HTML5 with Dart

Create HTML5 Applications With Dart

by Jose Angel Espinoza Portillo @OnlyAngel

©Jose Angel Espinoza Portillo 2013

Some rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical or photocopying, recording, or otherwise for commercial purposes without the prior permission of the publisher. HTML5 With Dart by Jose Angel Espinoza Portillo is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. Based on a work at https://github.com/onlyangel/HTML5WithDart.

ISBN ...

... Publications

To Norita

Preface

```
import 'dart:html';

void main() {
  query("#sample_text_id")
    ..text = "Click me!"
    ..onClick.listen(reverseText);
}

void reverseText(MouseEvent event) {
  var text = query("#sample_text_id").text;
  var buffer = new StringBuffer();
  for (int i = text.length - 1; i >= 0; i--) {
    buffer.write(text[i]);
  }
  query("#sample_text_id").text = buffer.toString();
}
```

0.1 Reason of the existence of this Book

0.2 Licences

0.3 Code

0.4 Subscription

0.5 How should read these book

Contents

Preface **v**

0.1 Reason of the existence of this Book vi
0.2 Licences vi
0.3 Code vi
0.4 Subscription vi
0.5 How should read these book vi

I What is Dart? **1**

1 Introduction **3**

1.1 About Dart 4
1.1.1 Origin (history) 4
1.1.2 Chrome vs v8 4
1.1.3 faster that v8 4
1.1.4 More than a language 4

1.2 Characteristics 4
1.2.1 j2js 4
1.3 Browser support 4
1.4 Tools 4
1.4.1 Editor 4

2 The actual language **5**
2.1 Dart Basics 5
2.2 Comments 5
2.2.1 Line 5
2.2.2 Multiline 6
2.3 Variables & Operations 6
2.3.1 Basic Operations 6
2.3.2 Type of Variables 6
2.4 Flow Management Operations 7
2.5 Functions 8
2.5.1 main() 8
2.5.2 The parameters 8
2.5.3 Function Operations 9
2.6 Classes 9
2.6.1 Members 9
2.6.2 Class constructor 10
2.6.3 Access Variables 10
2.6.4 get and set 10
2.6.5 mixins 10

2.6.6 Operations with classes 10
2.7 Libraries 10
2.7.1 Make your own 11
2.7.2 how to call them 11
2.7.3 Included Libraries 11
2.7.4 pub.dartlang.org 12
2.7.5 angular.dart 12
2.7.6 and the list goes on and on 12

Part I

What is Dart?

Chapter 1

Introduction

1.1 About Dart

1.1.1 Origin (history)

1.1.2 Chrome vs v8

1.1.3 faster that v8

1.1.4 More than a language

1.2 Characteristics

1.2.1 j2js

1.3 Browser support

1.4 Tools

Chapter 2

The actual language

Here I will explain the language

2.1 Dart Basics

Here it come the basic part of the Dart language

2.2 Comments

Here I will explain the dart comment "paradigma"

2.2.1 Line

I Will explain the single line comments

2.2.2 Multiline

I will explain the multi line comments

2.3 Variables & Operations

Variables are cool. Are even cooler when you usethem correctly. And don't get me started for operations.

2.3.1 Basic Operations

Asigment

yes im talking about equality

Asert

Yes these is an asert

2.3.2 Type of Variables

Numbers

Number Variables are awesome, make me remember math and stuf.

Booleans

Boolean Variables are super cool. Just thing that is true is true and what is false is false.

String

Compared with both kind of variables previous to these. These is not that sexy. But is prety dammed usefull.

String Operations

And yes the Strings has its own operations section.

Lists

The lists are a kind of array but made Object and with all kind of extras. Pretty usefull too.

Maps

The headache of most languages efficiently speaking. These is not a problem for Dart =D.

2.4 Flow Management Operations

conditionals

the conditionals

loops

the loops

2.5 Functions

Here I will explain what a function is.

2.5.1 main()

Main the Alpha of a Dart Application.

2.5.2 The parameters

Yes we use parameters and the parameters were before the HTML parameters.

Default Values

At the begining there was parameter, and after there exists the Default Values for Parameters

Optional Parameters

The roumors says that there are Optional Parameters behid those cool walls. Said the JS script.

Named Optional Parameters

And the callback JS method respond. Yes and some of them have names.

Positional Params

And the Dart came and show them the rigth order and position of the correct function calling.

2.5.3 Function Operations

The functions are so convenient that it even have it own Operations section.

As an Object

Yes you can have an object that represents a function and pass it as a parameter (YES A FUNCTION SENDED AS A PARAMETER OF OTHER FUNCTION, isn't that weird? But convenient).

Closures

Yeah! that Closures Thingi.

=>

Super fast way of, avoid type the keys.

2.6 Classes

2.6.1 Members

(public variables)

2.6.2 Class constructor

And is not the guy that build the class. Or not exactly.

Initializa list

These wier animal

Calling constructors

Constructors callis other consturctors these is an bussiness now.

2.6.3 Access Variables

how to access variables

2.6.4 get and set

Getters and Setters

2.6.5 mixins

2.6.6 Operations with classes

2.7 Libraries

yes Libraries

2.7.1 Make your own

You can do it

2.7.2 how to call them

Hey you library come here

Prefixes

a prefix

Partial Import

Just you and you come here

2.7.3 Included Libraries

The libraries from dart

Core

The core

Convert

Convertion tools

Html

All the subject of the se book

Async

How to call remote stuff

Futures

Great functionality

Isolates

Mutli proceses

2.7.4 pub.dartlang.org

More stuff for free

2.7.5 angular.dart

Like Angular.js but with Dart

2.7.6 and the list goes on and on

Much more stuff for free

Bibliography

[1] The official dart website http://www.dartlang.org/