Teaching children structure of Indian government

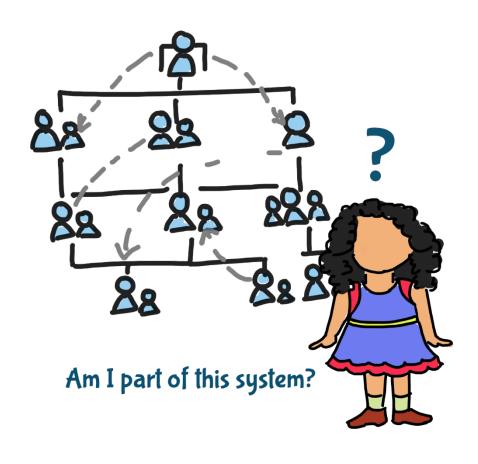
Guided by – Prof. Venkatesh R

Kalyani S Dhone 136330008

Why this topic?







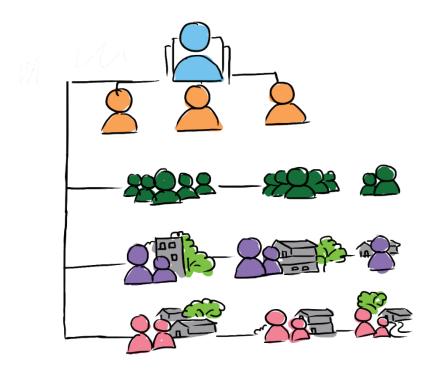


Why learn government and its structure

- Understanding the hierarchy of government and how things operate within the government
- Clear understanding of politics and its different components
- Understanding one's role and rights in the society
- Making the decision of voting in future
- Contribute to the success of your country as a responsible citizen

Design Goal

To teach children structure of the Indian government system

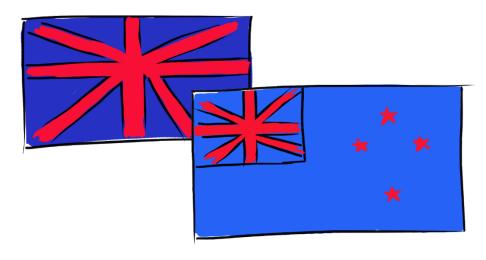


Design process followed

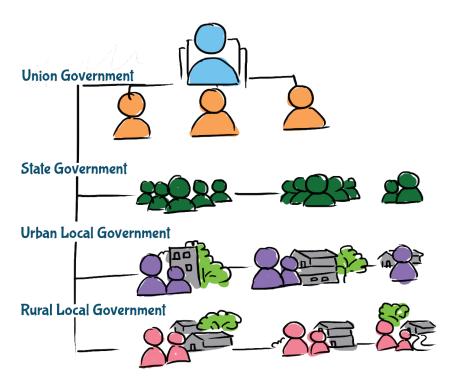
- Secondary research
- Primary research
- Findings
- Ideation
- Concepts
- Prototype
- Evaluation

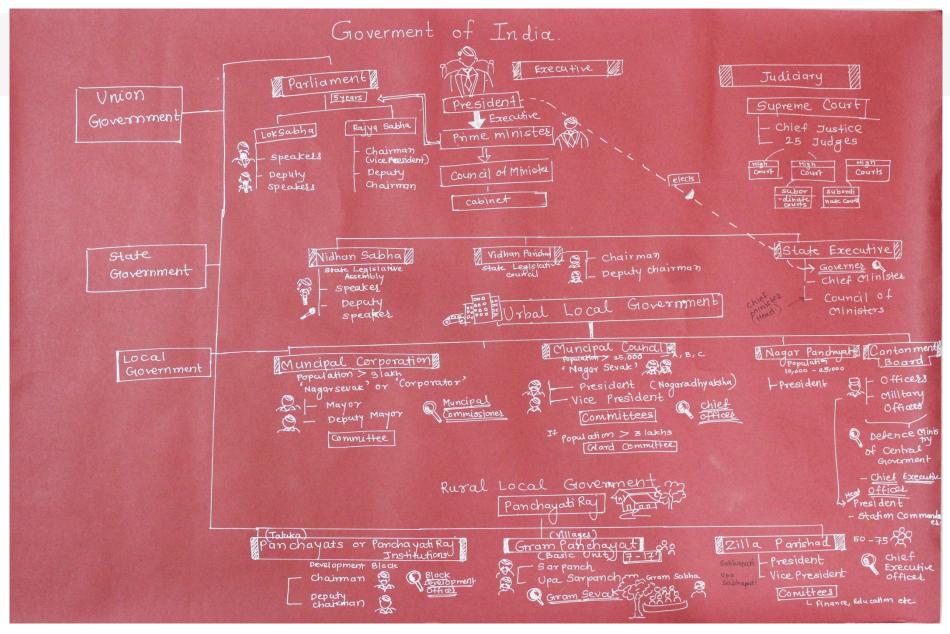
Understanding the other government systems

