应用动态化之NativeAPI

Dynamic App

客户端与H5如何优雅的互动

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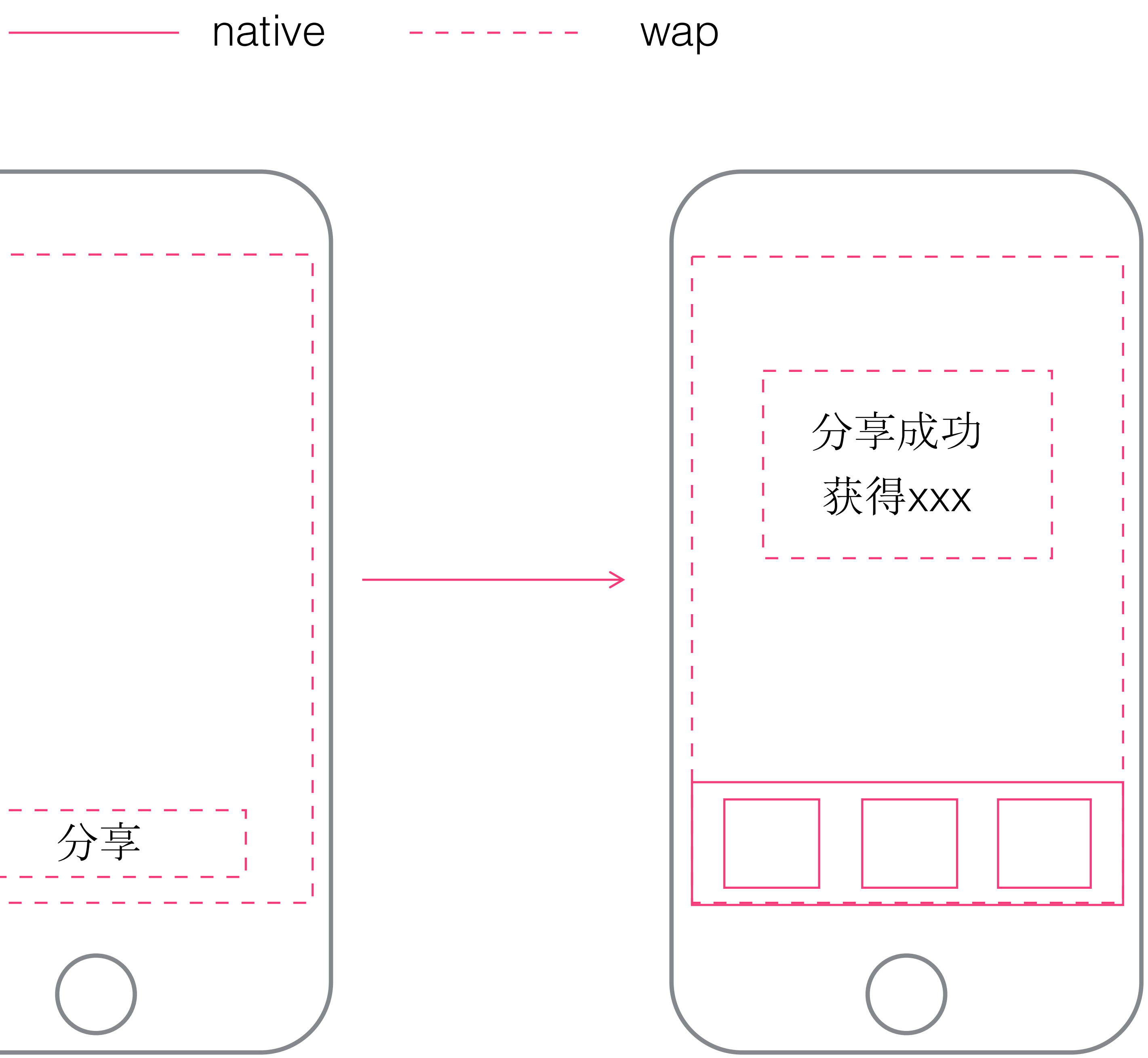
2015.9

