



Apps with love

Bachelor Project

Presentation I – Introduction, Situation, Goals & Method

1. October 2019

Alain Stulz / 2019

Company Introduction

Full Service Digital Agency



Company Introduction

Founded: **2010**

Offices: **Bern & Basel**

Employees: **35**

Nearshore & Freelance: **50+**

App Store Uploads: **200+**

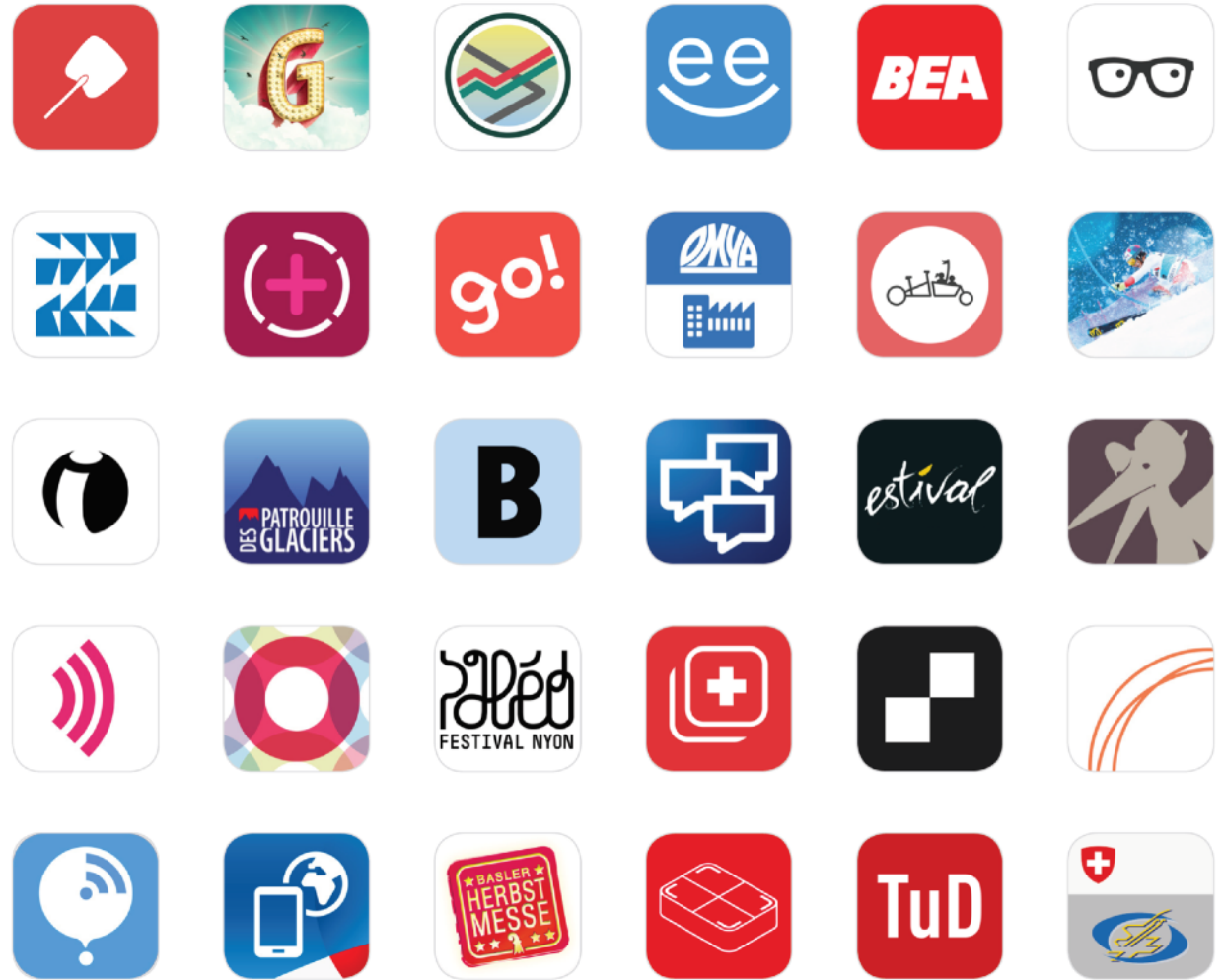
Where We Began

"Festival Buddy"



