FOR INSTRUCTOR PURPOSES ONLY

MATERIALS

+ Lab
+ Lesson
+ Lesson Starter Code

GENERAL ASSEMBLY

SWIFT DICTIONARIES

Wellington Moreno

Lead iOS Instructor, General Assembly

INDEPENDENT PRACTICE: PLAYGROUNDS

10 mins

DIRECTIONS

Write a function that takes a list of names and returns the most popular one.

DELIVERABLES

A Playgrounds file with your answers

LESSON

LEARNING OBJECTIVES

+ **Articulate** the purpose of a Dictionary
+ **Create** Dictionaries with different data types
+ **Add** data to a Dictionary
+ **Iterates** keys and values in a Dictionary
+ **Identify** the role the key plays in a dictionary

INTRODUCTION

DICTIONARIES

DEFINITION

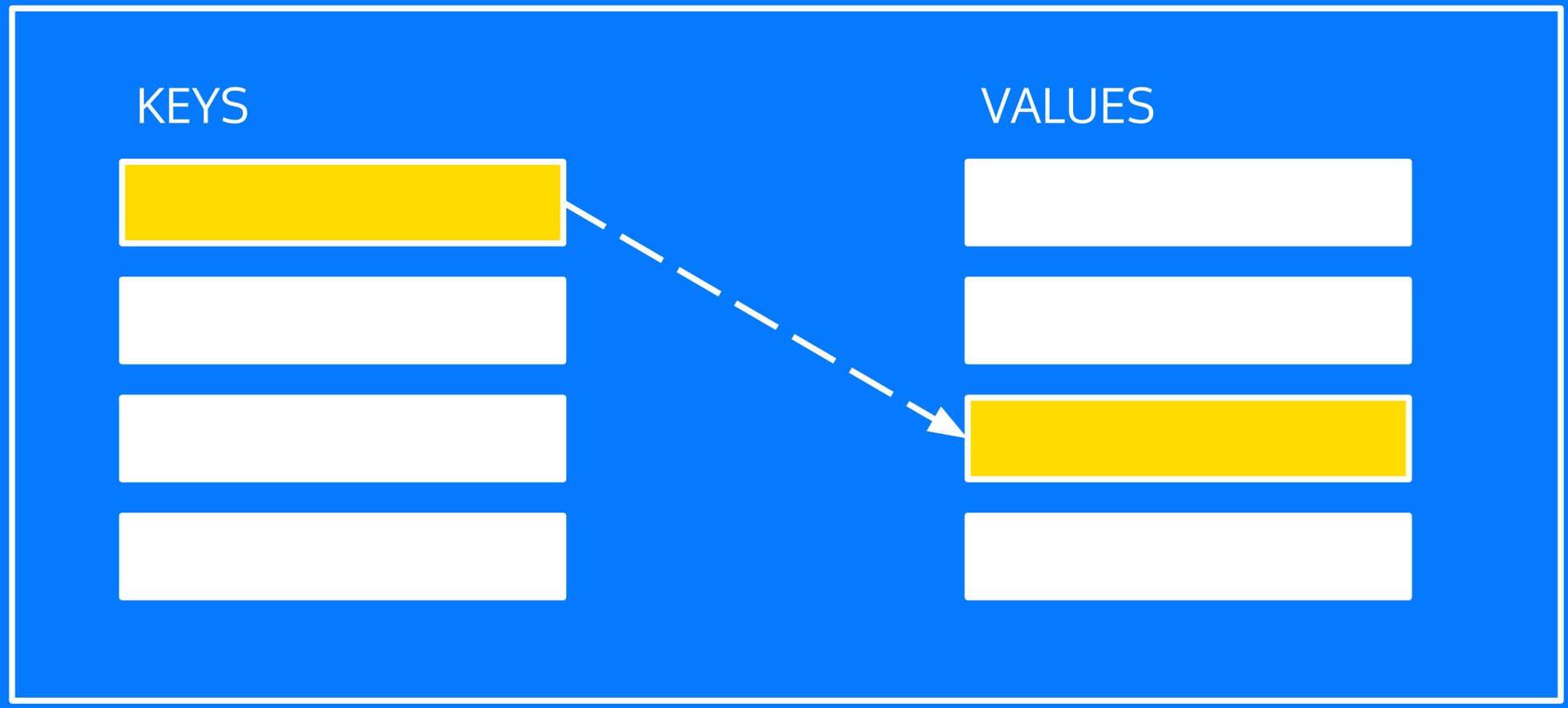
“DICTIONARIES ARE UNORDERED COLLECTIONS OF KEY-VALUE **ASSOCIATIONS.**”