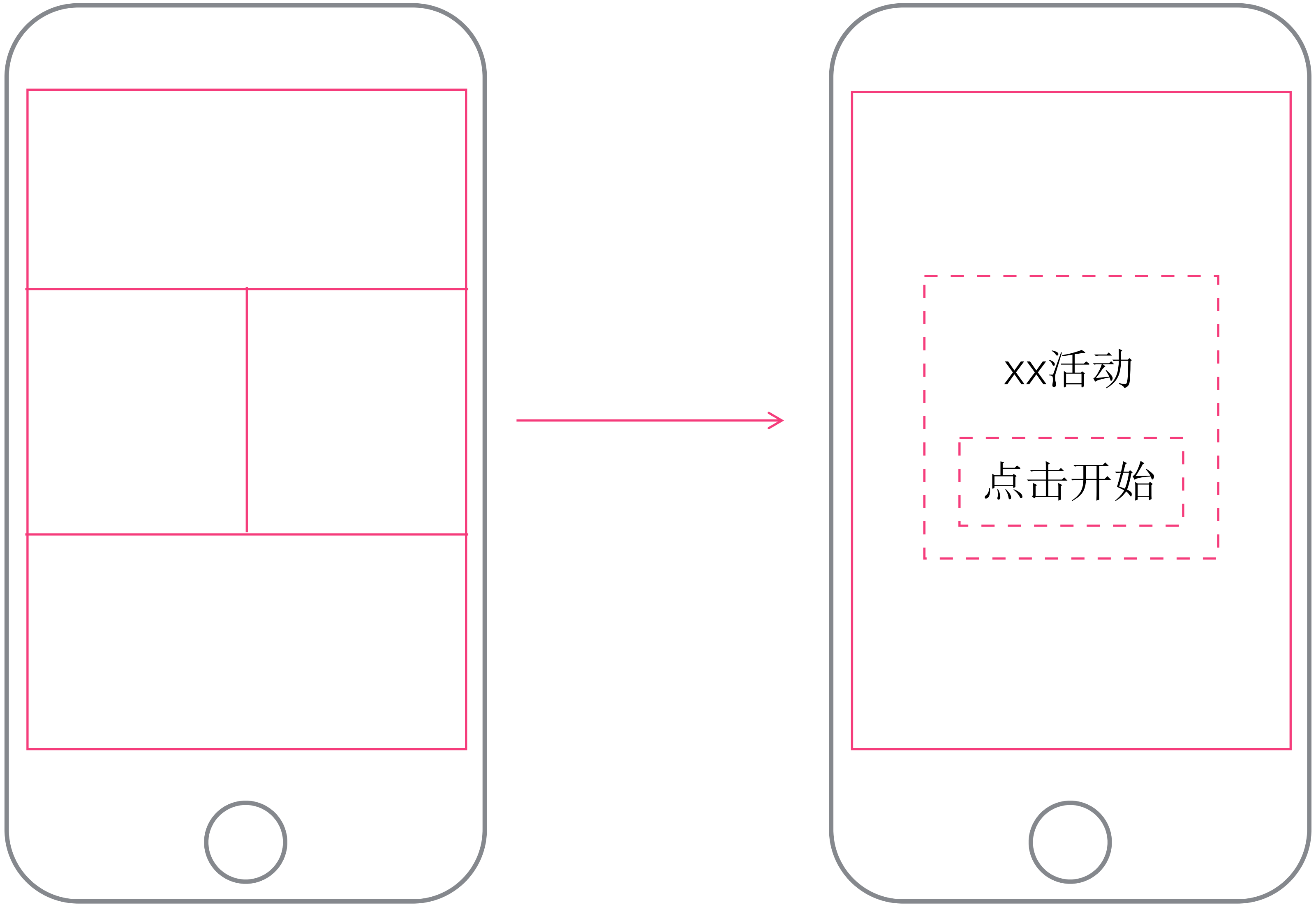
场景1

Scene Part1



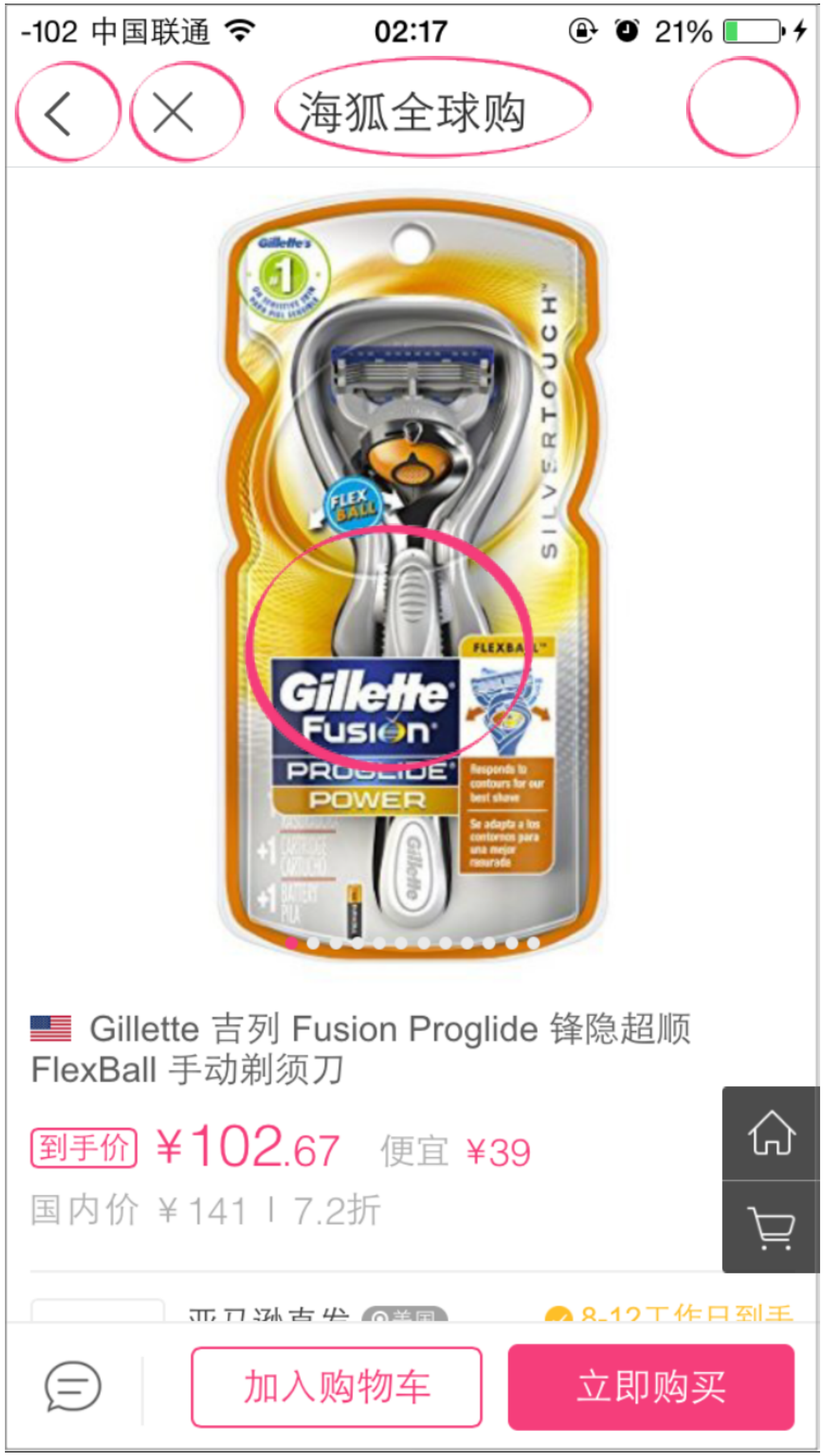
