LEARNING phaser-framework

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#phaser-

framework

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Chapter 1: Getting started with phaserframework

Remarks

Phaser is an open source Desktop and Mobile HTML5 game framework primarily.

It includes a robust set of documentation, features and examples to get you moving towards a working game quickly. It supports WebGL, via the Pixi.js rendering engine, and includes a Canvas fallback for support on older devices.

Although the engine is built in JavaScript it also includes TypeScript definitions

There is a new envisioning of the project that is ES6 compliant called Lazer.

Versions

Phaser 2

Version	Release Date
2.6.2 Kore Springs	2016-08-25
2.6.1 Caemlyn	2016-07-11
2.6.0 Fal Moran	2016-07-08
2.5.0 Five Kings	2016-06-17
2.4.9 Four Kings	2016-06-16
2.4.8 Watch Hill	2016-05-19

Examples

Getting Started Phaser

- 1. Create a folder
- 2. Create an index.html inside the new directory. Open it in the Bracket editor
- 3. Download the Phaser repository from github, then grab the *phaser.js* file from the build folder. Place the file inside your project directory.
- 4. Open *index.html* and link the **phaser.js** inside the header tag.

```
<!doctype html>
<html lang="en">
<head>
   <meta charset="UTF-8" />
   <title>My Gamer</title>
    <script type="text/javascript" src="lib/phaser.js"></script>
    <style type="text/css">
      body {
           margin: 0;
       }
    </style>
</head>
<body>
       <div id="gameContainer"></div>
</body>
</html>
```

5. Create another js file inside the directory named *game.js*6. Open *game.js* file in editor and write the following code:

```
// Phaser instance, width 800px, height 600px render as CANVAS.
// Method signature - preload, create and update
var game = new Phaser.Game(800, 600, Phaser.CANVAS,'gameContainer', { preload: preload,
create: create, update: update });
function preload() {
// this method used to load your game assets
}
function create() {
// this method run only once used to create to game world
}
function update() {
// this method loop 60 times in a seconds, used to handle gameplay.
}
```

- 8. Save all files and open *index.html* using Bracket liveserver (top right icon).
- 9. The Phaser development environment is now created. A console screen should appear in the browser for error verification.

Getting Started with Phaser using Node.js

1. Create a folder where you would like to have your game live, and move into that

```
mkdir my-new-game
cd my-new-game
```

2. Initialize the directory using npm.

```
npm init -y
```

3. Install phaser as a node package.

npm install phaser

4. Install http-server as a global module, to be used on the commandline.

```
npm install -g http-server
```

5. Create an index.html file and reference the Phaser executable and paste the following code into it.

```
<!doctype html>
<html lang="en">
<head>
                <meta charset="UTF-8" />
                 <title>My Gamer</title>
                <script type="text/javascript" src="node_modules/phaser/build/phaser.js"></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></scri
                <style type="text/css">
                body {
                               margin: 0;
                 }
                 </style>
</head>
<body>
                <div id="helloWorld"></div>
</body>
<script>
var game = new Phaser.Game(800, 600, Phaser.CANVAS, 'helloWorld', {
                create: create
});
function create() {
                var text = "Hello World!";
                 var style = {
                                font: "65px Arial",
                                fill: "#ff0044",
                                align: "center"
                 };
                var t = game.add.text(game.world.centerX, 300, text, style);
                 t.anchor.set(0.5);
</script>
</html>
```

6. Start the server and load http://localhost:8080 in your browser!

hs

Read Getting started with phaser-framework online: https://riptutorial.com/phaser-

framework/topic/6168/getting-started-with-phaser-framework

Chapter 2: Add An Image In Phaser

Introduction

Adding an image file (preferable a png) to your game as an "Image" object in Phaser.

Syntax

- game.load.image(name:string, file:string,);
- game.add.image(x:number, y:number, name:string);

Remarks

- An Image object is a good choice for things in your game that don't use frame animations and don't otherwise need to be a Sprite.
- By default the anchor point for an image in the upper left corner, but you can change it like this: image.anchor.setTo(0.5, 0.5);

Examples

Create And Add To Screen

You first must create a "Game" object in Phaser.

```
var game = new Phaser.Game(800, 600, Phaser.AUTO, 'phaser-example', { preload: preload,
create: create });
```

In the preload callback function load the image.

```
function preload() {
   game.load.image('thing', 'assets/thing-image.png');
```

```
}
```

Parameter	Details (Game.add.image)
name	the name used to reference the image in the game.add.image method.
file	path to the asset file (relative to the root directory for the project.

Then in the create function use the "add" method of the game object to create the Image object and it to the screen.

```
function create() {
```

https://riptutorial.com/

var image = game.add.image(100, 100, 'thing');

}

Parameter	Details (Game.add.image)
x	the x coordinates where the image should be added.
У	the y coordinate where the image should be added.
name	the name of the image assigned in the game.load.image method.

