

Game Development with Flutter and Flame

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Who is this guy?

Shawn Gordhamer, flutterballclass@gmail.com

I have worked for a number of large companies as a software developer: IBM, GE

I am currently a mobile app developer for a large insurance company.

I love learning new things and teaching them to others.

Game Development with Flutter and Flame

Why Flame?

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The Dart programming language should be familiar

What Makes Up a Game

Canvas

What the game draws on

Frame

A drawing on the canvas that lasts a very short period of time

Component

Something that controls what is drawn on the canvas

What Makes Up a Game

Canvas

What the game draws on

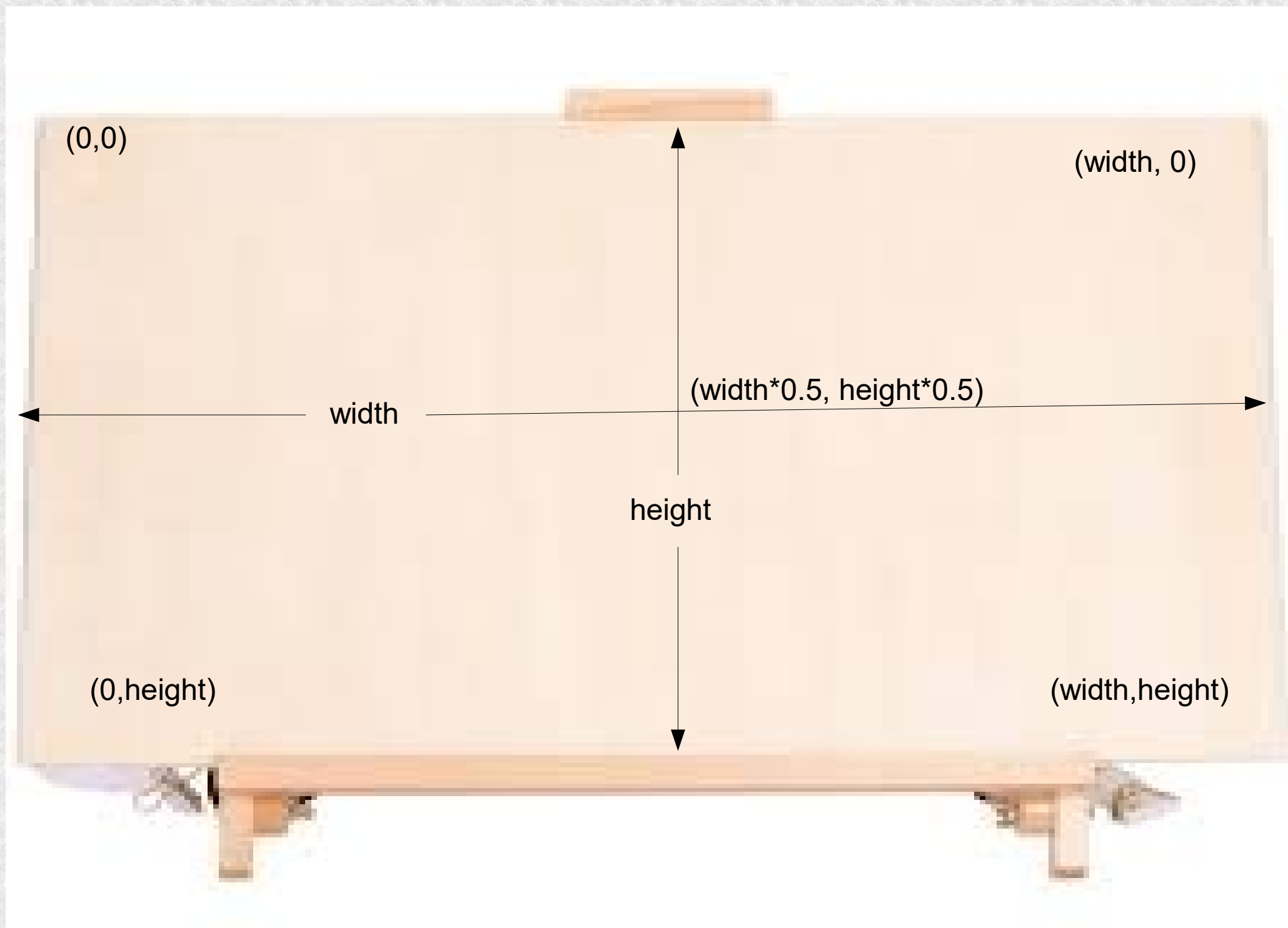


A game has access to the entire screen of the phone. This screen is called the canvas

A canvas has these important properties

- width
- height

We use x,y coordinates to indicate a location on the canvas



What Makes Up a Game

Frame

A drawing on the canvas that lasts a very short period of time

Frame rate

60 frames/second

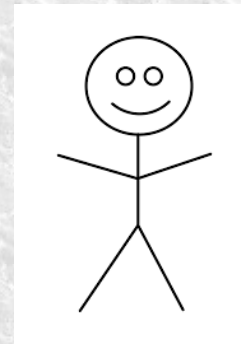
No guaranteed frame rate

What Makes Up a Game

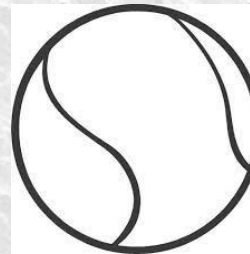
Component

Something that controls what is drawn on the canvas

A game character you control



A moving part of the game



Rules that govern the interaction between other components

Our First Component

We will make a ball

What can a ball do?

- Draw itself somewhere on the screen
- Move on the screen
- Bounce off things
- Destroy itself when we no longer want to see it

Writing Code

All of the code for this course can be downloaded from here:

https://github.com/shawnlg/flutter_ball

Each section of course has its own code that covers everything up to that point.

If you are ever stuck, look at the code.

Prerequisites

- Be familiar with a modern programming language such as JavaScript, Java, C#, etc.

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<https://flutter.dev/>

click on Get Started

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- Install the Flutter development environment on your computer.
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click on Get Started
- Create and run the sample flutter program on a phone or phone emulator.

How We Go Through This Course

I will show snippets of code to explain concepts

Entire code functions will be shown when possible

Enough information will always be given for you to complete the material we are learning.

Sometimes I encourage you to try something yourself to test yourself on how you are grasping the material.

Next Up

Set up our game project and build our first component

A BALL