场景2

Scene Part2



应用

apply



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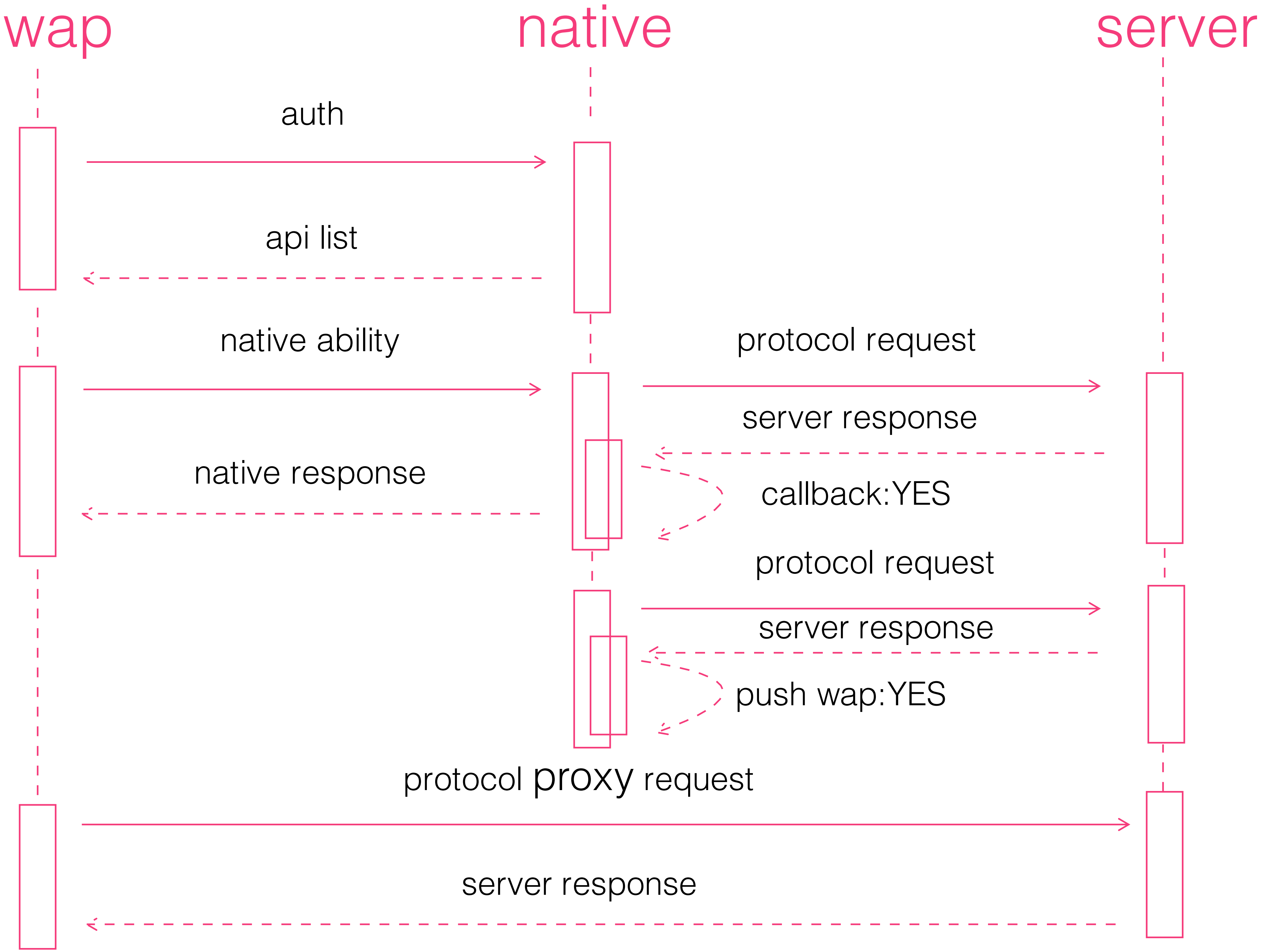
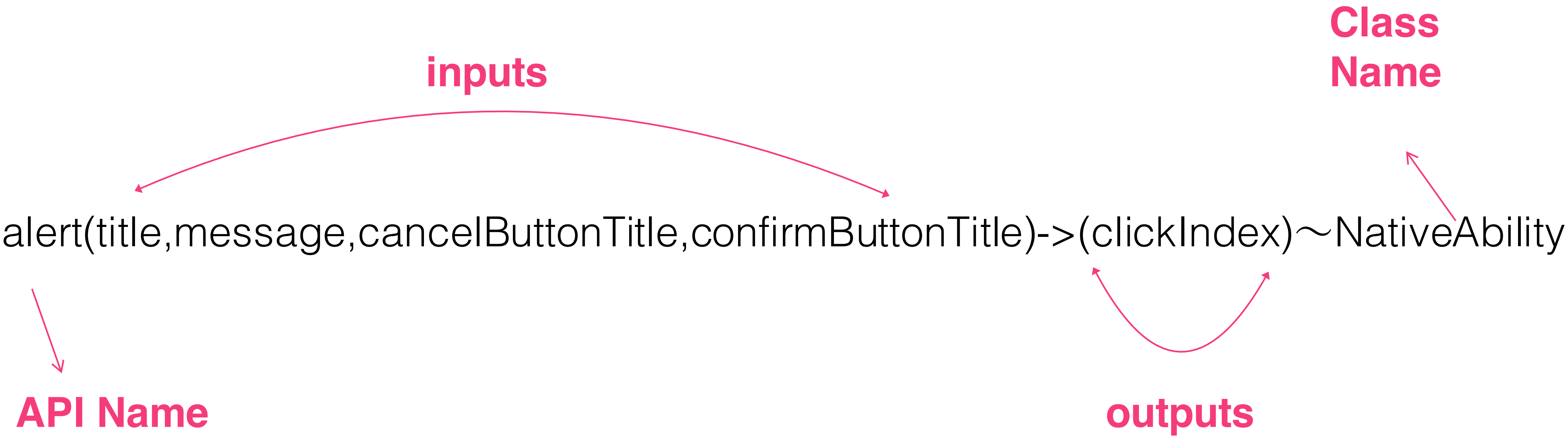
亚马逊直发 美国 8-12工作日到手

