Microsoft

Web Development Fundamentals 4

网站开发系列 - jQuery & 部署上线

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Microsoft Reactor | Ryan Chung

Microsoft

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Web Project Workshop Agenda 网页开发在线研讨会议程

19:30	Welcome 开场
19:35	Introduction to jQuery jQuery语法介绍
20:10	Using jQuery to access API 运用jQuery存取云端资料
20:30	10-minute break 中场休息
20:40	Lab Practice 网站综合练习
21:20	Q&A 问答时间
21:30	Event end 研讨会结束

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developer.microsoft.com/reactor/

@MSFTReactor on Twitter

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使用jQuery与API

jQuery/API 工作坊大纲

- jQuery与API介绍
- 使用jQuery存取API
- 结合HTML与jQuery
- 综合练习：Pokédex 宝可梦图鉴

简介

- JavaScript Library
- 简化JavaScript程序代码

主要功能

- HTML/DOM 存取
- CSS 使用
- HTML事件方法
- 特效与动画
- AJAX
- 其他工具

如何使用

1. 在官网找到最新版本下载

   https://code.jquery.com/jquery-X.X.X.min.js

2. 在<head></head>中插入或</body>前

   <script src="jquery-X.X.X.min.js"></script>

https://code.jquery.com/

文法结构

- $(selector).action()

  选择对象(找到谁) . 进行动作(做什么)

- 例如：

  $(this).hide() 把目前这个组件藏起来

  $("p").hide() 把所有段落藏起来 **element selector**

  $(".test").hide() 把所有类别为test的组件藏起来 **class selector**

  $("#test").hide() 把所有id为test的组件藏起来 **id selector**

常见事件侦测

- 点击

click、dblclick

```
$("p").click(function(){
        // action goes here!!
});
```

- 载入完成

ready

- 鼠标

mouseenter, mouseleave, mousedown, mouseup

hover = mouseenter + mouseleave

- 聚焦

focus, blur

效果

- hide() 隐藏
- show() 显示
- toggle() 切换隐藏或显示

- fadeIn() 淡入
- fadeOut() 淡出
- fadeToggle() 切换交叉进出

- fadeTo() 改变透明度

- slideDown() 下拉显示
- slideUp() 上拉隐藏
- slideToggle() 切换上下滑动

- animate() 动画

Lab.按按钮看详细介绍

The Hangover Part III

When one of their own is kidnapped by an angry gangster, the Wolf Pack must track down Mr. Chow, who has escaped from prison and is on the lam.

Show Detail

按按钮可以显示详细介绍
再单击可以隐藏详细介绍

index.html

```
<!DOCTYPE html>
<html>
    <head>
        <meta charset="utf-8">
        <title>HellojQuery</title>
    </head>
    <body>
        <img width="200" height="300"
        src="http://content6.flixster.com/movie/11/17/27/11172744_800.jpg">
        <h1>The Hangover Part III</h1>
        <p>When one of their own is kidnapped by an angry gangster,
            the Wolf Pack must track down Mr. Chow, who has escaped
            from prison and is on the lam.</p>
        <button>Show Detail</button>
        <script src="https://code.jquery.com/jquery-3.5.1.min.js"></script>
        <script async defer src="main.js"></script>
    </body>
</html>
```

main.js

```
$("p").hide(); //先隐藏段落
$("button").click(function(){ //当按钮按下后
    $("p").toggle();      //切换显示段落
});
```

Lab.显示/隐藏 ->各种特效

1. 请试着修改显示/隐藏的范例，变成淡入淡出特效
   - fadeToggle()
2. 请试着修改显示/隐藏的范例，变成下拉上收特效
   - slideToggle()
3. 请测试带有参数的显示效果

```
$(selector).toggle(speed,callback);
```

```
$(selector).slideToggle(speed,callback);
```

```
$(selector).fadeToggle(speed,callback);
```

Example

```
$("button").click(function(){
    $("#div1").fadeToggle();
    $("#div2").fadeToggle("slow");
    $("#div3").fadeToggle(3000);
});
```

