



Objective of this assignment

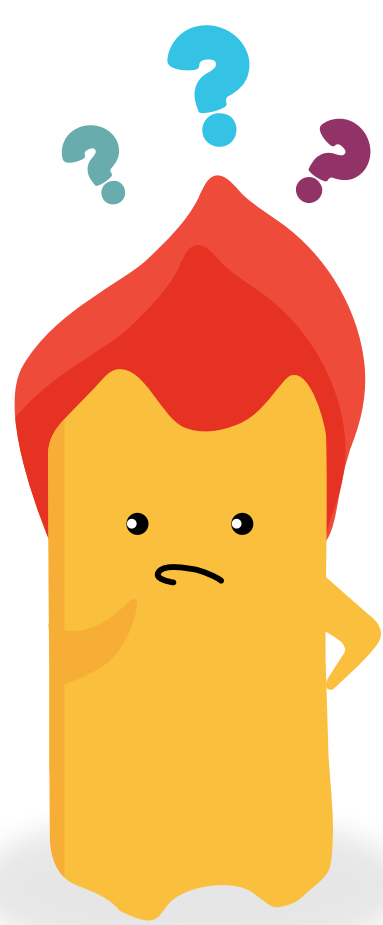
Design a **spelling learning game** for the age group of **4 to 6 years**.

Introducing Letterhunt

The aim of Letterhunt is to make the learning process of spelling be exciting and adventurous from the normal and boring repetition exercise involved in learning spelling.

Letterhunt uses 9 important factors that engage the child in the learning process. These factors are:





Why Letterhunt ?

The aim of Letterhunt is to make the learning process of spelling be exciting and adventurous from the normal and boring repetition exercise involved in learning spelling.

Letterhunt uses 9 important factors that engage the child in the learning process. These factors are:

Acting

Acting as an adventurer/explorer

The kid will be in the skin of an explorer discovering new things in his environment

Tech+old

Technology + Traditional method

Since we are living in technology age, Kids of nowadays are very advance for their age due to the overload of information accessible.The game explore the technology of AR but also somehow keep the traditional way of learning spelling.

Hero

Having a character for support

The game have a male and a female character that the kid can choose. These Animated character will be guiding the child through the steps of learning spelling. These character will be speaking with supported subtitle.

Drawing

Learn how to draw the letters

Once the child is introduce to a letter, the child will be ask to trace that letter on the screen using their finger. Doing so, allow them to practise their writing skills.

Image

Digital and physical image

The app put digital objects in the real world and make the user learn about these objects. The app also help the user to learn about physical object in the real world.

Repetition

Repetition in different mode

The app repeat the learning of a letter in 3 different ways. Voice, image and drawing. Learning a letter in these 3 ways help the child to memorize that letter much better

Voice

Sound output/input

The animated character will be speaking when guiding the child and also the app allow speech recognition to help the child in pronouncing the letters.

Music

The Alphabet Song

Before starting the game the animated character will be singing the alphabet song. The purpose of this song help the kid to memorize the letters in an orderly manner. Research prove that jingle is good way to memorize things.

Moving

Move to break boredom

The app make the child to move around and learn things at the same time.