Read Add An Image In Phaser online: https://riptutorial.com/phaser-framework/topic/9853/add-animage-in-phaser

Chapter 3: Working with TypeScript

Examples

Phaser environment setup (Asp.Net MVC5 - Typescript - Visual Studio 2015)

Create a new ASP.Net Project:

New Project							
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Name: Location:	PhaserSetUp						Browse
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Select a template: ASP.NET 4.6.1 Templates	An empty project template for creating ASP.NET applications. This template does not have any cont it.
Image: Service Image	Learn more
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Add folders and core references for:	Microsoft Azure
Web Forms 🖌 MVC 🖌 Web API	
	App Service ~
Add <u>u</u> nit tests	
Test project name: PhaserSetUp.Tests	
	OK Cano

Add two new folders: ${\tt App}$ and ${\tt scripts}$ in the root folder:

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Add npm configuration file in the root folder:

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▲ Web General	! ⊒	Web Forms User Control	Visual C#	
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Razor Scripts	ព	Bower Configuration File	Visual C#	
SignalK Web API	נ]	Grunt Configuration File	Visual C#	
Web Forms Windows Forms	נ י	Gulp Configuration File	Visual C#	
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<u>N</u> ame: package.json				
<pre>{ "version": "1.0.0", "name": "phaser.js.environ" "private": true, "devDependencies": { "gulp": "3.9.1", "phaser": "2.6.2" } }</pre>	nment.se	etup",		

Add gulp configuration file in the root folder:

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Silverlight	K	AngularJs Factory	Visual C#	
Workflow	s 🔊	AngularJs Module	Visual C#	
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<u>N</u> ame:	gulpfile.js			

Add typings folder in scripts folder:

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r Toolbox	 Solution 'PhaserSetUp' (1 project) PhaserSetUp Properties Properties References App App_Data App_Start Controllers Models Scripts Views Scripts Views Global.asax gulpfile.js Packages.config Scripts 	

Gulp task:

```
/// <binding ProjectOpened='install' />
var gulp = require('gulp');
gulp.task('phaser-setup-typings', function () {
    gulp.src([
        './node_modules/phaser/typescript/pixi.d.ts',
        './node_modules/phaser/typescript/p2.d.ts',
        './node_modules/phaser/typescript/phaser.d.ts',
    ])
   .pipe(gulp.dest('./Scripts/typings'));
});
gulp.task('phaser-setup', function () {
    gulp.src([
        './node_modules/phaser/build/phaser.min.js',
    ])
   .pipe(gulp.dest('./Scripts/'));
});
gulp.task('install', ['phaser-setup-typings', 'phaser-setup']);
```

Run the install task:

\bowtie	PhaserSetUp - Microsoft Visual Studio	
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	ay Deckages.config ▷ ay Web.config	
	Team Explorer Solution Explorer	Error List Find Results 1 Find Symbol Results Task Runner
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Task	finished	

Add a typescript file in the ${\tt App}$ folder:

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✓ Visual C# Code	[]	OWIN Startup class	Visual C#	Type: V A blank
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Markup MVC	E	TypeScript File	Visual C#	
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Web Forms Windows Forms		WCF Data Service 5.6.4	Visual C#	
WPF Silverlight SOL Secure	œ	WCF Service	Visual C#	
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▶ Online	Ŷ	Web Configuration File	Visual C#	
	-		Nr 104	▼
		Click here to go online and find templates.		
Name: app.ts				

Add an MVC controller:





```
public class HomeController : Controller
{
    // GET: Home
    public ActionResult Index()
    {
        return View();
    }
}
```

Add web optimization nuget package:

Install-Package Microsoft.AspNet.Web.Optimization



Add BundleConfig.cs class into the App_Start folder:



Edit the Global.asax

```
using System;
using System.Web;
using System.Web.Mvc;
using System.Web.Routing;
using System.Web.Http;
```

```
namespace PhaserSetUp
{
    public class Global : HttpApplication
    {
        void Application_Start(object sender, EventArgs e)
        {
            // Code that runs on application startup
            AreaRegistration.RegisterAllAreas();
            GlobalConfiguration.Configure(WebApiConfig.Register);
            RouteConfig.RegisterRoutes(RouteTable.Routes);
            BundleConfig.RegisterBundles(BundleTable.Bundles);
        }
    }
}
```

Add a View:

I

Add New Item - PhaserSetUp				
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	⊕	Generic Handler	Visual C#	
	ູ	JSON File	Visual C#	
	۲°	JSON Schema File	Visual C#	
	្ណី	JSX File	Visual C#	
		LESS Style Sheet	Visual C#	
	•	MVC 5 Layout Page (Razor)	Visual C#	
	_ <u>C</u> #	MVC 5 Partial Page (Razor)	Visual C#	
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NI				

<u>N</u>ame:

Index.cshtml

@using System.Web.Optimization
<!DOCTYPE html>

<html> <head>

```
<meta name="viewport" content="width=device-width" />
<title>@ViewBag.Title</title>
</head>
<body>
<div>
@RenderBody()
</div>
<script src="../../Scripts/phaser.min.js"></script>
@Scripts.Render("~/bundles/app")
</body>
</html>
```

Read Working with TypeScript online: https://riptutorial.com/phaser-framework/topic/8054/workingwith-typescript

Credits

S. No	Chapters	Contributors
1	Getting started with phaser-framework	4444, Bob_Gneu, Community, InferOn, Shohanur Rahaman
2	Add An Image In Phaser	Jim
3	Working with TypeScript	Bob_Gneu, InferOn