Lab.鼠标移到谁，就显示谁的名字

The Hangover Part III

Ed Helms

index.html

```
<!DOCTYPE html>
<html>
    <head>
        <meta charset="utf-8">
        <title>HellojQuery</title>
        <link rel="stylesheet" href="style.css">
    </head>
    <body>
        <img alt="Bradley Cooper"    src="images/Bradley_Cooper.jpg">
        <img alt="Ed Helms"          src="images/Ed_Helms.jpg">
        <img alt="Zach Galifianakis" src="images/Zach_Galifianakis.jpg">

        <h1>The Hangover Part III</h1>
        <p></p>
        <script src="https://code.jquery.com/jquery-3.5.1.min.js"></script>
        <script async defer src="main.js"></script>
    </body>
</html>
```

main.js

```
$("img").hover(
    function(){$("p").text($(this).attr("alt"));},
    function(){$("p").text("");});
```

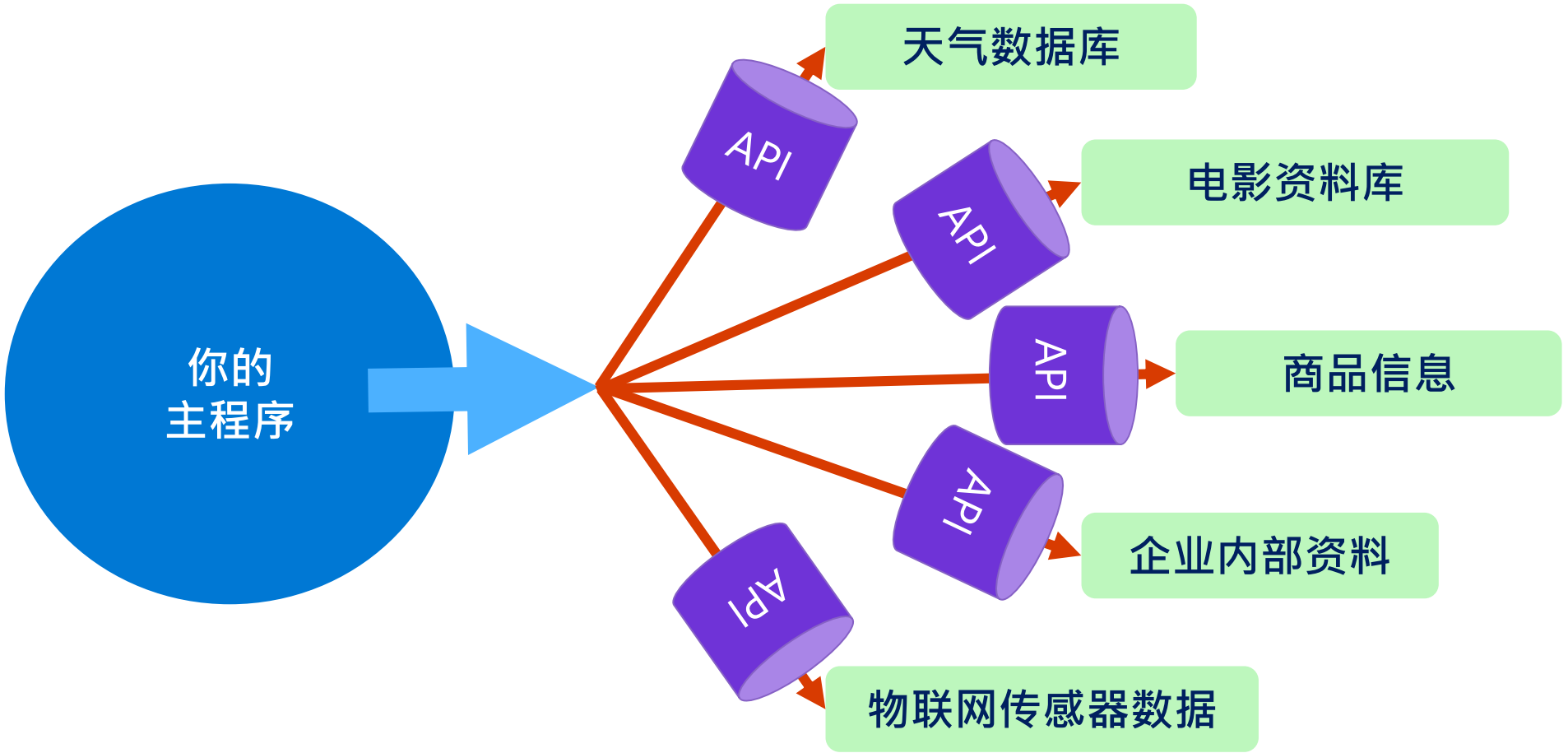
style.css

```
img{
    width: 200px;
    height: 300px;
}

p{
    font-size: 18px;
    font-style: italic;
}
```