Playing Letterhunt on learn mode

Click on Learn mode to start the game



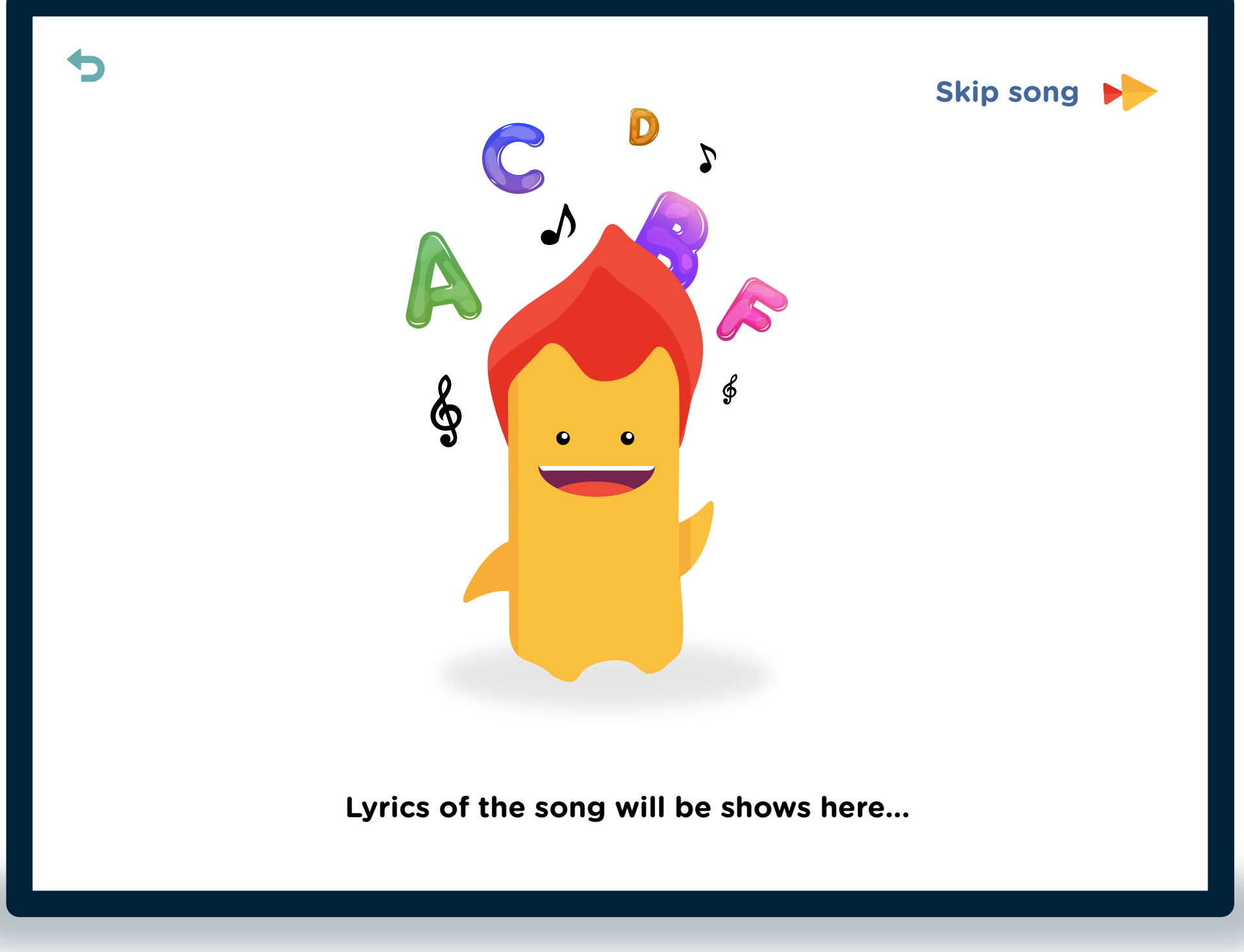
Choose a character

The character guide and educate the user



Character Jingle

The character will be palyng the alphabet jingle



Secondary Character

This character always pop-up to explain things about the UI and func-tion of the game and never involve in the learning activity of the user