- Westminster System
- UK, New Zealand government system

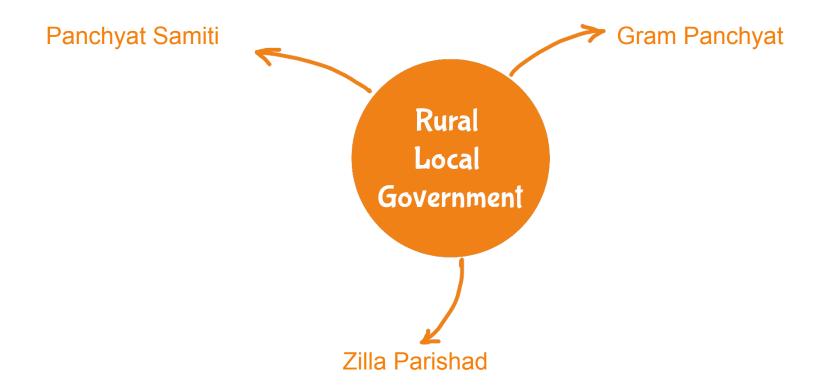


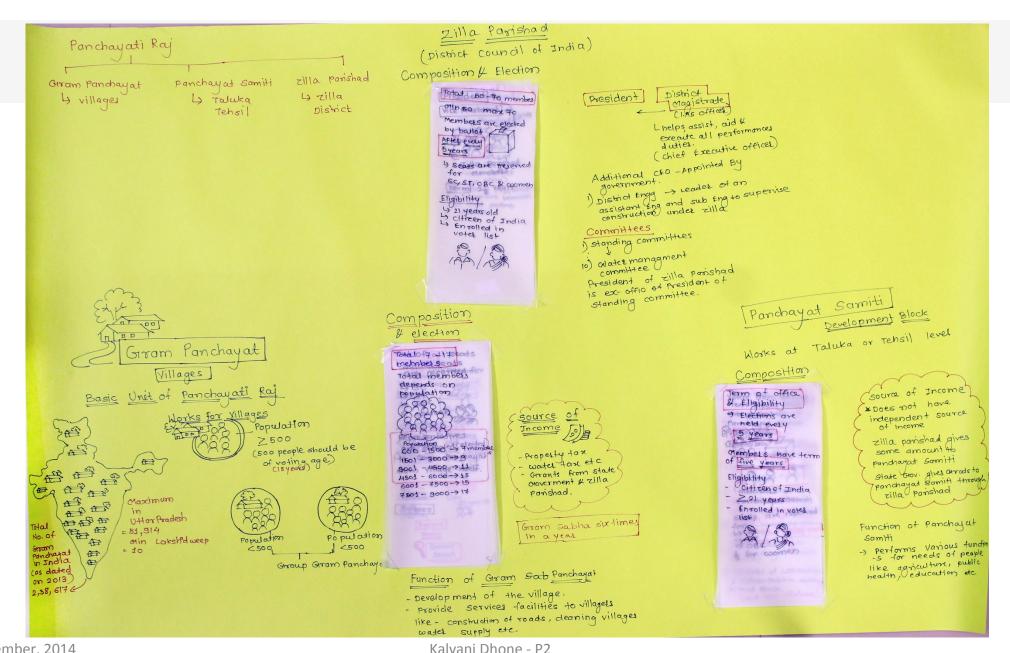
Understanding the Indian government system