- 当鼠标移至图片上面时
  - hover吃两个参数
    - 进入范围
      - 取得该张图片的alt属性值
      - 利用text()，改变段落中的文字
    - 离开范围
      - 清空文字

API: Application Programming Interface 应用程序编程接口



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综合练习：Pokédex 宝可梦图鉴

综合练习：Pokédex 宝可梦图鉴

pidgeotto

Types
flying
normal

Height
11

Weight
300

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Pokédex 宝可梦图鉴资料

https://pokeapi.co/api/v2/pokemon/25/

最后这个数字是id
也就是在数据库中
宝可梦精灵的编号

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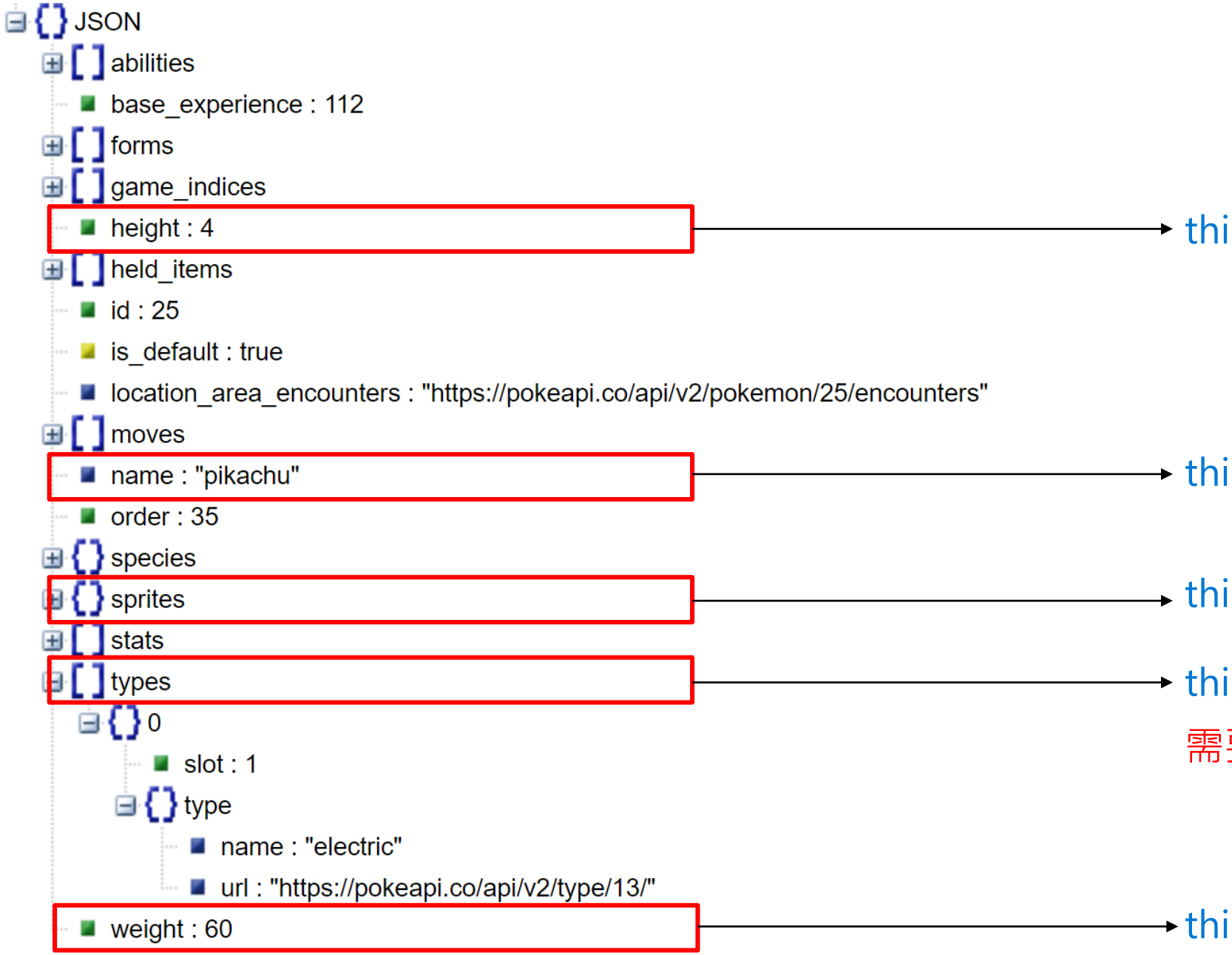
用 JSON Viewer 观察一下数据结构