Native API sequence



API原型1 prototype 1



inputs

Class Name

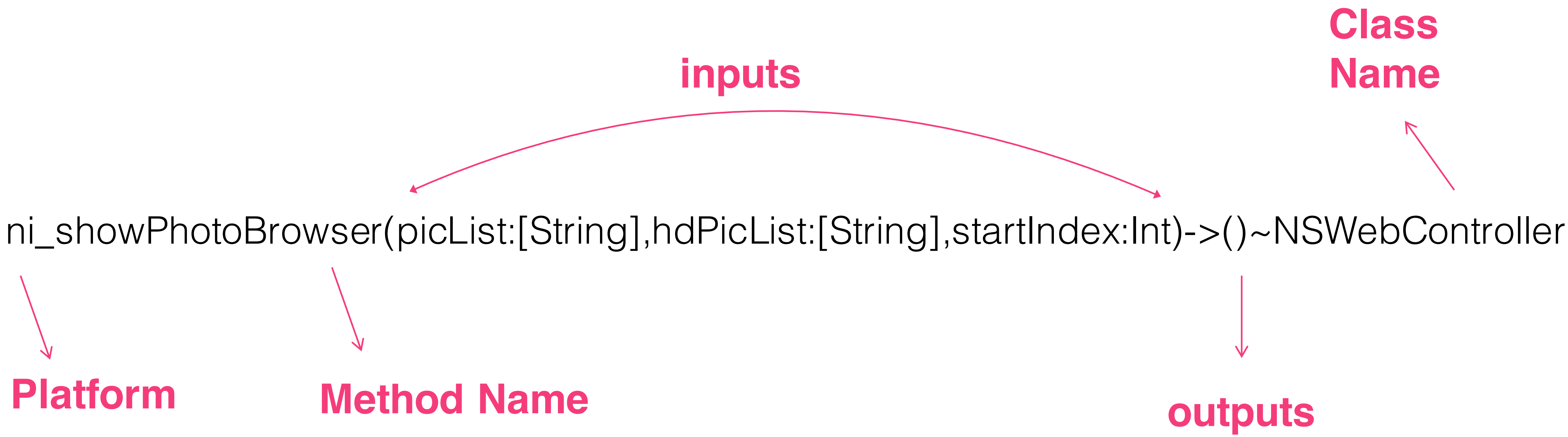
alert(title,message,cancelButtonTitle,confirmButtonTitle)->(clickIndex)～NativeAbility