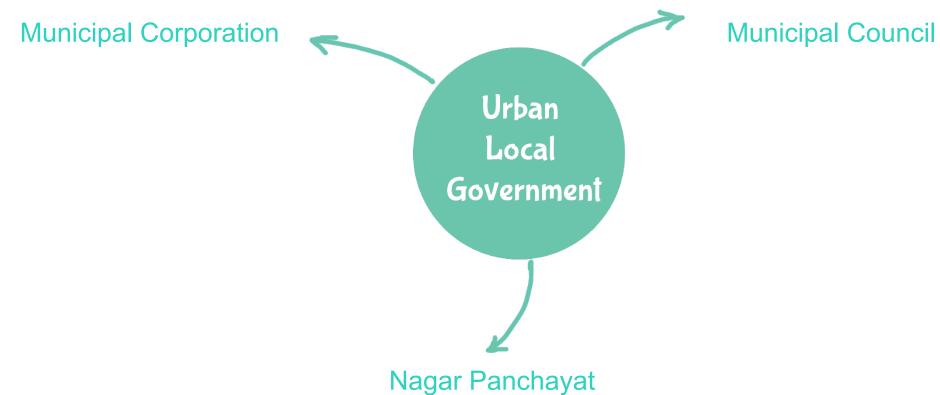


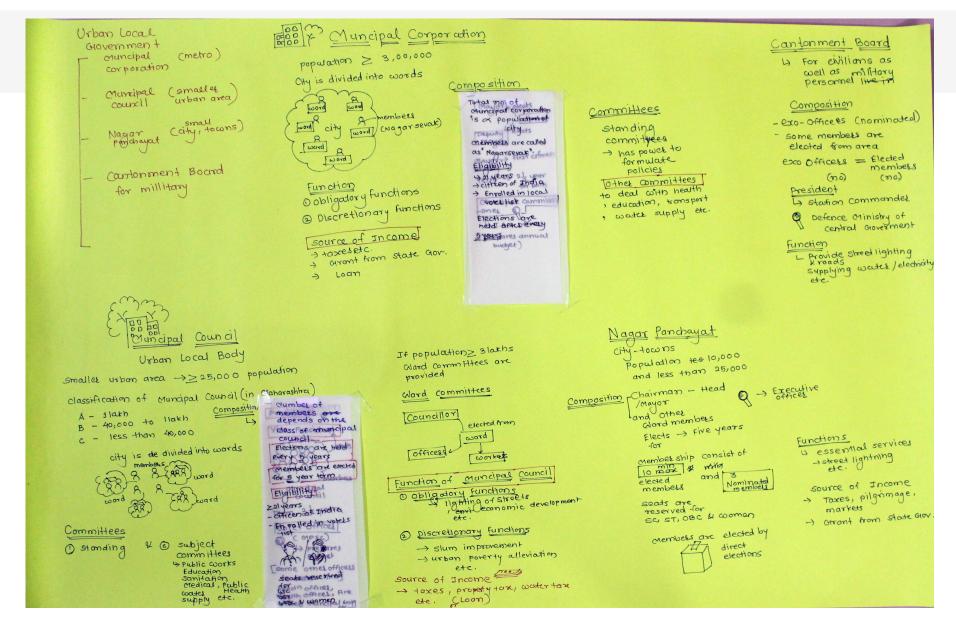
Rural Local Government



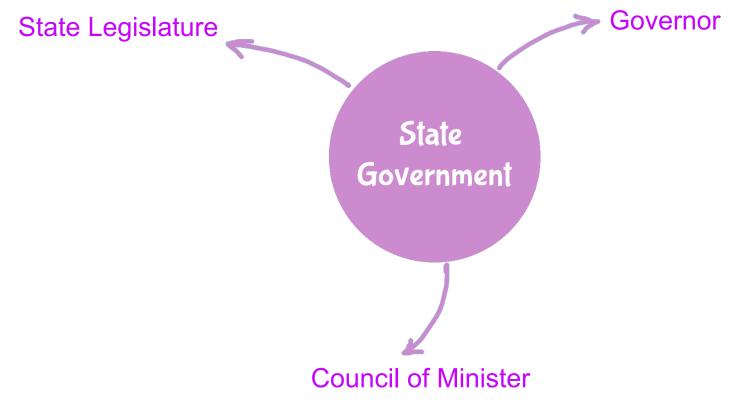


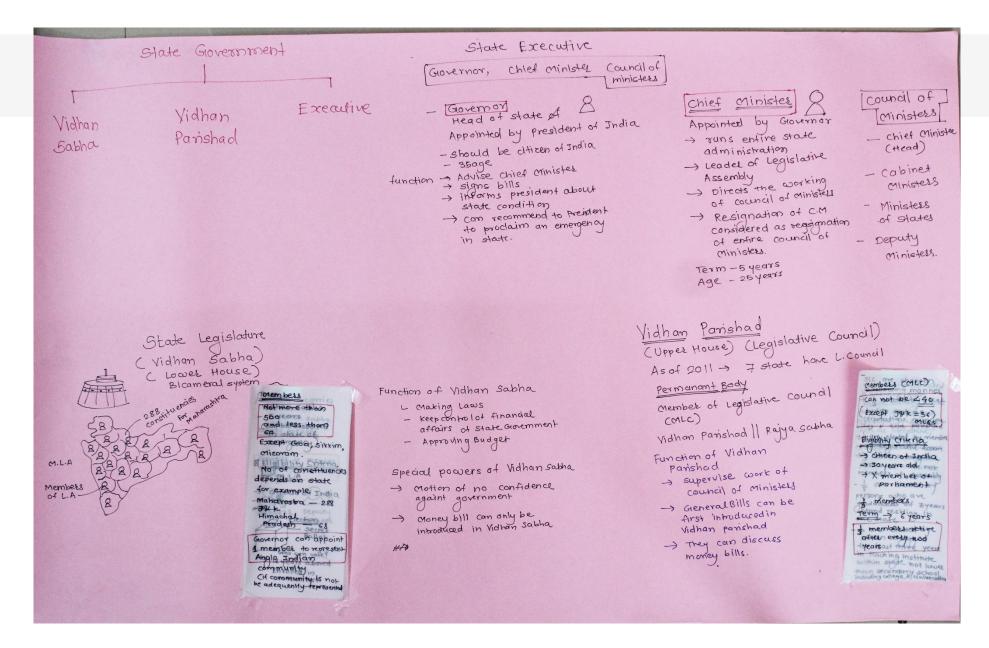
Urban Local Government



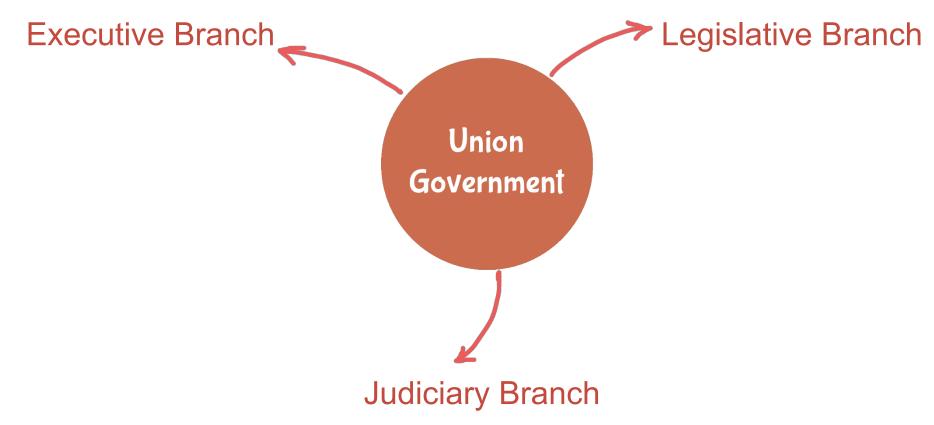


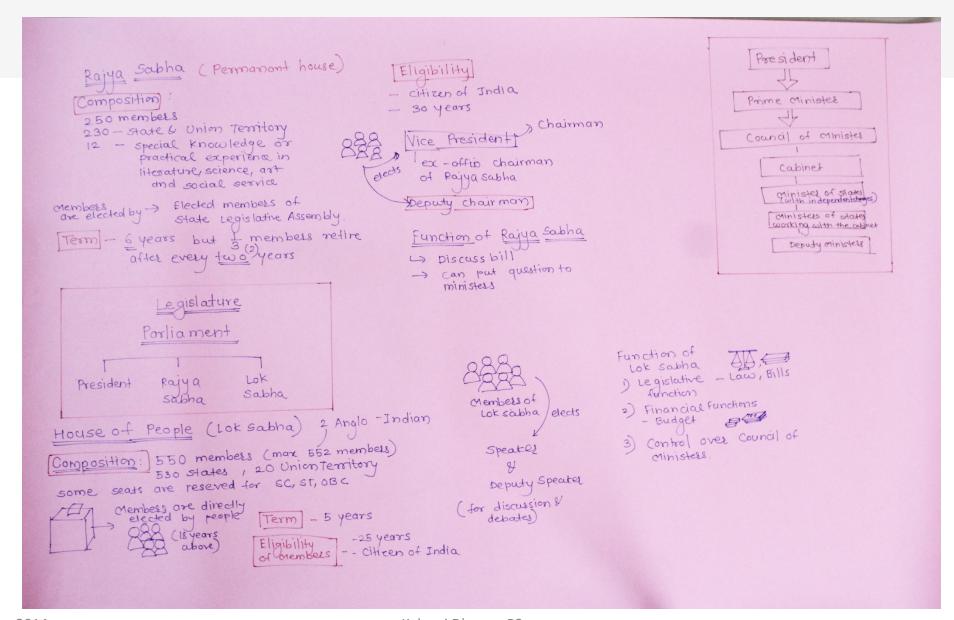
State Government





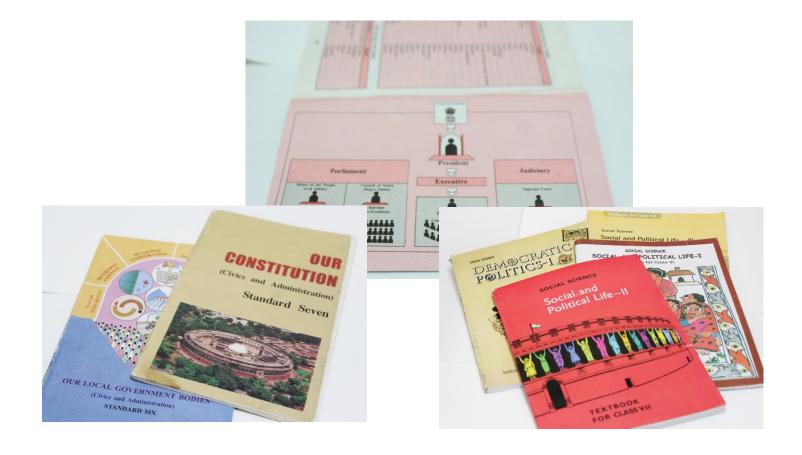
Union Government





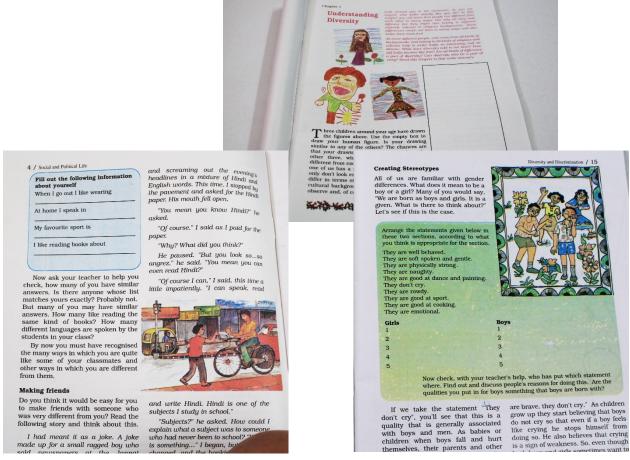
Study of existing curriculum

- State Board
- Central Board



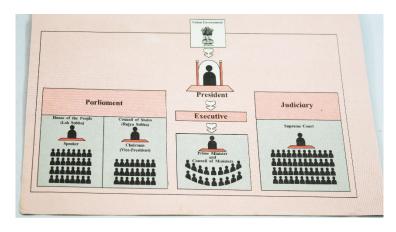
Key observations after studying the curriculum

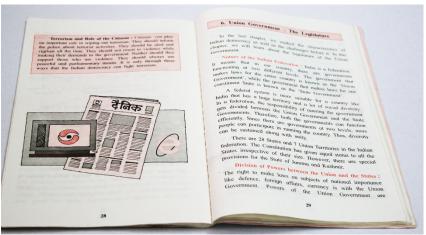
- Central Board
 - Content
 - Use of images
 - Use of Narrative
 - Activities



Key observations after studying the curriculum

- Maharashtra Board
 - Content
 - Use of images
 - Use of Narrative
 - Activities





User studies

- User study with the teacher
- User study with the students

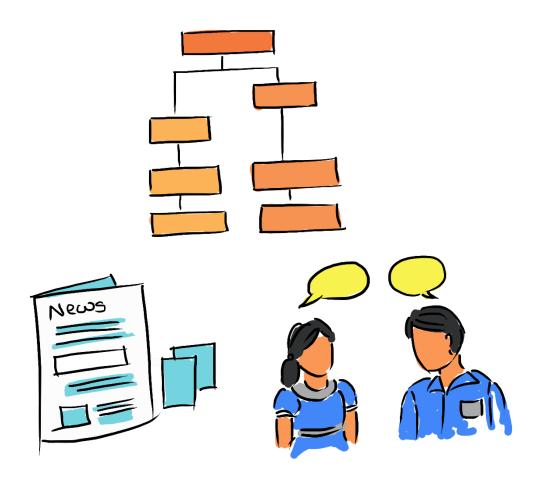