The letter board

The User has to complete previous tasks to unlock the next task



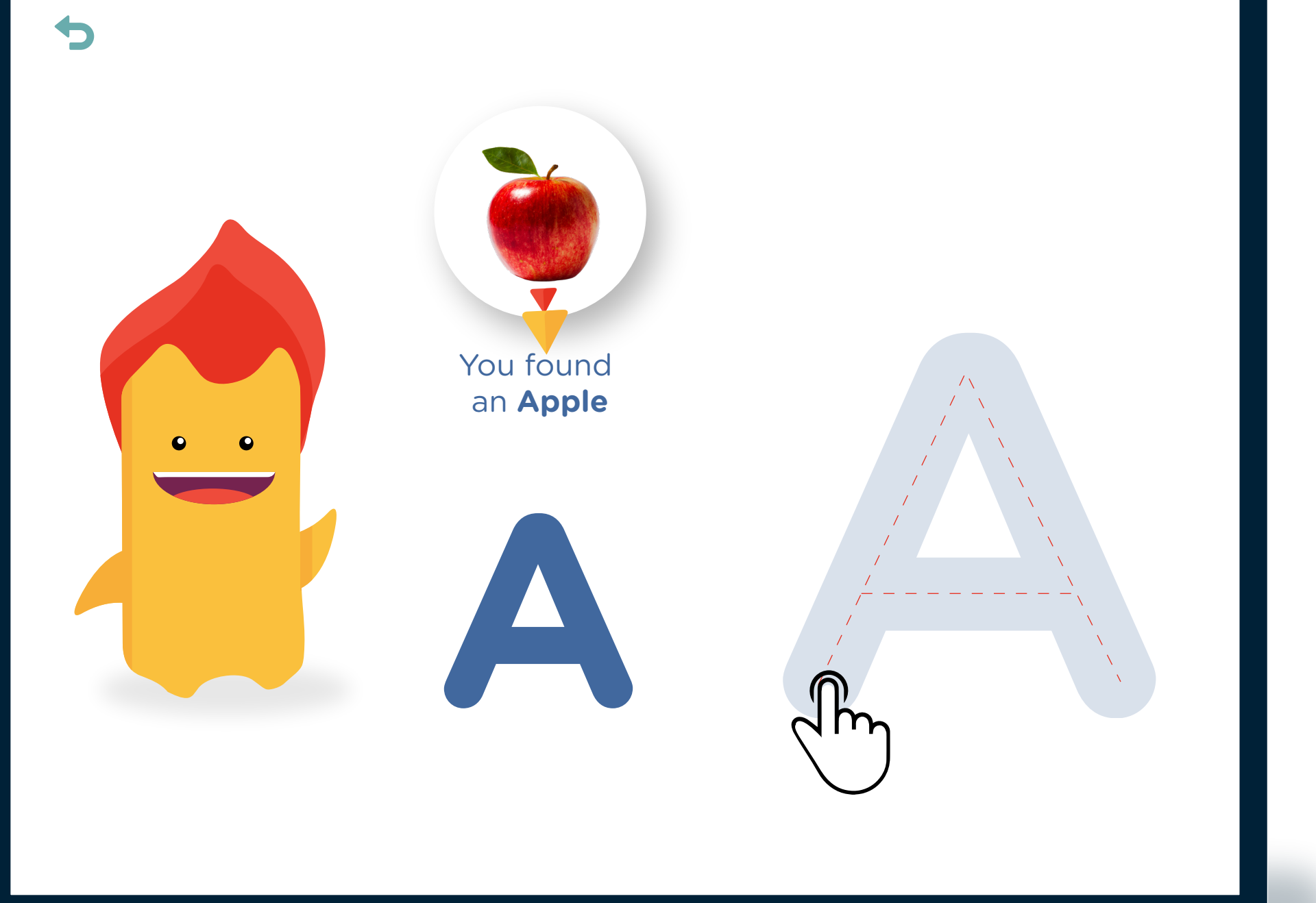
Finding a virtual object

Once the user click on the letter A the camera will open up and show the a path to follow. At the end of that path a hidden object for the user to discover



Learn about the found object

When the user finds the hidden, the animated character will tell the name of that object, the letter that object start with and trace on the dotted outline to found that letter.