API Name

outputs

Native开放接口

API原型2 prototype 2



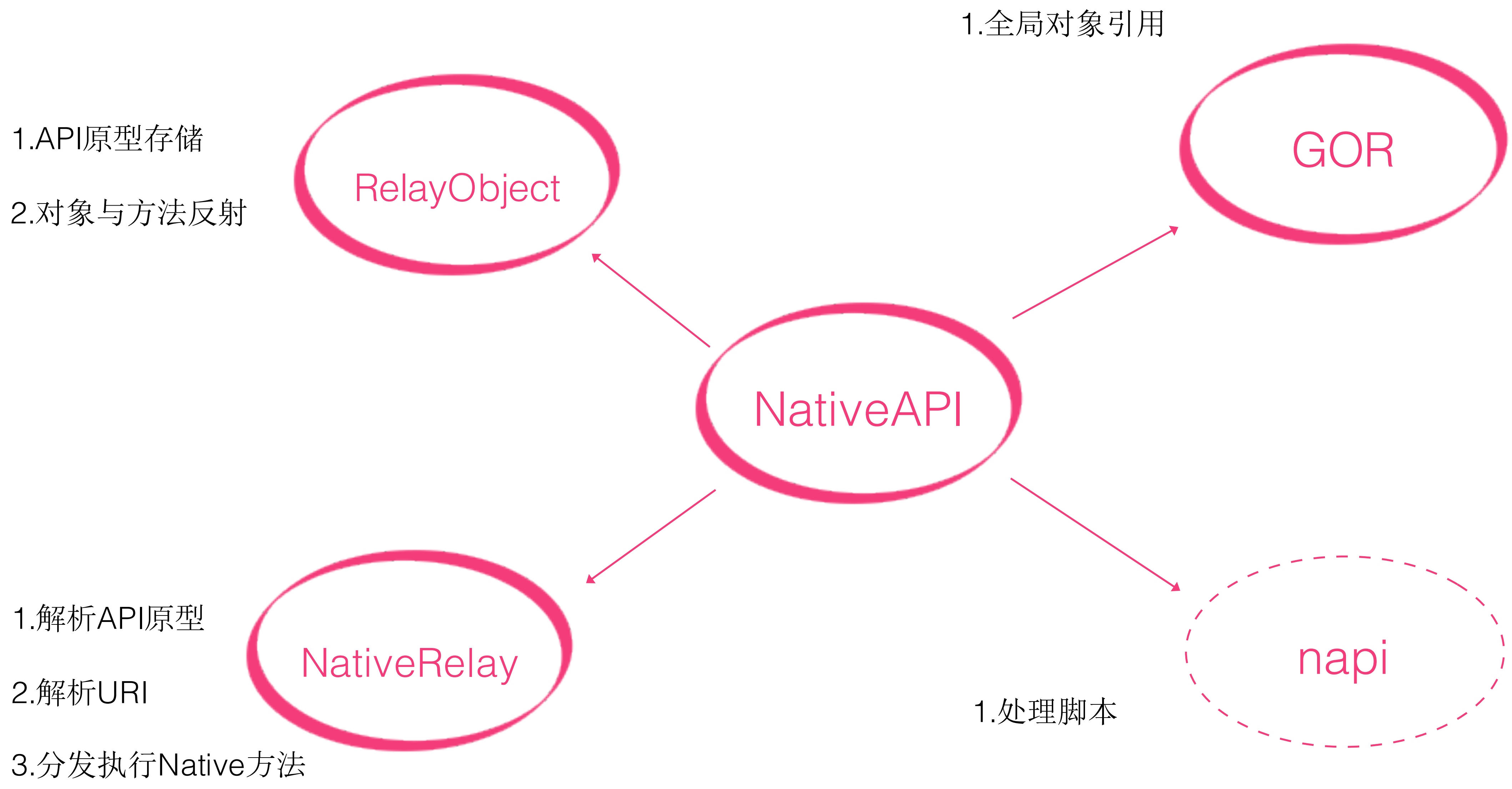
ni_showPhotoBrowser(picList:[String],hdPicList:[String],startIndex:Int)->()~NSWebController