User studies

- User study with the teachers
 - 3 interviews with teachers 'Kendriya Vidyalaya'
- User study with the students
 - 7 Interviews with student of grade VI, VII, VIII

User study with the teacher

CBSE Schools

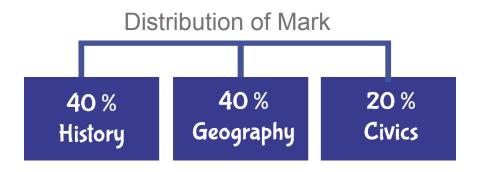
- Distribution of Marks 100% for Social, Political Life
- Methods of Teaching
 - Flow chart
 - Role play exercise
 - Skit/ Drama
 - Activities like searching articles in newspapers



User study with the teachers

Maharashtra Board Schools

- Distribution of Marks 20% for Civics
- Methods of Teaching
 - Read Chapter
 - Write important points on the board
 - Ask students to read
 - Solve exercise mentioned in the book



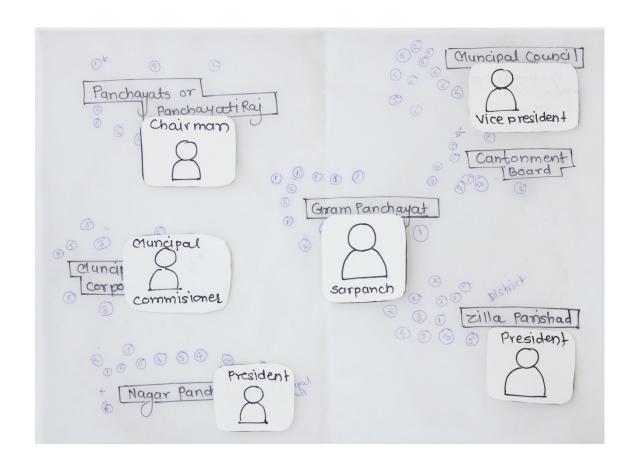
User study with children

Activities given to children

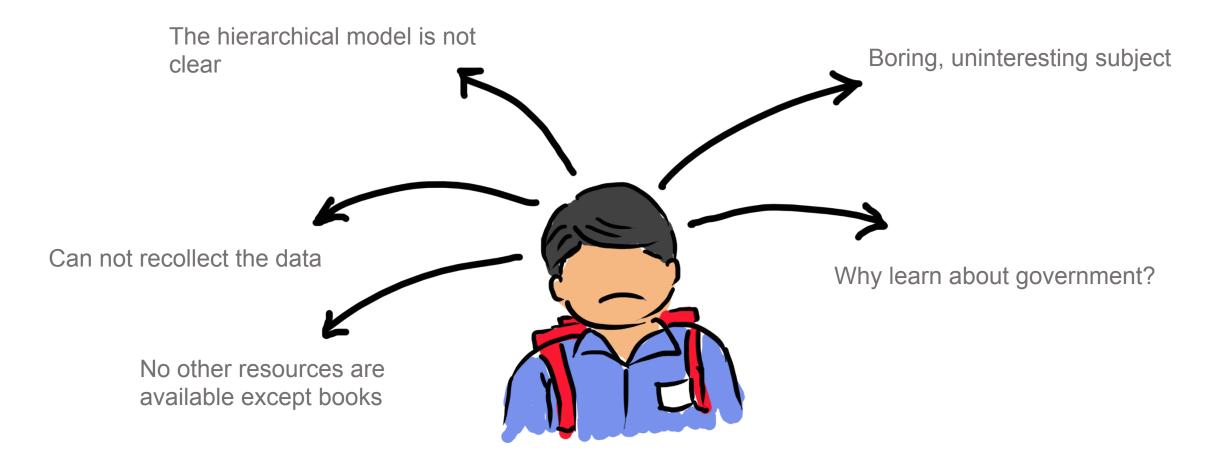
- Arrange given government systems according to their hierarchy
- Assign heads of any 3 governments systems from 5 given cards