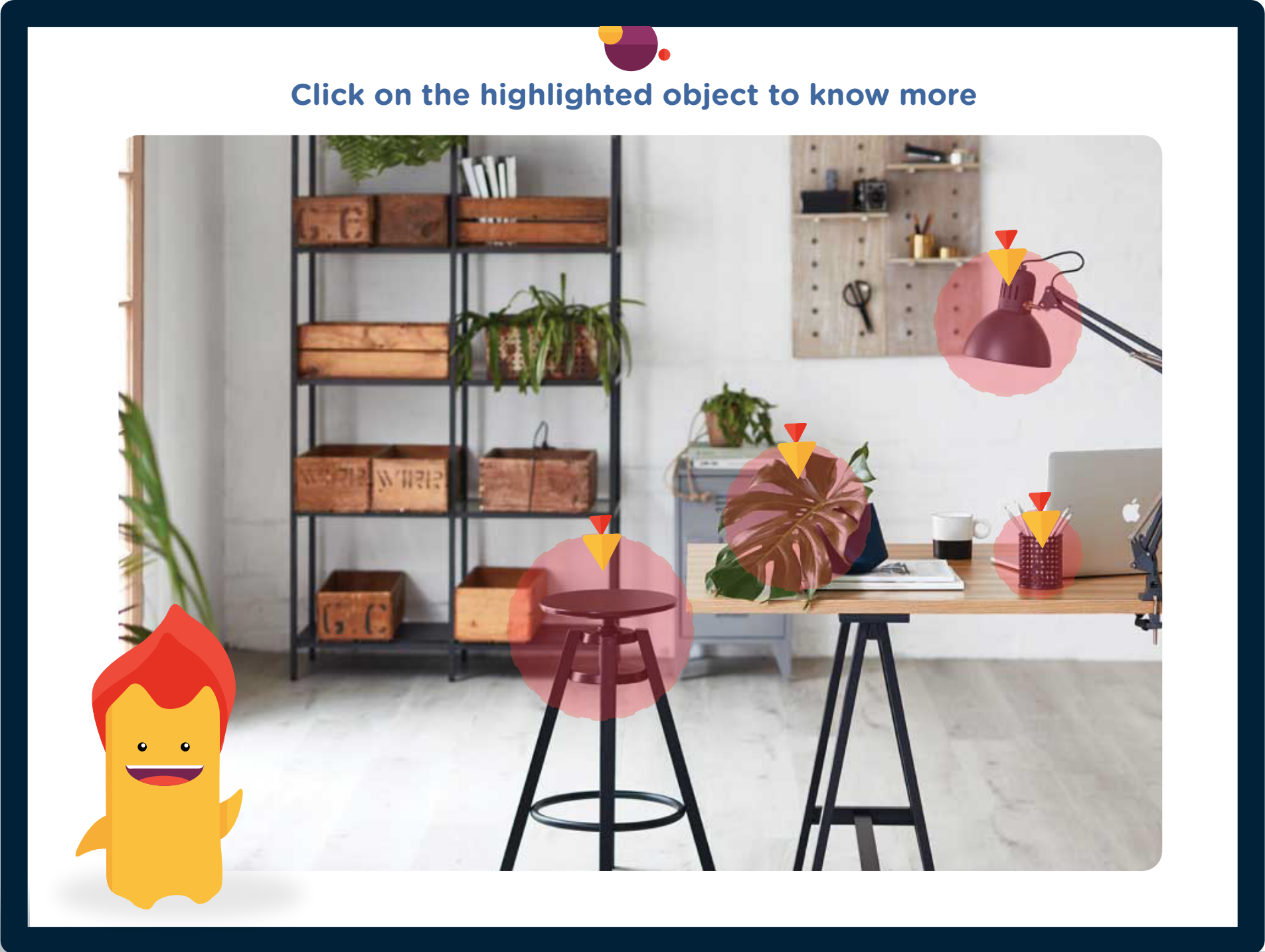
Playing Letterhunt on Explore mode

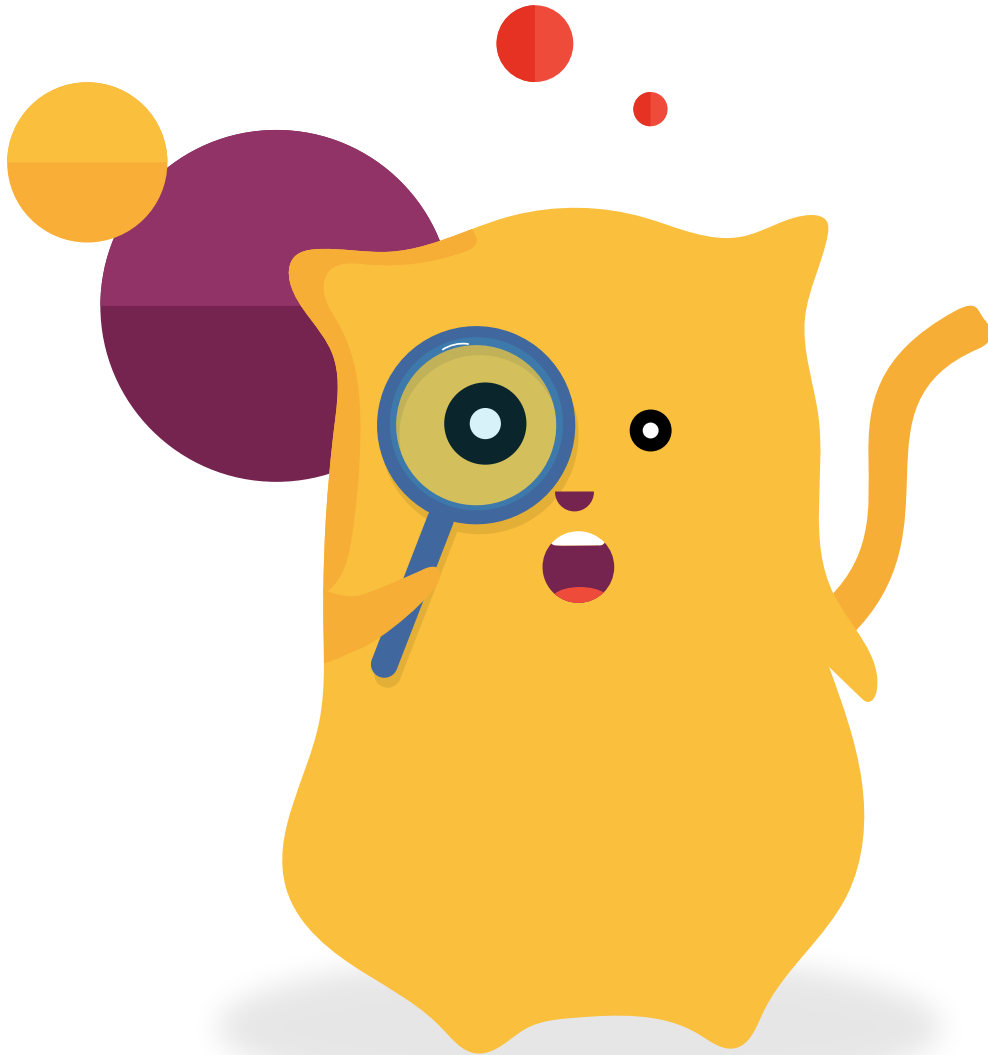
Click on Explore mode to start the game



Interact with your surrounding

When the user click on the explore mode the camera will open up. The camera will highlights all the closest objects. The User can click on any object and learn the name of that object, the pronunciation of the letters and practice an outline exercise just like in learn mode





Framing my researching questions

- ▶ How children of 4 to 6 behave and think ?
- ▶ What entertain children of 4 to 6 ?
- ▶ Most popular learning method and techniques(specific to spelling) ?

HOW I DID THE RESEARCH ?



How children of 4 to 6 behave and think ?

- ▶ Expect many emotional expressions, new friendships(Socially Active), make-believe play, an interest in numbers, tall stories and a lot of physical activity.
 - ▶ Play is important because it's still how children learn and explore feelings. When it comes to play, your child likes to sing, dance and act.
 - ▶ **Acting**- Your child also loves make-believe play and is learning the difference between fantasy and reality
 - ▶ **Thinking** - Preschoolers understand more about opposites – for example, high/low.
 - ▶ **Talking** - Children's language develops a lot at 4-5 years. You might notice that your child telling stories, have conversation their feeling or ideas
 - ▶ Preschoolers love moving and being active
-

Material Source

The Australian Parenting Website

<https://raisingchildren.net.au/preschoolers/development/development-tracker/4-5-years>

What entertain children of 4 to 6 ?



- ▶ Toddlers like feeling useful
- ▶ Interested in sorting stuff
- ▶ Allocate them task to do in the house
- ▶ They like building their own shelter like Making dens and forts.
- ▶ Attracted to colours and interest to mix and match them.
- ▶ Children love making noise which can be turn into music with guidance
- ▶ Mostly for girls have a spa day you could paint nails, give each other massages, and even have a go at making your own face masks to look after your skin
- ▶ Hold a sensory scavenger hunt
- ▶ Be your own superhero - acting and dressing up as their favorite superhero
- ▶ Make a special soothing box - things that can be put in them colouring sheets or a favourite book, Something to touch - a cuddly toy, Memories - photos, Something smelly - a favourite cream.
- ▶ Create a soundscape of your house - Each time you find/make a sound use your phone to record it and then pause until the next one. When you listen to it back you will have a soundscape of all the noises around your house.