支持类型

- 基本类型：Int，Long，Float，Double，Bool
- 复杂类型：String，Any，[](Array)，{}(Dictionary)，{Custom}

Native已有方法

构成1 compose part1



1.全局对象引用

GOR

1.API原型存储

2.对象与方法反射

RelayObject

NativeAPI

1.解析API原型

2.解析URI

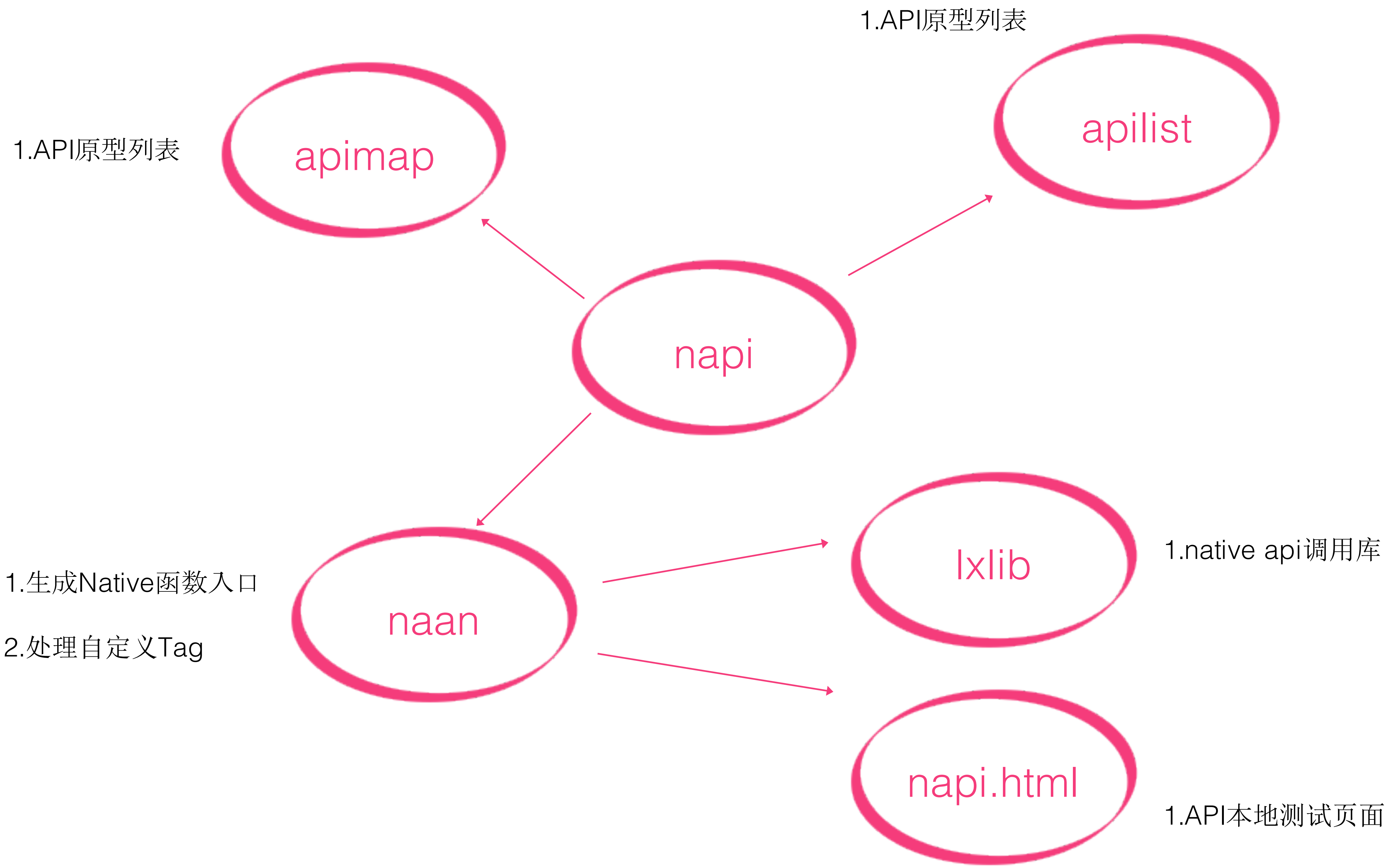
3.分发执行Native方法

NativeRelay

napi

1.处理脚本

构成2 compose part2



apimap example

echo(content)->(content)~NativeAbility

NativeAbility.m example

```
#pragma mark -
#pragma mark Native API - echo - Function Block
static NSString * echo_CALLBACK_ID = @"";
- (void)NativE_echo_context:(id)context content:(NSString *)content cbId:(NSString *)cbId{
   echo_CALLBACK_ID = cbId;
   /* Coding

   ...

   */

    [self NativE_echo_callback:content];
}

- (void)NativE_echo_callback:(NSString *)content{
   [[NSNotificationCenter defaultCenter]
   postNotificationName:@"NativE_notify"
   object:self
   userInfo:
        @{
            @"content":content,