http://jsonviewer.stack.hu/



thisObject.height

thisObject.name

thisObject.sprites["front_default"]

thisObject.types[0]["type"].name

需要巡访types

thisObject.weight

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项目结构

index.html
main.js
style.css
pokemon.html
pokemon.js

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index.html

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>Test Pokedex</title>
    <link rel="stylesheet" href="style.css">
  </head>
  <body>
      <div class="container">
          <div class="pokemon">
            <iframe src="pokemon.html" width="600px" height="500px"></iframe>
          </div>
          <div class="pokedex">
              <div class="name"></div>
              <div class="picture"></div>
              <div class="types"></div>
              <div class="height"></div>
              <div class="weight"></div>
          </div>
      </div>
      <script src="https://code.jquery.com/jquery-3.5.1.min.js"></script>
      <script async defer src="main.js"></script>
  </body>
</html>
```

用iframe来显示整个宝可梦图鉴选项

用户选定图片后，右方出现单一精灵介绍

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pokemon.html

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>Test Pokedex</title>
  </head>
  <body>
      <script src="https://code.jquery.com/jquery-3.5.1.min.js"></script>
      <script async defer src="pokemon.js"></script>
  </body>
</html>
```

内容稍后由pokemon.js 产生

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pokemon.js

```
let id;
```

把精灵的小图用循环方式添加到画面上

```
for (let i = 1; i <= 151; i++){
    $("body").append('<img id="' + i +
    '" src="https://raw.githubusercontent.com/PokeAPI/sprites/master/sprites/pokemon/shiny/' +
    i + '.png">');
}

$('img').click(function(){
    id = $(this).attr('id');
    parent.$(parent.document).trigger("imageClick",id);
});
```

当用户选定项目后，触发事件并将该项目的id送往主页

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产生右方卡片内容(id,名子,图片,类别,高度,重量)

main.js

```
$(document).on("imageClick",function(e,id){
    $.get("https://pokeapi.co/api/v2/pokemon/" + id + "/", function(res) {
        //显示名子
        let nameString = "<h1>" + id+"<br>"+ res.name + "</h1>";
        $('.name').html(nameString);
        //显示图片
        let imgString = '<img src="';
        imgString += res.sprites["front_default"] +'">';
        $('.picture').html(imgString);
        //巡访并显示类别
        var types = "<h3>Types</h3><ul>";
        for(let i = 0; i < res.types.length; i++) {
            types += "<li>" + res.types[i]["type"].name + "</li>";
        }
        types += "</ul>";
        $(".types").html(types);
        //显示高度、重量
        $('.height').html("<h3>Height</h3>"+res.height);
        $('.weight').html("<h3>Weight</h3>"+res.weight);
    }, 'json');
});
```

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style.css

```css
*{
    margin: 0px;
    padding: 0px;
}

.pokemon{
    display: inline-block;
    vertical-align: top;
}
.pokedex{
    width: 20%;
    height: 400px;
    border: 10px solid #5fb3df;
    display: inline-block;
    vertical-align: top;
    padding: 20px;
    text-align: center;
}
```

```css
.pokedex div{
    margin-top: 5px;
}

.picture img{
    display: block;
    margin: 0px auto;
}

.types li{
    list-style: none;
    padding-top: 5px;
}

h3{
    color:purple;
}
```

