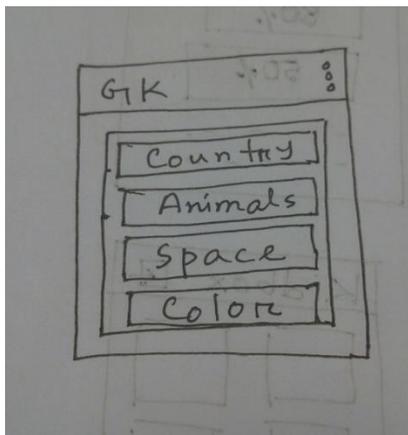
Second participant was a girl 'A' aged 3 years, neighbor of Rumaly living at ground floor. She was told first to use the app and the test was held at Rumaly's place. It was in open space and she was in good mood and comfort zone then.

Testing Results:

Using Textual Data : Severity 4

Kids of 2-6 ages are not able to read much and do the task accordingly, they want to see figure. In the General Knowledge part, the information needed to be mostly pictorial.

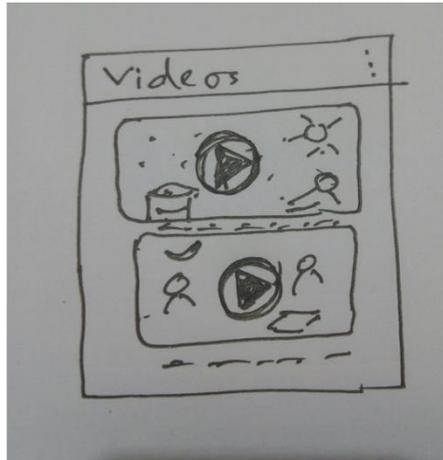
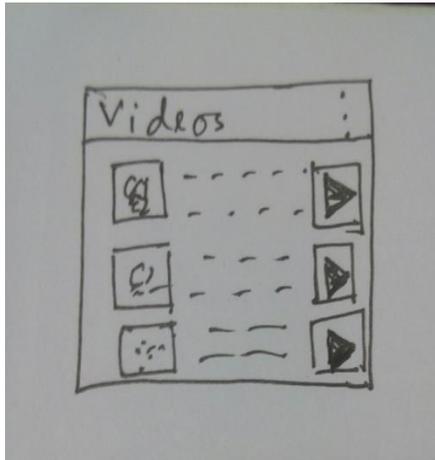
Correction: Titles were depicted in picture rather than text.



Representation of Videos:

Thumbnails were smaller and they wanted larger and details were not important to them. But parents wanted to see titles attached to each video.

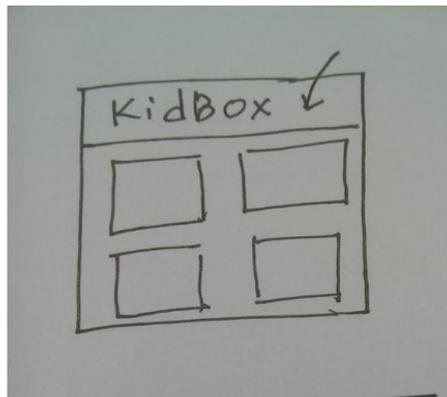
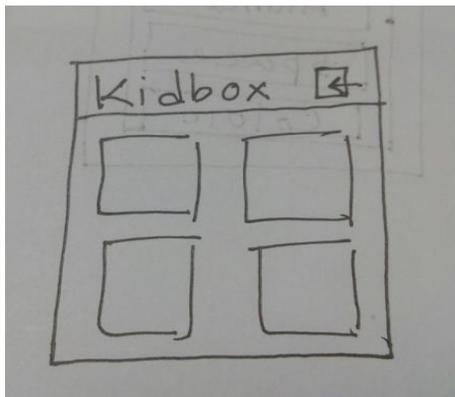
Correction: Larger thumbnail with title for parents



Login option:

Login option was visible first but parents wanted to make it invisible.

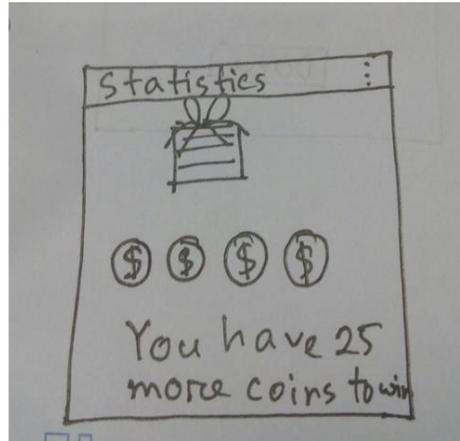
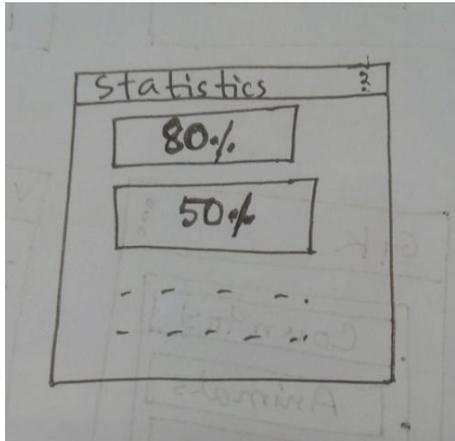
Correction: Login option comes after tapping on toolbar.



Bonus Points:

Statistics was shown in percentage before but kids do not understand the numbers well specifically 2-3 aged kids.

Correction: Coins added according to child's tasks. If a child has done any work, coins will be added.



Add Video:

The process of obtaining YouTube link was not mentioned before. One of the parent user said to provide it as it is not known to her.

Correction: The whole process how to copy a link from YouTube video is added in onboarding view that will be viewed for the first time.