            @"cbId":echo_CALLBACK_ID
        }];
}
```

xx.js example

```
lx.echo(“hello word”,function(ret){alert(ret.content)})
```

Demo

API列表

api list

pop()->()

alert(title,message,cancelButtonTitle,confirmButtonTitle)->(clickIndex)

push(code,{})->()

toRoot(tabIndex)->()

openUrl(scheme)->()

canOpenUrl(scheme)->(status)

hookBack-(which)

webTitle(title)->()

toast(msg)->()

shakeServicesEnable()->(status)

shakeServicesDisable()->(status)

shakeServicesAction()->(status)

download(url)->()

location()->(lat,lng)

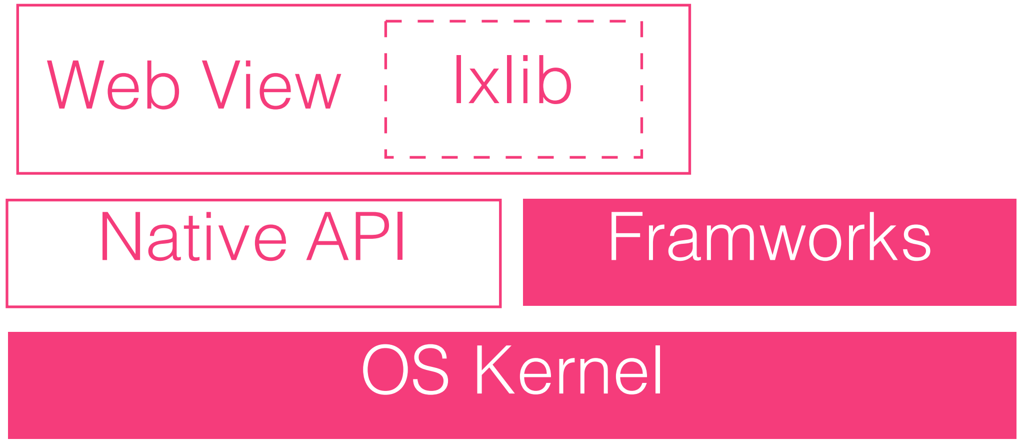
login()->(userId,userNick,userAvatar)

scheduleNotification(time,content)->(status)

share(channel,title,url,imageUrl)->(status)

结构图

Arch



Web View

lxlib

Native API

Framworks

OS Kernel

目的

purpose

- 优化h5桥接开发结构
- h5获取客户端已知信息（设备，用户信息）
- h5移交耗时操作（数据签名，加解密）
- 客户端帮助h5构建缓存

后续

next

- 更丰富的Native API
- 动态化中间件（效率，热补）