Result:

7 out of 10 children failed to give correct answers



Findings

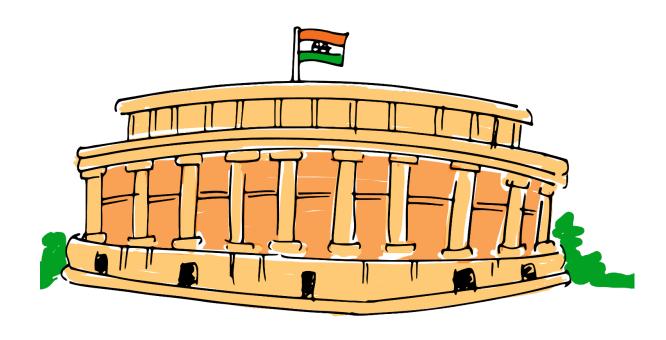


Revised Design Goal

Based on the observations and findings the design goal was restated as

- Provide resource for children to teach the structure of the Indian parliament
- To make children understand the relation between the different components of the parliament

Why parliament?



Target users

• 8th standard students

Ideations

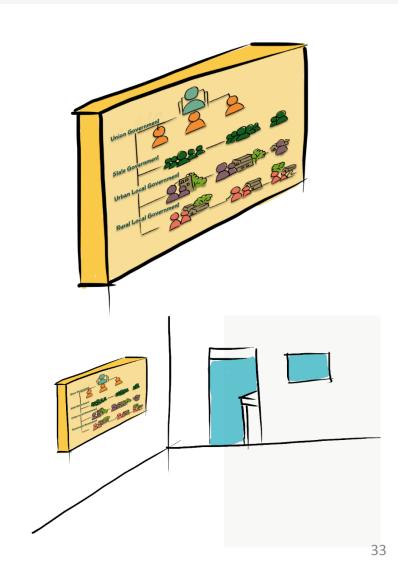
Wall Installation

Advantages

- Can be installed in classrooms and see every day
- Overall structure can be seen in one go
- Tangible Physical interaction
- Group learning

Disadvantages

- Can not take anywhere
- Difficult to install in every school
- Cost



Ideations

Interactive physical book

Advantages

- Portable, can carry anywhere
- Tangible Physical Interaction
- Visualization of information in layered form

Disadvantages

- Group learning may not happen
- Cost
- Less interaction from user side



Ideations

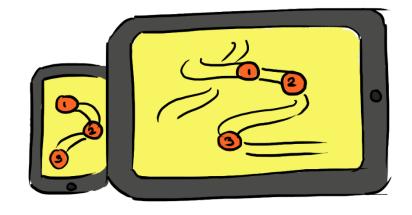
Phone or Tablet app

Advantages

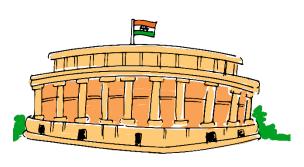
- Information can be accessed, shared easily
- Easy to carry
- Can be updated easily

Disadvantages

- Children don't own tablet to use them any time
- Can get distracted because of other games and app



