

Bunny and Beaver

Have

Dinner

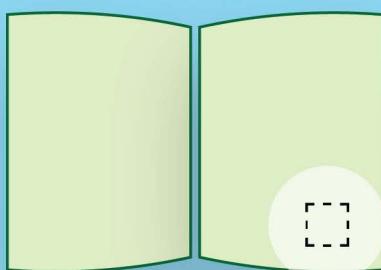
Melody Trinh, Jessica Torres, Priya Jain

Table of Contents

Introduction.....	1
Chapter 1.....	2
Introduction Activity.....	2
Algorithm Design Activity.....	5
Chapter 2.....	7
Pattern Recognition Activity.....	8
Chapter 3.....	10
Decomposition Activity.....	11
Acknowledgements.....	12

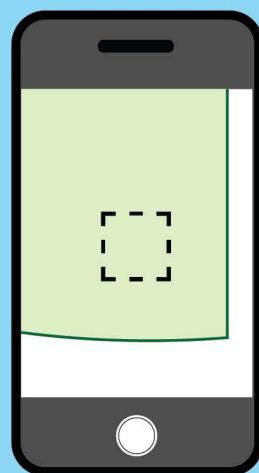
How do I use this book?

1



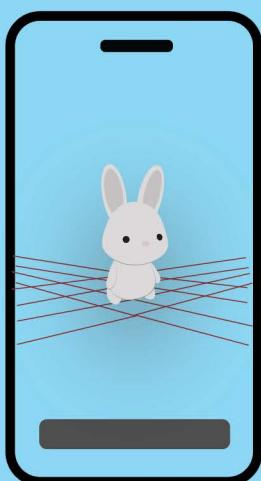
Locate QR codes

2



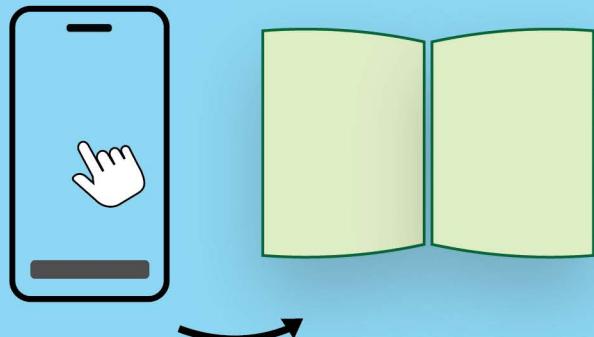
Scan

3



Launch and watch
AR come to life!