- SWIFT REFERENCE

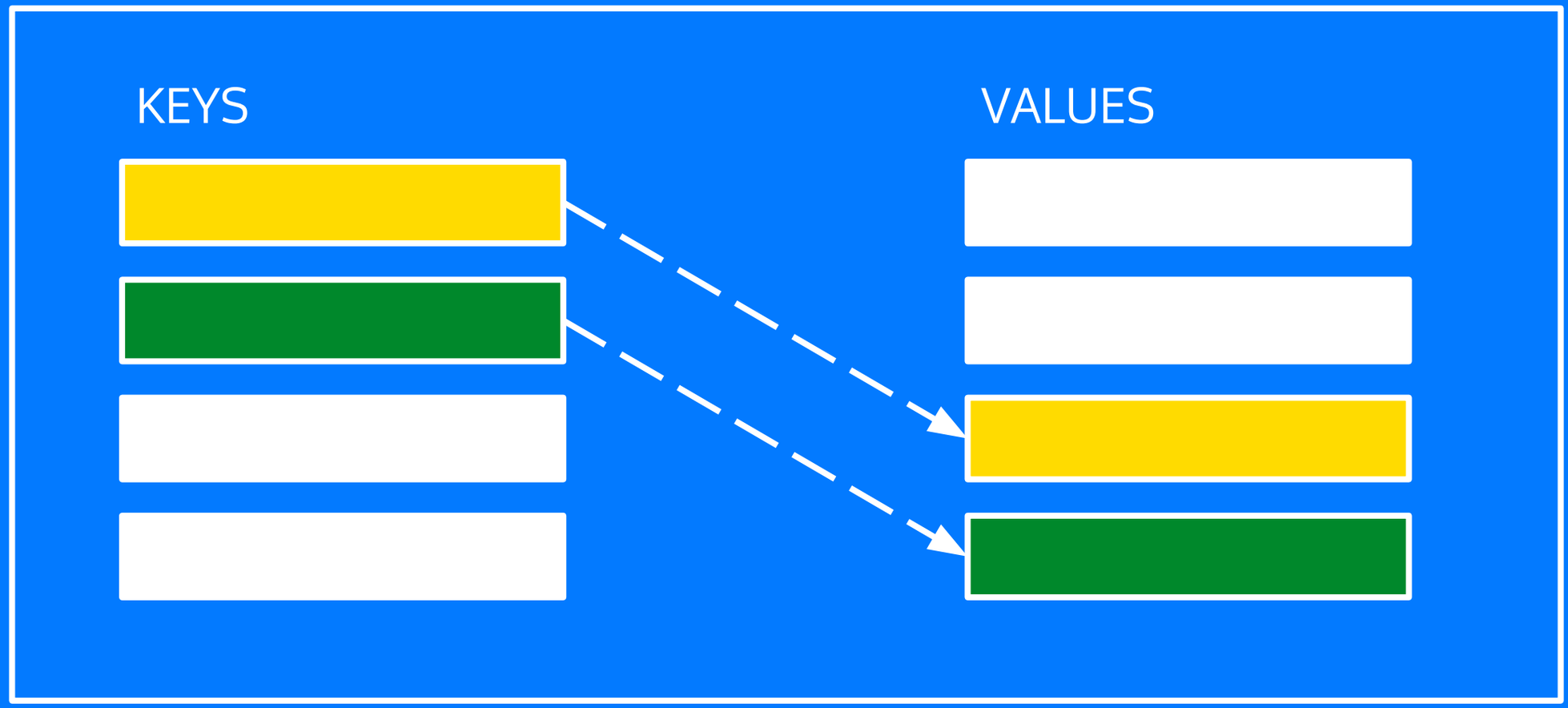
QUESTION

WHO CARES?