Analysis of content



Parliament



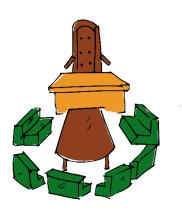
President



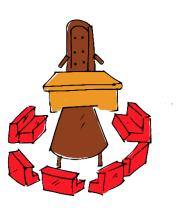
Prime Minister



Council of Ministers



Lok Sabha

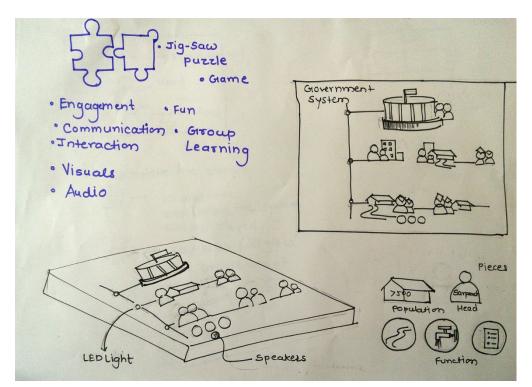


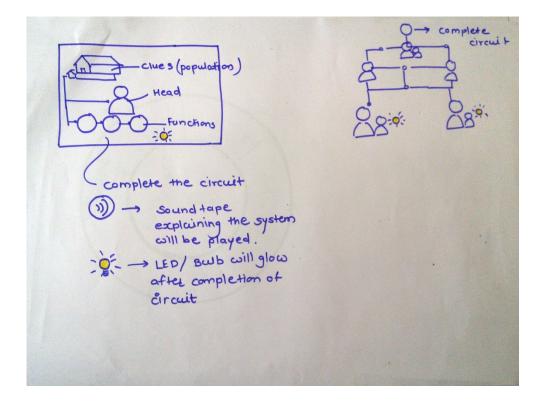
Rajya Sabha

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Concept

Concept 1
Interactive Installation

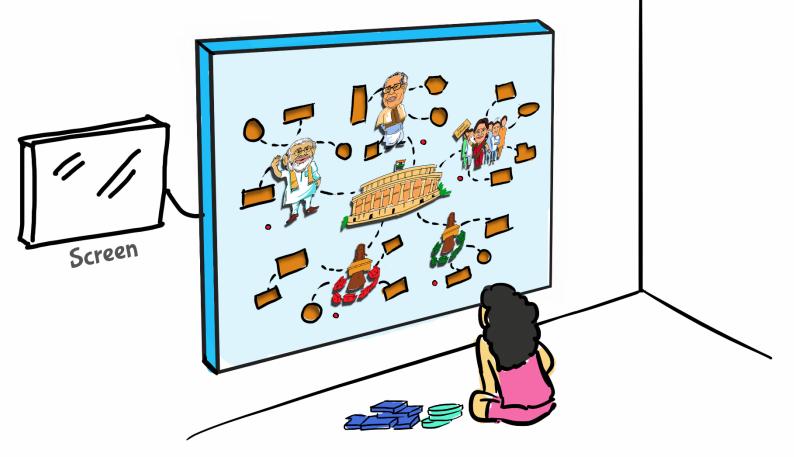




Concept

Concept 1

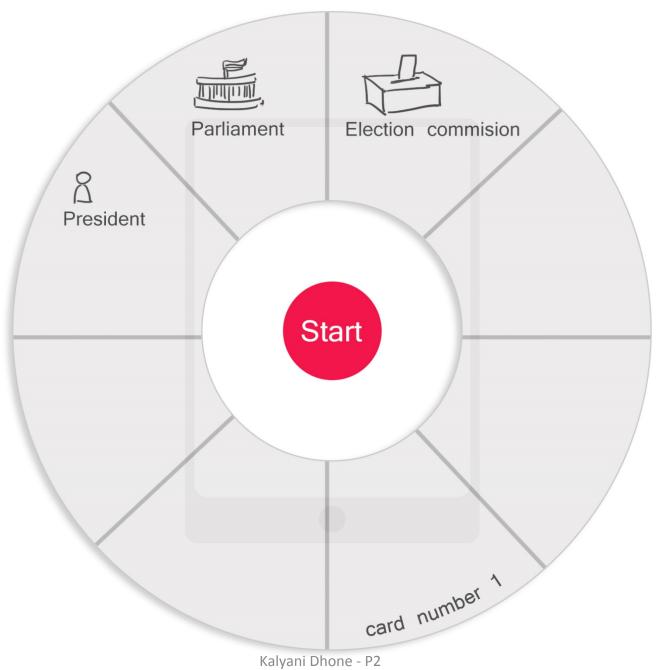