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将网站部署至Azure

如何免费使用微软Azure服务

https://azure.microsoft.com/zh-cn/free/

https://azure.microsoft.com/zh-cn/free/students/

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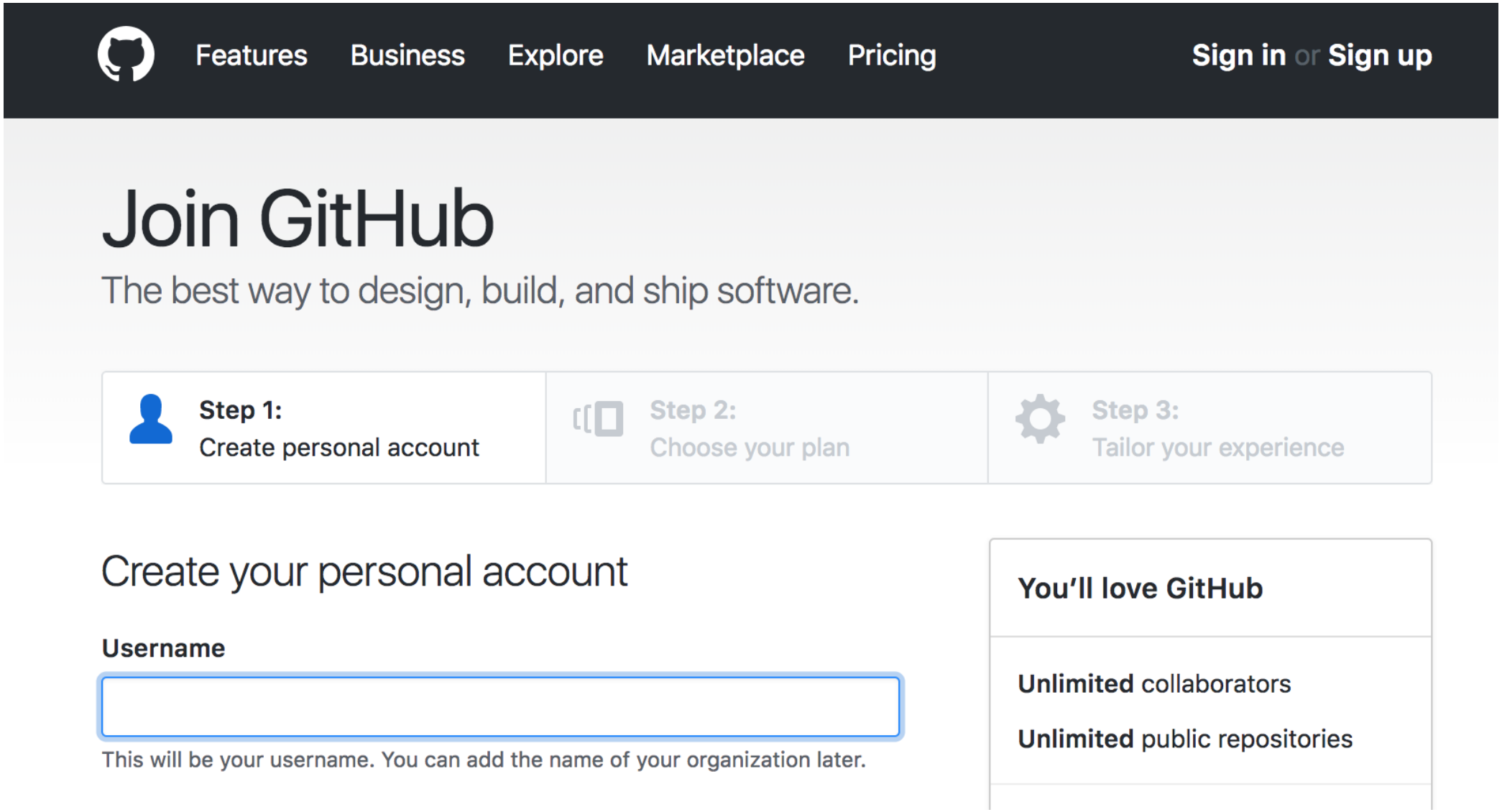