4

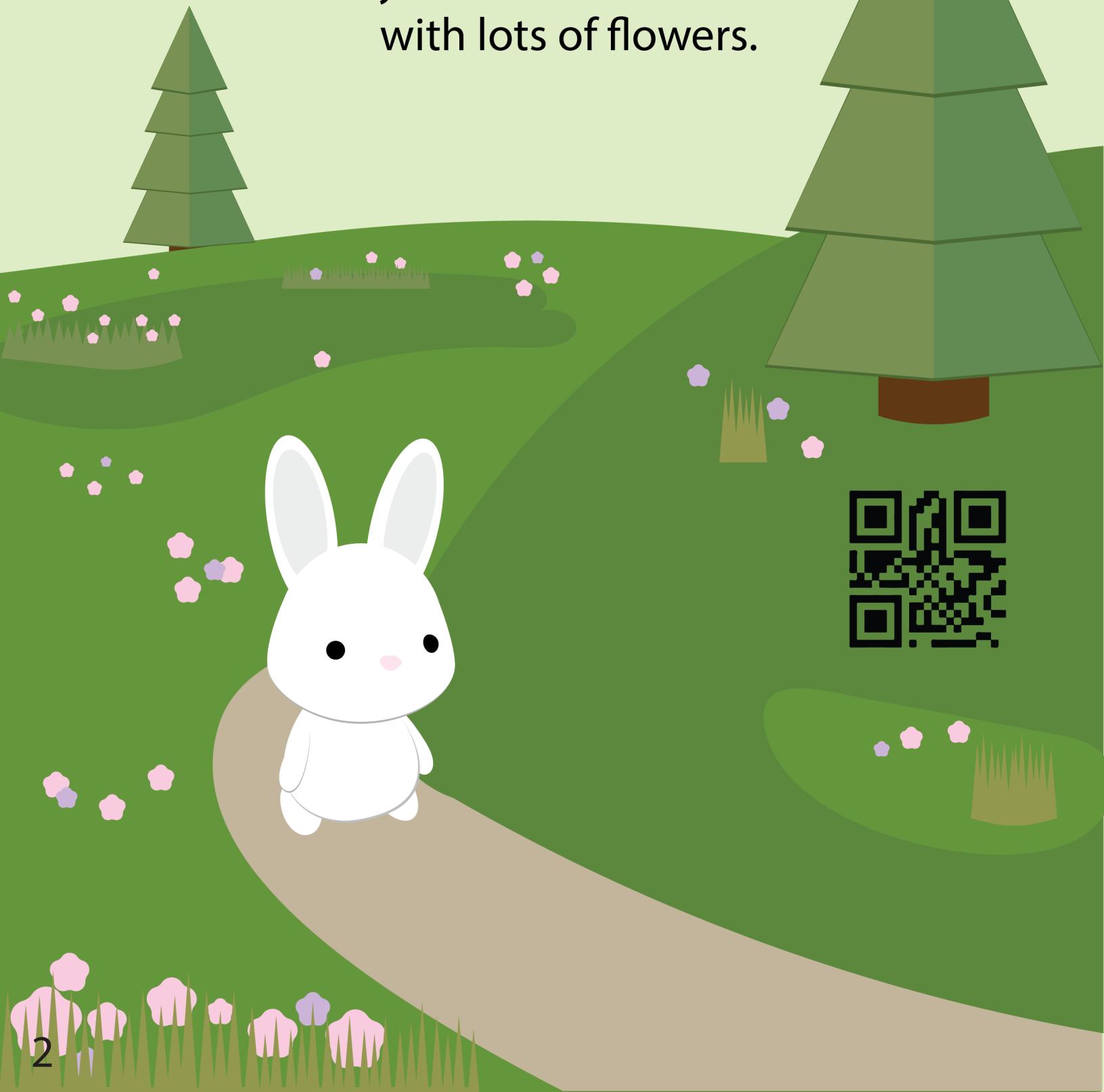


Complete the activity
and return to the story

Enjoy the adventure!

This is Bunny.

Bunny lives in a meadow
with lots of flowers.





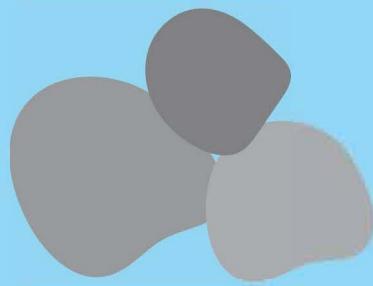
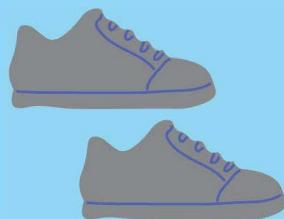
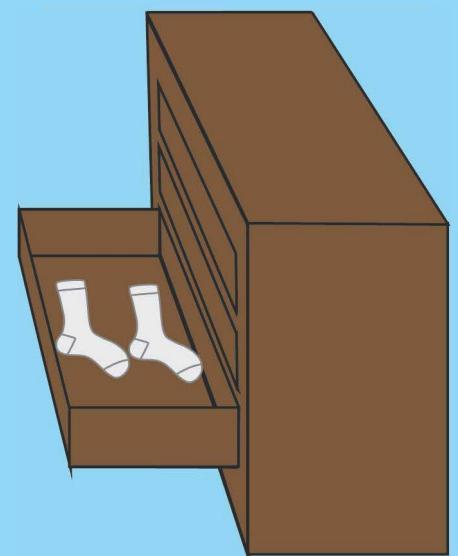
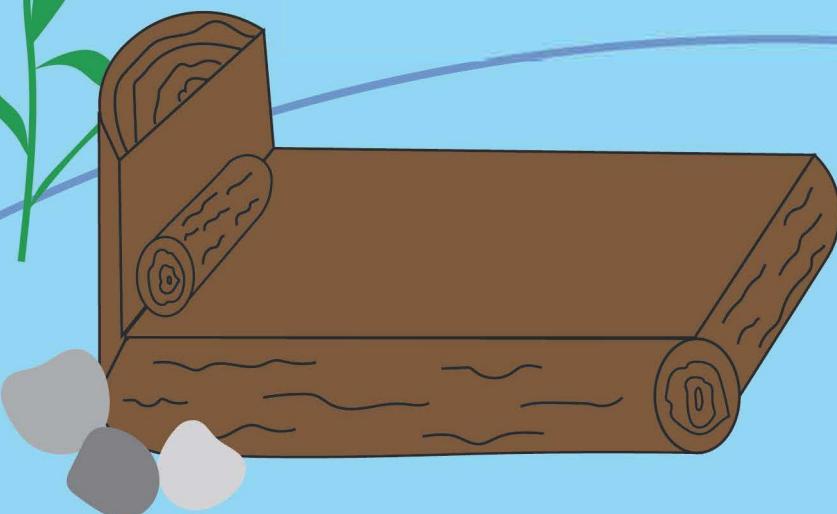
This is Beaver.

Beaver lives in a pond with lots of leaves.

Bunny has invited his best friend
Beaver to the meadow for dinner.



Help Beaver get ready to get to
Bunny's house.



Algorithm Design

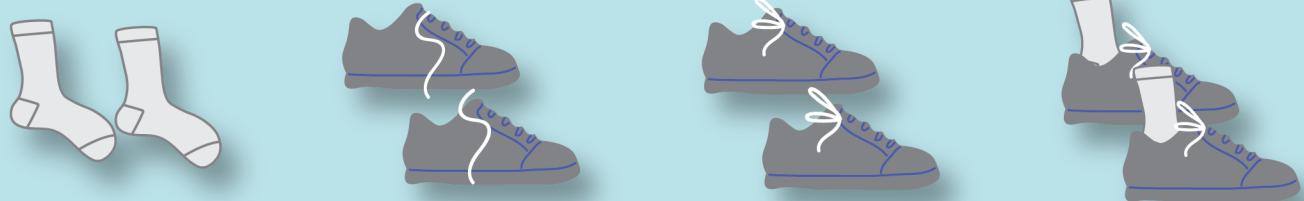
By helping Beaver get ready, you created an **algorithm**!