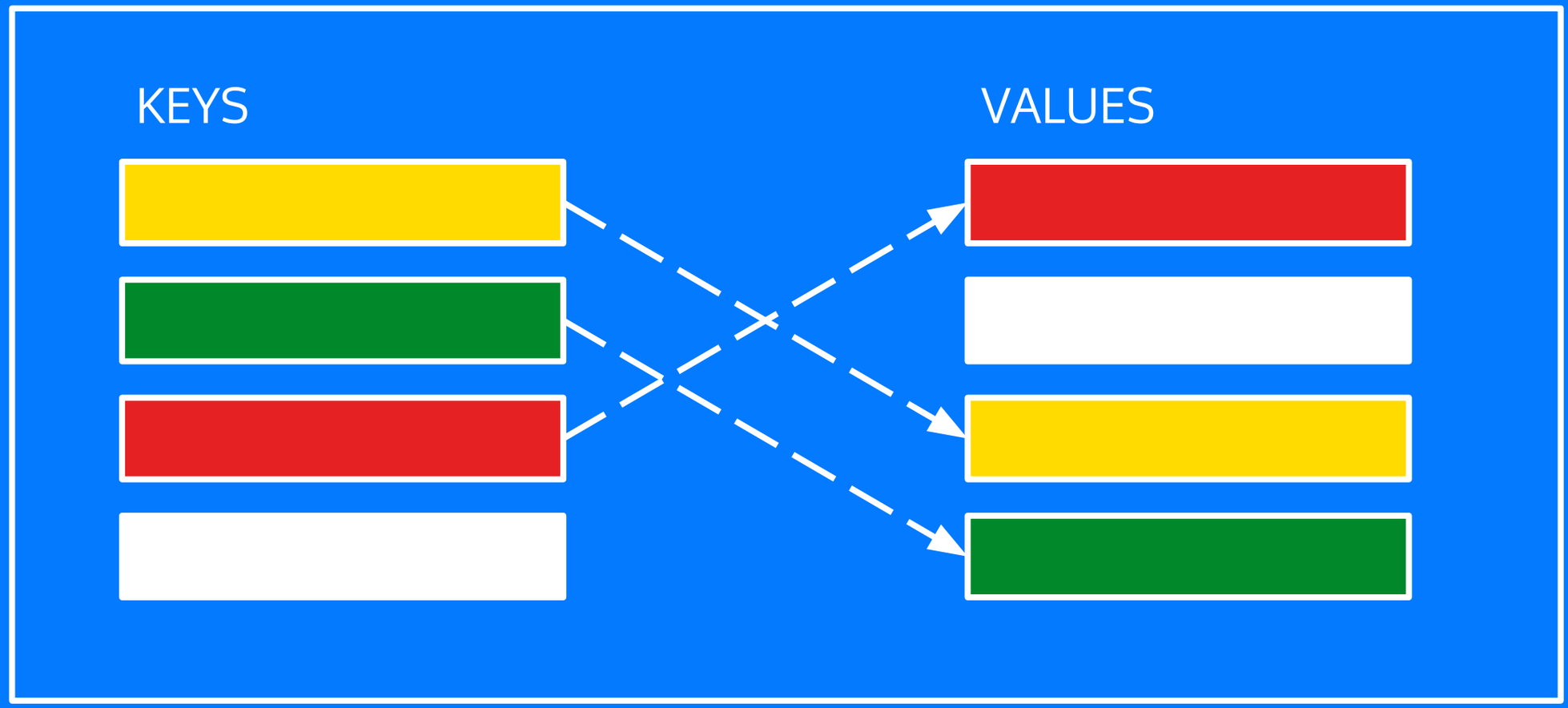
DICTIONARIES



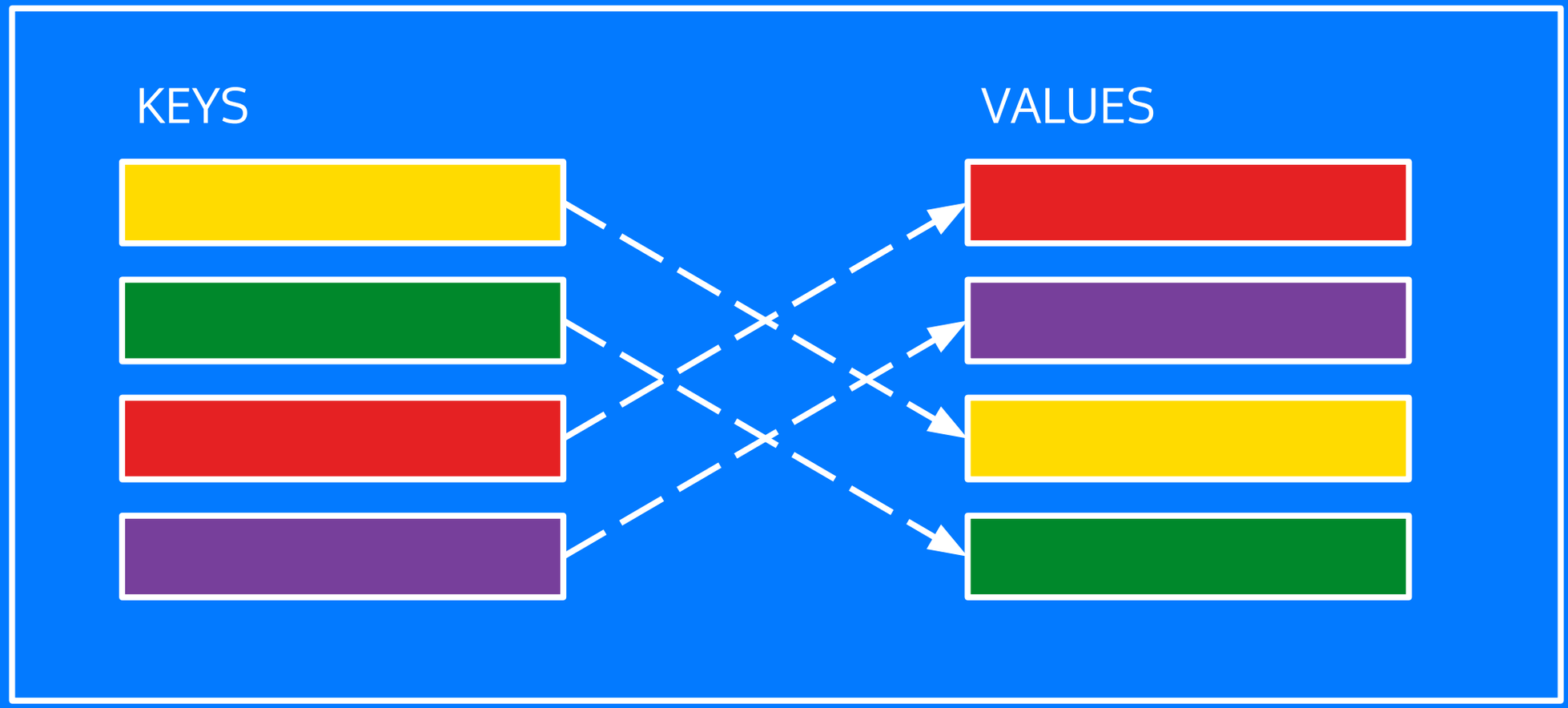
DICTIONARIES



DICTIONARIES



DICTIONARIES



DEMO

Let’s create a Dictionary of Phone prices.

PAIR-PROGRAM: PLAYGROUNDS

10 mins

DIRECTIONS

Create a dictionary that maps:

1. A word to its definition
2. A book to its author
3. A person to their age
4. A zip code to its state
5. An album to its tracks

NOTES

Create each Dictionary with at least 5 values

DEMO

Using Dictionaries

PAIR-PROGRAM: PLAYGROUNDS

20 mins

DIRECTIONS

Write a function that:

1. Takes a Dictionary `[Double: Int]` and a `number: Int` , and returns a copy of it.
2. Takes an array of words and returns the word that appeared the most.

NOTES

Be sure to test your functions by calling them and passing them values

CHECK YOUR SHIT AT THE DOOR

NAME YOUR DICTIONARIES WELL AND CLEARLY

USE A UNIQUE KEY

LESSON

Q & A

CONCLUSION

+ Dictionaries allow you to form relationships in your data
+ A Database is a type of complicated Dictionary that allows you to find a value for a query (B-Tree)

LESSON

BEFORE NEXT CLASS

+ Read up on the “Hashable” protocol in Swift.
+ Read up on “Hash Tables”

THANKS!

WELLINGTON MORENO

+ GitHub/Slack: **@SirWellington**
+ Twitter: **@SirWellingtonZ**
+ Email: **wellington.moreno@ga.co**