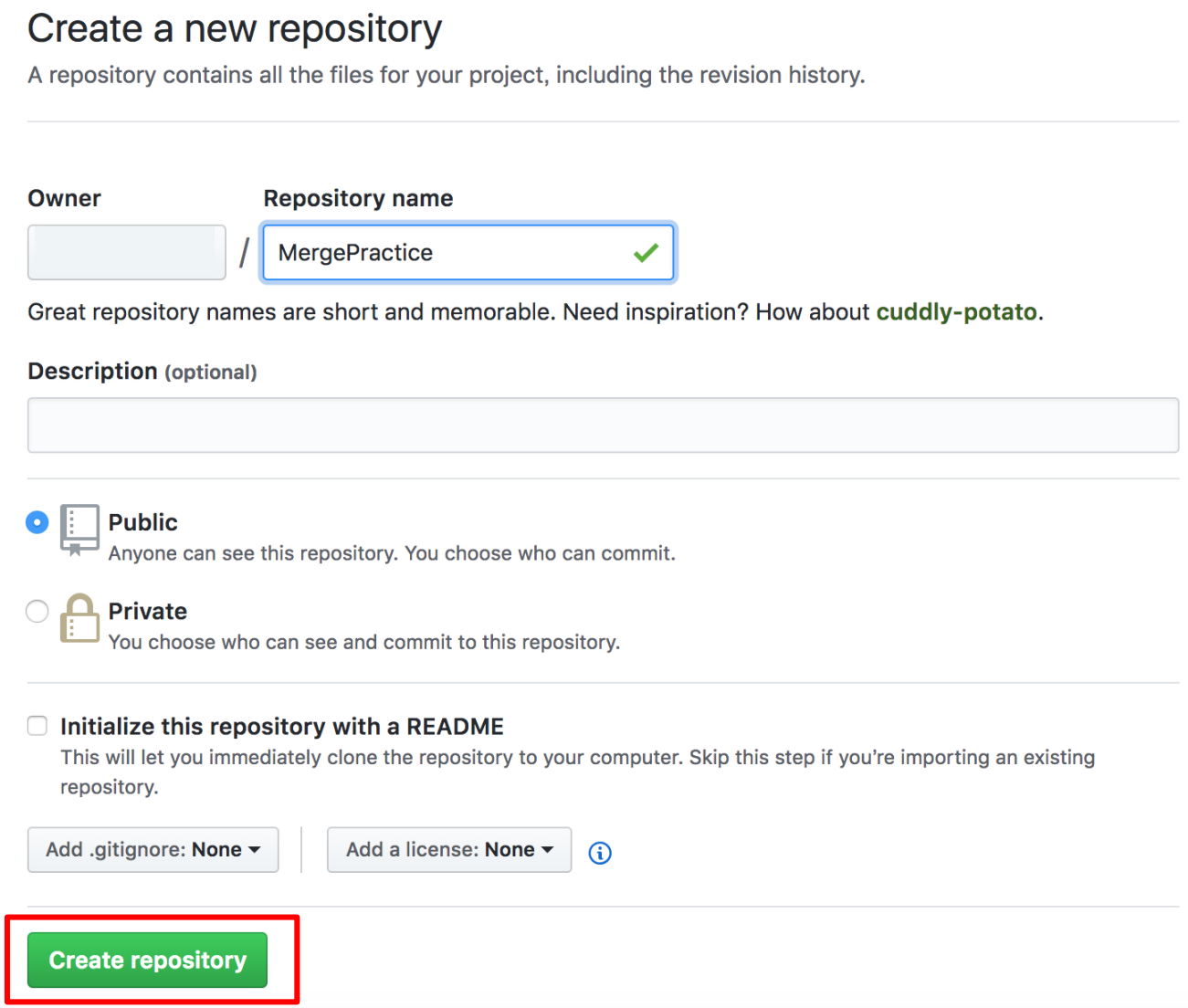
注册一个GitHub账号



https://github.com/join

登入后，建立一个新的项目

- 点选照片旁边的+，New repository



本机设定

- 打开终端机应用程序
  - Windows：cmd
  - Mac：Terminal
- 找到项目文件夹

  cd YourProjectDic
- Git 初始化(需先安装好git)

  git init
- 加入所有档案

  git add .