Material Source

Arlene Harris (A mum explaining how she entertained her kids during lockdown)

<https://www.irishtimes.com/life-and-style/health-family/parenting/coronavirus-how-to-keep-children-happy-learning-and-entertained-at-home-1.4202320>



Most popular learning method and techniques(specific to spelling) ?

- ▶ A child learns to spell in a roughly predictable series of steps that build on one another
- ▶ we also now understand that spelling memory is dependent on a child's growing knowledge of spoken and written word structure.
- ▶ **Visual Memory and Spelling Memory**
While visual memory — is vital for learning to spell, it doesn't work alone. Spelling memory — memory for letter sequences — is enhanced by a child's awareness of phonemes, or speech sounds.
- ▶ **Pre Communicative Writing Stage**
Most young children who are exposed to print in their homes spontaneously begin to experiment with writing. Reading at this stage is "logographic," meaning that a child guesses at whole words based on their visual features
- ▶ **Semiphonetic Stage**
After children have experimented with imitative writing and developed an awareness of alphabet letter names, a shift occurs. They begin to realize that letters represent speech sounds
- ▶ **Phonetic Spelling Stage**
At this point, children "spell" by matching sounds to letters and consistently representing all of a word's sounds.
- ▶ **Transitional Spelling Stage**
they begin to understand that most sounds are represented by letter combinations.

Material Source

Scholastic is the world's largest publisher and distributor of children's books.
<https://raisingchildren.net.au/preschoolers/development/development-tracker/4-5-years>



EXISTING SPELLING GAMES

Osmo ABCs



This game is based on shapes. The child can build letters by assembling random pieces of material together.

music- making rhythm sound with words. Music is a way to help the kid better memories the sound of a word

letter building by referencing an image on the screen and build it. When the letter is build the app propose a word that can be build with that letter.

To remember word the kid is ask to build a shape representing this word

Spelling Game

This free and simple spelling game for children, helps children learn how to spell and recognize words in English in a better way. Included everyday objects with colorful pictures which help children to improve their English skills every day.



Letter Dance Party

In this game , your child can practise letter recognition and dance with Big Bird and Snuffy



Personal Insights from research

(Keyword: Acting)

Use Acting as a medium of learning

(Keyword: Drawing)

Use drawing as a method of learning

(Keyword: Repetition)

The main focus point at this age is to use repetition. However, this doesn't mean doing the same exercise over and over again but instead to go over the same concept using different tools like worksheets, songs, or videos.

(Keyword: Story-telling)

it's really helpful for young children to learn through story-telling. Make sure to use exaggerated gestures and expressions, since these will likely be more entertaining to your little one and will help them remember the story better.

(Keyword: Music)

since at this point children are better with rhymes, make sure to use lots of different songs in English for kids so they can practice the sounds of words to improve their fluency in this language and their pronunciation as well.

(Keyword: Technology + Traditional method is best)

Children nowadays are quite in tune with technology, software and apps can help them learn spelling. Traditional methods such as flashcards, worksheets, books, and audio-books in English are important at these stages, since they will be perfect to improve your child's reading abilities and will help also with their writing skills. A mix of old methods and technology can do wonders for a child's learning path.

(Keyword: Hero)

Use a hero as guidance in the app. This character should be friendly, playful, talkative and should look appealing to the children eye

(Keyword: Image)

Association with images or prints is a good way to remember words

(Keyword: Voice)

It would be good if the child was told to pronounce certain word and get feedback if his/her pronunciation is correct or not. Which will improve his/her speaking skills

(Keyword: Reward)

Always reward the kids after a good action. This motivate them to learn more and be competitive. And have gallery where the child store all his/her achievement. It will act as a reminder when the child is feeling low

(Keyword: Senses)

Try to make the child play games that required him/her to use all his senses. It's a good overall self development aspect

(Keyword: Collaboration)

Make the child engage in group exercises where they have to collaborate to solve a particular task.

(Keyword: Moving)

To avoid boredom allow the child to move around during their activities.



Prioritised Requirements

Referring to my research i believe the key ingredients for creating a good spelling game are the keywords mention above. It doesn't need to have all of them but at least 70%.

Acting

Tech+old

Hero

Drawing

Image

Moving

Repetition

Voice

Music

Collaboration

Senses

Story-telling

Reward

Prioritised One

Prioritised two



Created by Hansroy Nemdharry / interaction designer