Interactive Installation

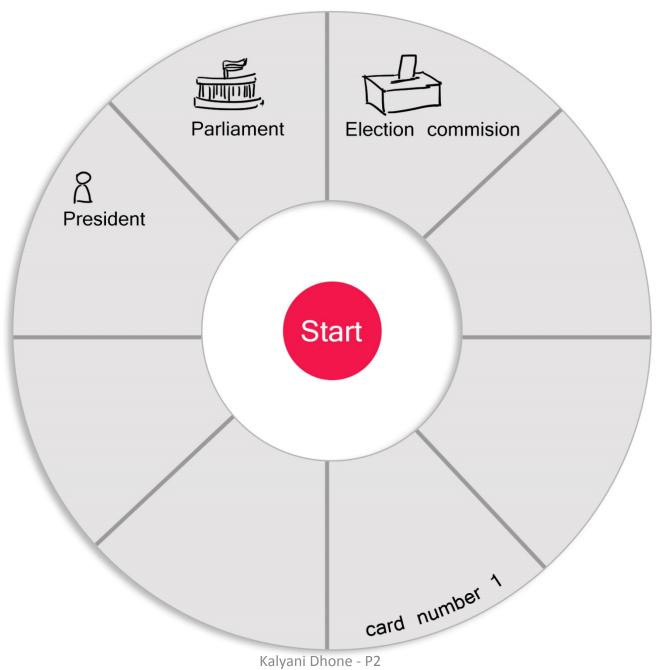


Concept

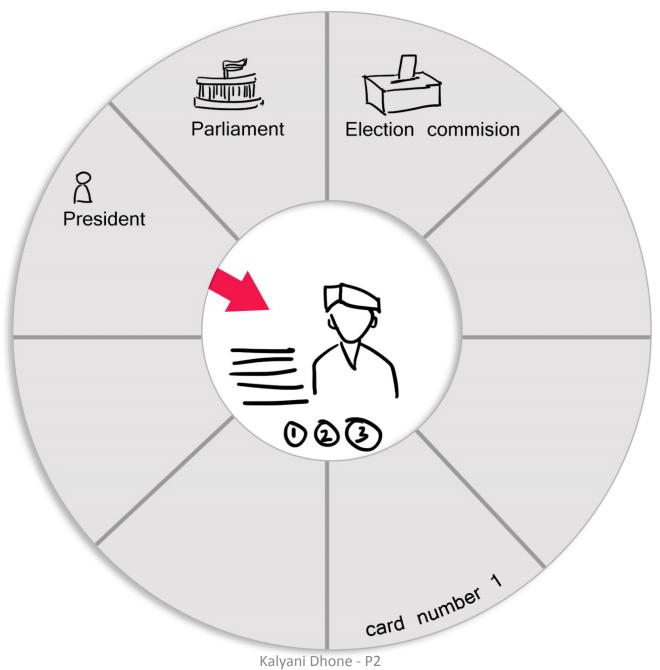
Concept 2

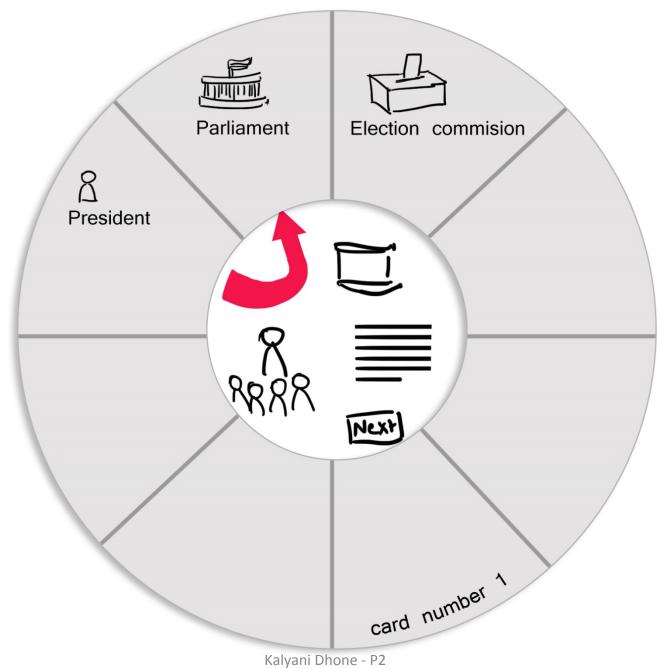
Digital Interactive Wheel

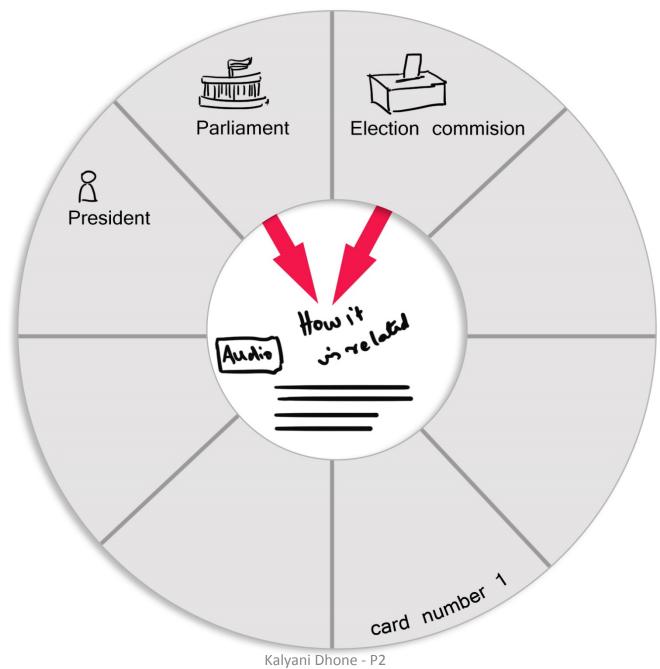


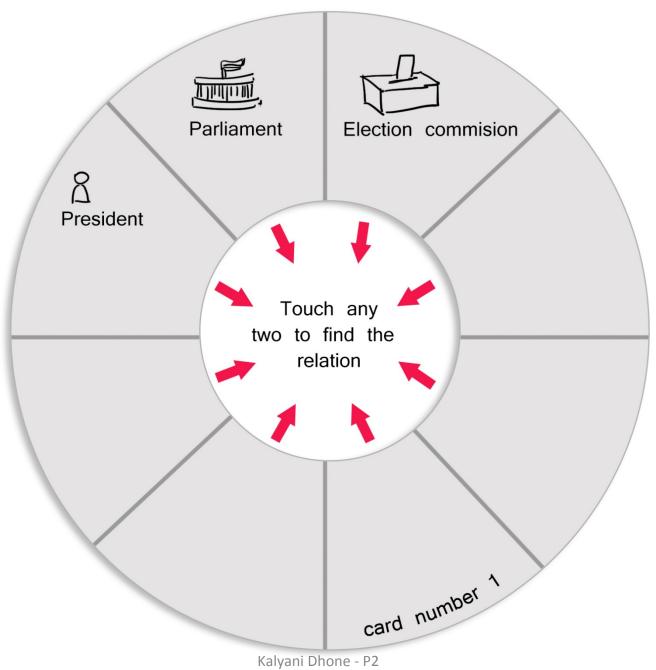


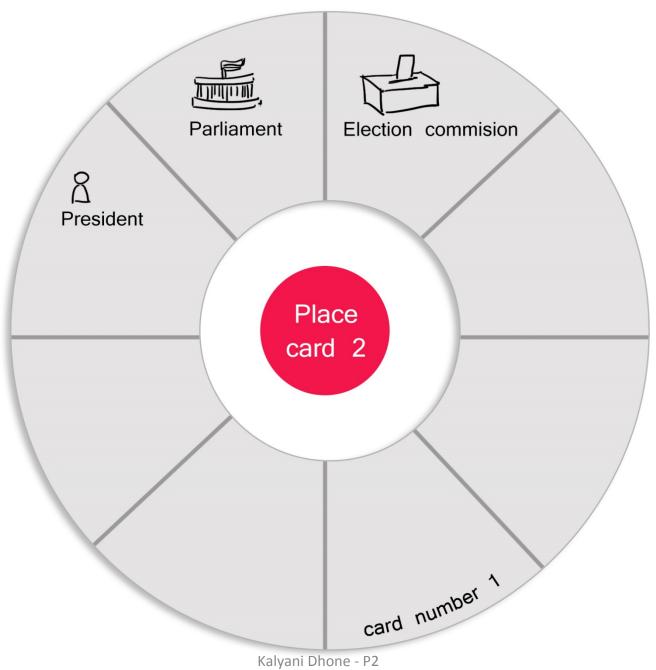
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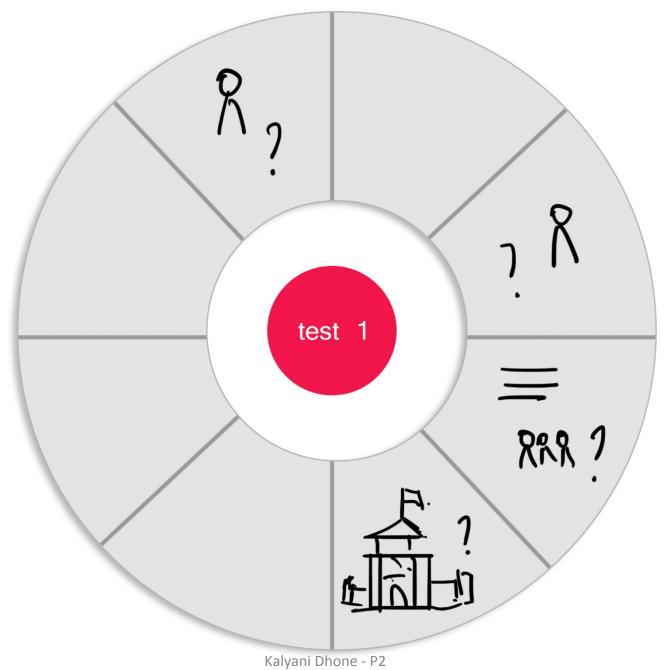




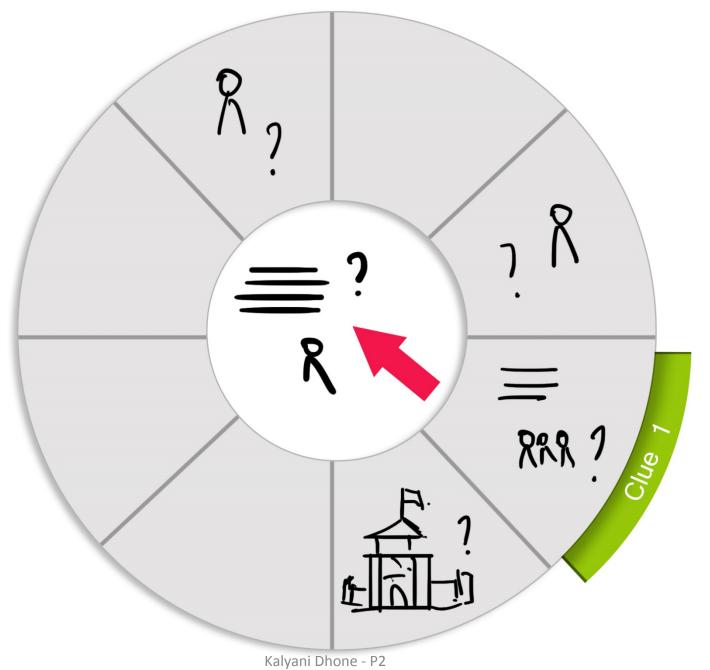




46



27 November, 2014



Why Video?