本机设定

- 设定上传描述标记

  git commit –m "First commit"

- 对应远程位置

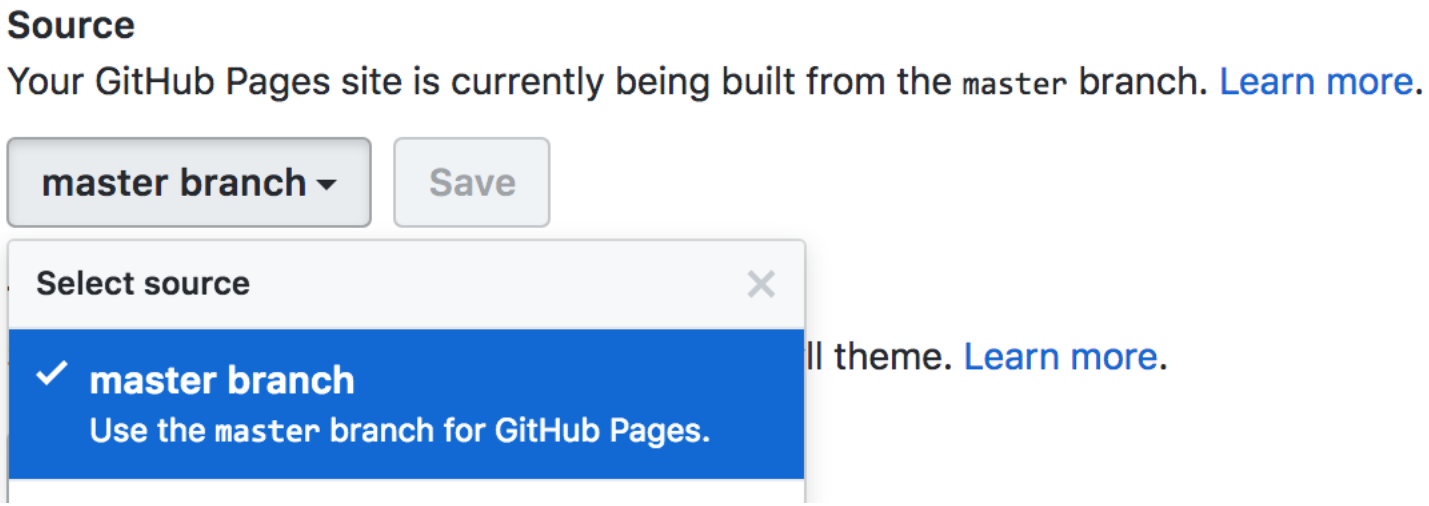
  git remote add origin https://github.com/YourUserName/YourProgectName.git