But now, what is an **algorithm**?

An **algorithm** is a set of instructions that describe how to complete a task.



You successfully listed the steps needed to get Beaver ready!



Now every time Beaver wants to get ready, he can use this same algorithm to do so.



Good job! You helped
Beaver get ready.

To get to Bunny's house,
Beaver needs to travel from
the pond to the meadow.



A recent storm has made the route muddy and Beaver cannot get to the other side.

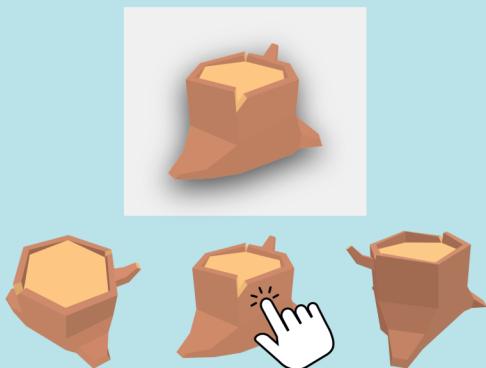
Danger!
Edge of cliff

Help Beaver choose which logs to use to get to the other side!



Pattern Recognition

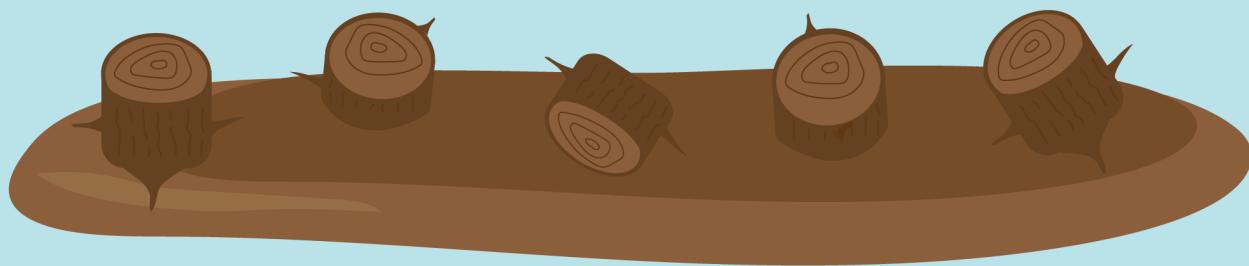
By correctly selecting the matching logs, Beaver was able to get to the other side of the muddy road. You also practiced **pattern recognition!**



Pattern recognition is the ability to identify similarities in things.

By selecting the matching item, you were able to recognize similarities between different items.

Next time Beaver tries to cross that muddy road, he can use the same pattern to get across it more easily.



Good job! That was a close one!

Beaver can see the meadow and Bunny
waiting for him.



Beaver is now at the meadow.

They are ready to eat dinner but they realize they need another chair! Help Bunny and Beaver build the other chair.



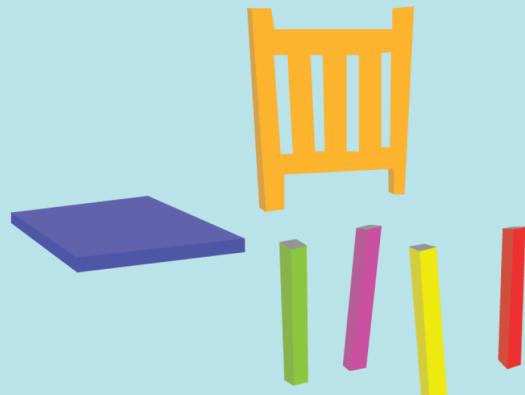
Decomposition



The task of helping Beaver build a chair is a **decomposition** task.

Decomposition is the process of breaking down a task into smaller, more manageable tasks.

Building a chair may sound complicated, but assembling the chair piece by piece makes it easier.



Beaver is now a better problem solver after learning **decomposition**!



Good job! You have helped Bunny and Beaver build the chair!

Now they can enjoy their dinner together!



Thank you for helping! Can't wait for dinner!

Thank you for helping me throughout my journey!

Acknowledgements

This book aims to introduce children to computational thinking skills which are crucial in this era dominated by technology. It is important to teach children these essential skills while having parental involvement and screen monitoring.

Computational thinking isn't just about coding, they are valuable skills that can be applied to everyday situations such as problem solving and critical thinking.

We extend our gratitude to Santa Clara University and our advisor Dr. Hsiao for their support in the development of this project. Looking ahead, we hope to expand this project by adding additional chapters and activities.

If you have any feedback or suggestions, please feel free to contact us.

Melody Trinh

mtrinh@scu.edu

Jessica Torres

jtorres2@scu.edu

Priya Jain

pjain4@scu.edu