Video

- Audio + Visuals
- Simple Illustration
- Animation
- Can watch repeatedly

Communication principles used in the video

- Chunking
- Logical Sequence
- Summary (Repetition)

- Video
- Character Making
- Illustrations



Character used in video



Illustrations used in video

3D installation

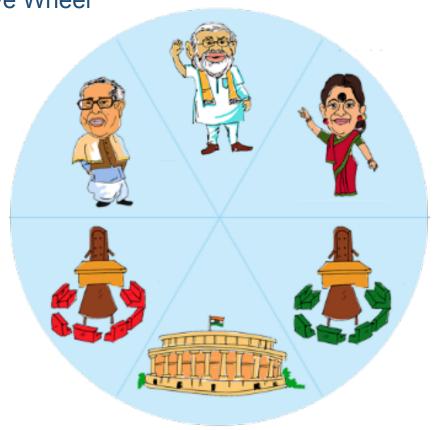




3D installation

- Info graphics
- Overall view of system at one glance
- Video can be played repeatedly
- Tangible
- Audio and Visual

Interactive Wheel



Simple Wheel

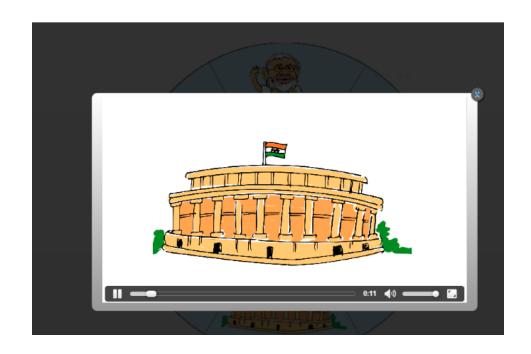
Kalyani Dhone - P2

Concentric Wheel

Interactive Wheel

- No overall view of the system or component of the system
- No tangible component
- Only ongoing chunk is memorized

Clips from video





Problems found in both the prototypes

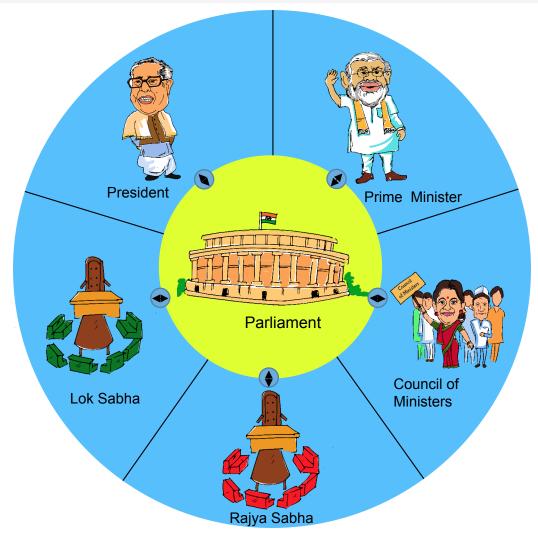
- Speed of the video
- Timing
- Difficult to retain the data in one go

Final Prototype





Final Prototype



Go back to see other videos

Back

Demo

Play

User criteria

8th standard English medium students 7th standard English medium student

Evaluation Criteria

- After watching the video students should be able to understand the difference between the parliament and the government
- After watching the particular video for ex. Lok Sabha, Rajya Sabha, student should be list down at least two functions of respective component
- After watching the particular video student should be able to solve the puzzle on the installation of that video

Evaluation

Total no of users – 12, 5 students of 8th standard, 2 students of 9th standard 5 students of 7th standard

Process

- Pre test
- Post test
- Evaluation without installation
- Evaluation with installation

Findings and observation from evaluation

- Evaluation without installation.
 - User has to watch the video 2 times to understand the concept
 - 4 out of 12 students stopped the video in between to see the video again to understand the concept again
 - 2 student had to watch the video 3 times because they couldn't understand the English properly







Findings and observation from evaluation

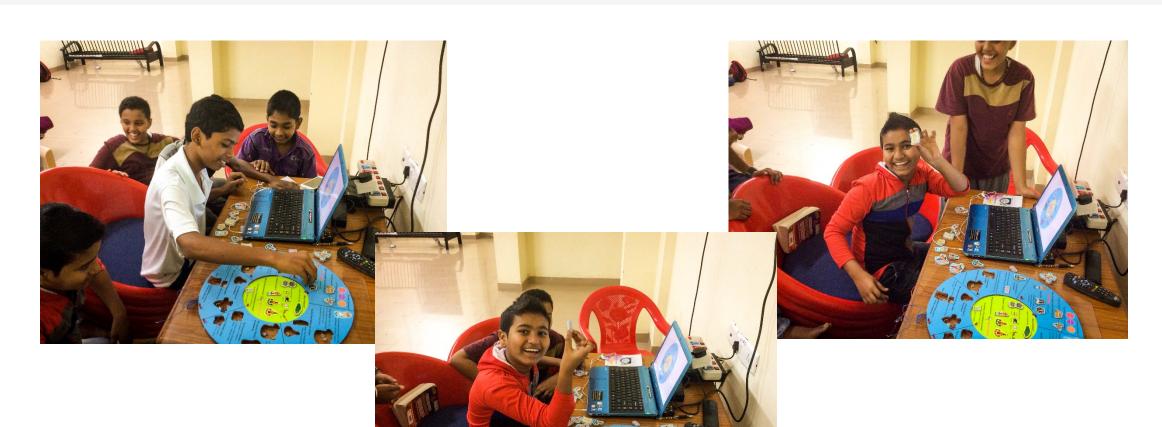
- Evaluation with installation
 - User has to watch the video 1 or 2 time to understand the concept
 - While watching the video the students were concentrating the video more to solve the puzzle and get the clues from video
 - While solving the puzzle they read the information on the installation and try to remember the content shown in the video







Evaluation



My learnings from this project

- Video Making
 - Script
 - Sound
 - Illustrations
 - Animation
- Prototype Hardware
- Interaction with students

Thank You