- 上传档案

  git push –u origin master

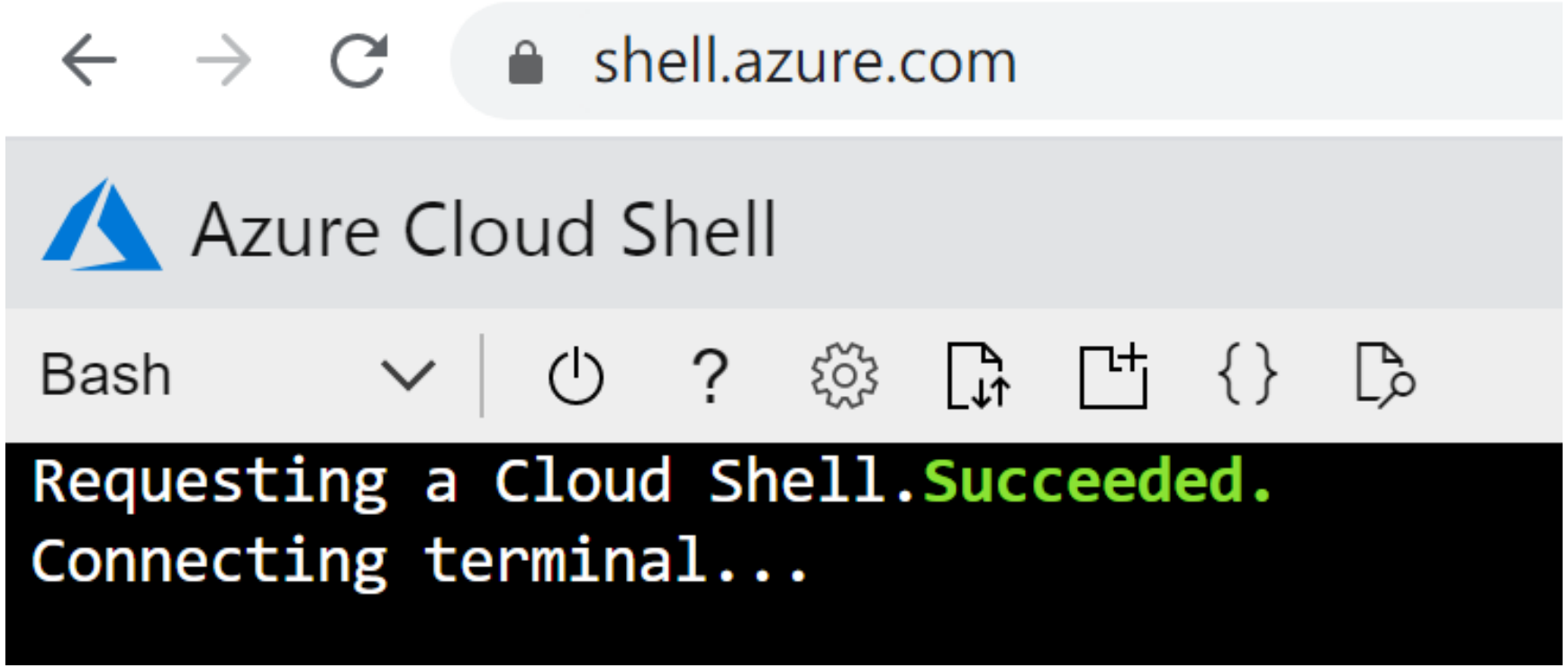
选择一：直接设定GitHub Pages

- 在Github网站中，进入自己的项目
- 点击 Settings
- 下拉至GitHub Pages
- 将Source设定为 master branch



选择二：从GitHub部署至Azure

- 打开浏览器，进入 https://shell.azure.com



https://shell.azure.com

选择二：从GitHub部署至Azure

复制专案至Azure

git clone https://github.com/YourAccount/YourProjectName.git

启动网站部署(每次更新也是下这个指令)

az webapp up --location westeurope --name YourProjectName --html

- 建立一个预设的Resource Group
- 建立一个预设的App Service Plan
- 依据你输入的项目名称建立App
- 部署并启动你的Web App

https://shell.azure.com

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延伸学习资源

Azure 网站开发

- **Azure 云端服务基础**

https://docs.microsoft.com/en-us/learn/paths/azure-fundamentals/

- **将网站部署于Azure 虚拟机**

https://docs.microsoft.com/en-us/learn/paths/deploy-a-website-with-azure-virtual-machines/

- **学习C#程序语言**

https://docs.microsoft.com/en-us/learn/paths/csharp-first-steps/

- **利用Azure App Service部署你的网站**

https://docs.microsoft.com/en-us/learn/paths/deploy-a-website-with-azure-app-service/

微软认证

- Microsoft Certified Solutions Associate
- Microsoft Certified Solutions Developer (MCSD)
- Microsoft Certified: Azure Developer Associate
- Azure Fundamentals

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Microsoft Reactor 上海 – 数据科学系列

日期	星期	时间	主题
5/29	五	19:30 ~ 21:30	Python 程序设计入门
6/04	四	19:30 ~ 21:30	Numpy & Pandas
6/18	五	19:30 ~ 21:30	数据维护与清理
6/20	六	14:30 ~ 16:30	数据科学案例练习

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议程结束
感谢聆听

请记得填写课程回馈问卷
https://aka.ms/ReactorFeedback

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