How To **Create** Many Apps **Efficiently?**

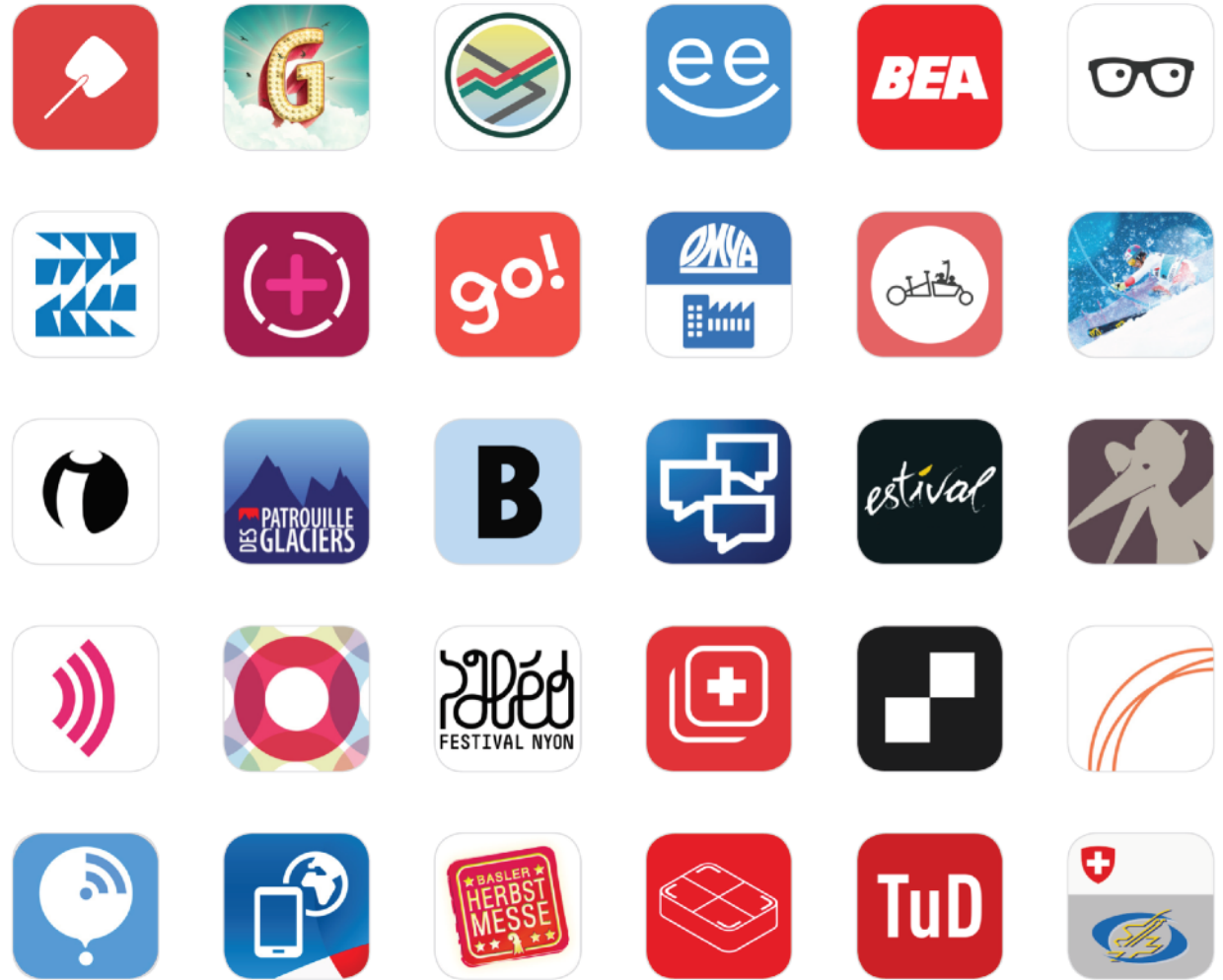
Reuse Code



How To **Create** Many Apps **Efficiently?**

Reuse Code

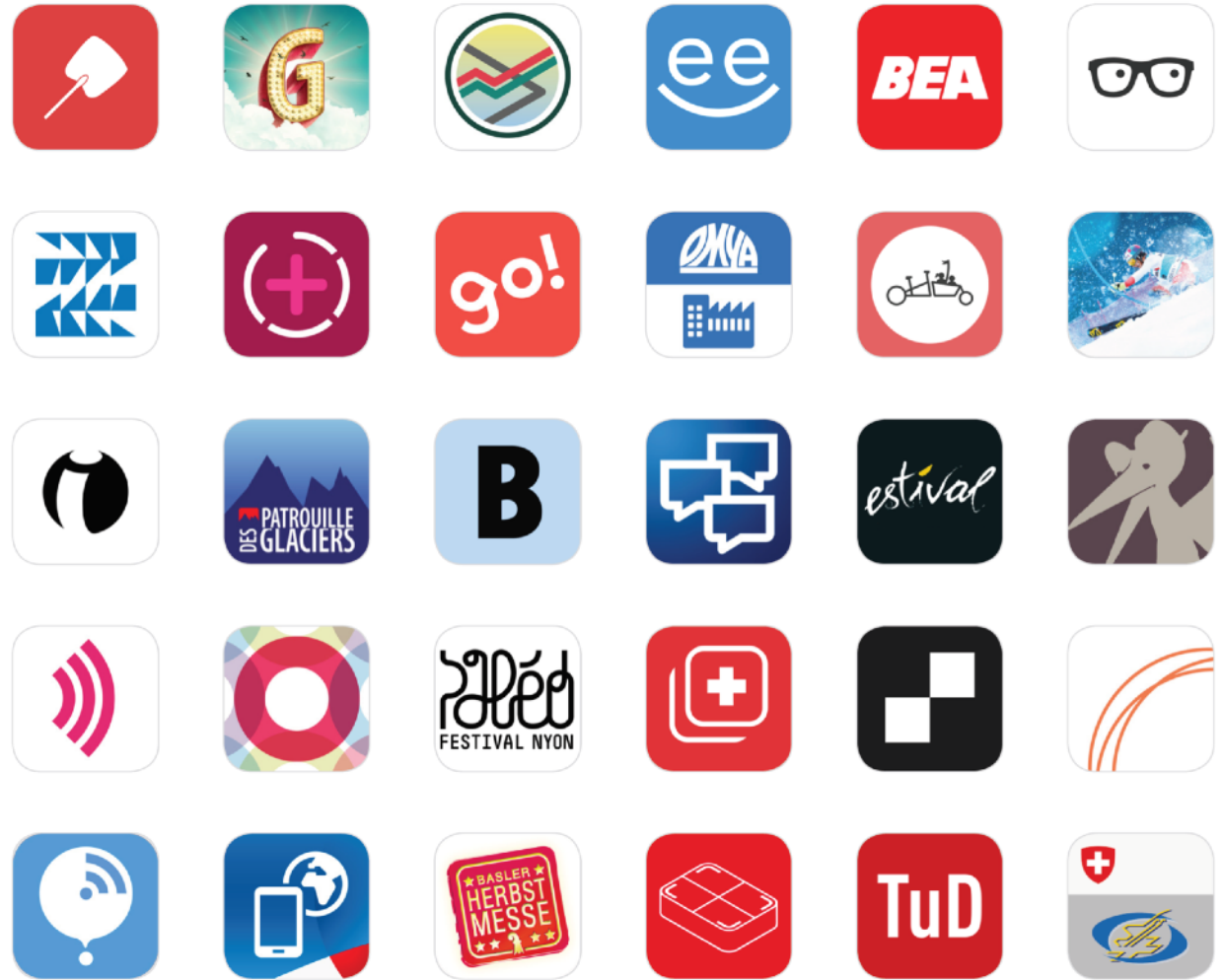
- Copy & Paste



How To **Create** Many Apps **Efficiently?**

Reuse Code

- ~~Copy & Paste~~
- Custom **Framework**



More Features!

POIs

Video Gallery

Geofencing

Analytics

Push

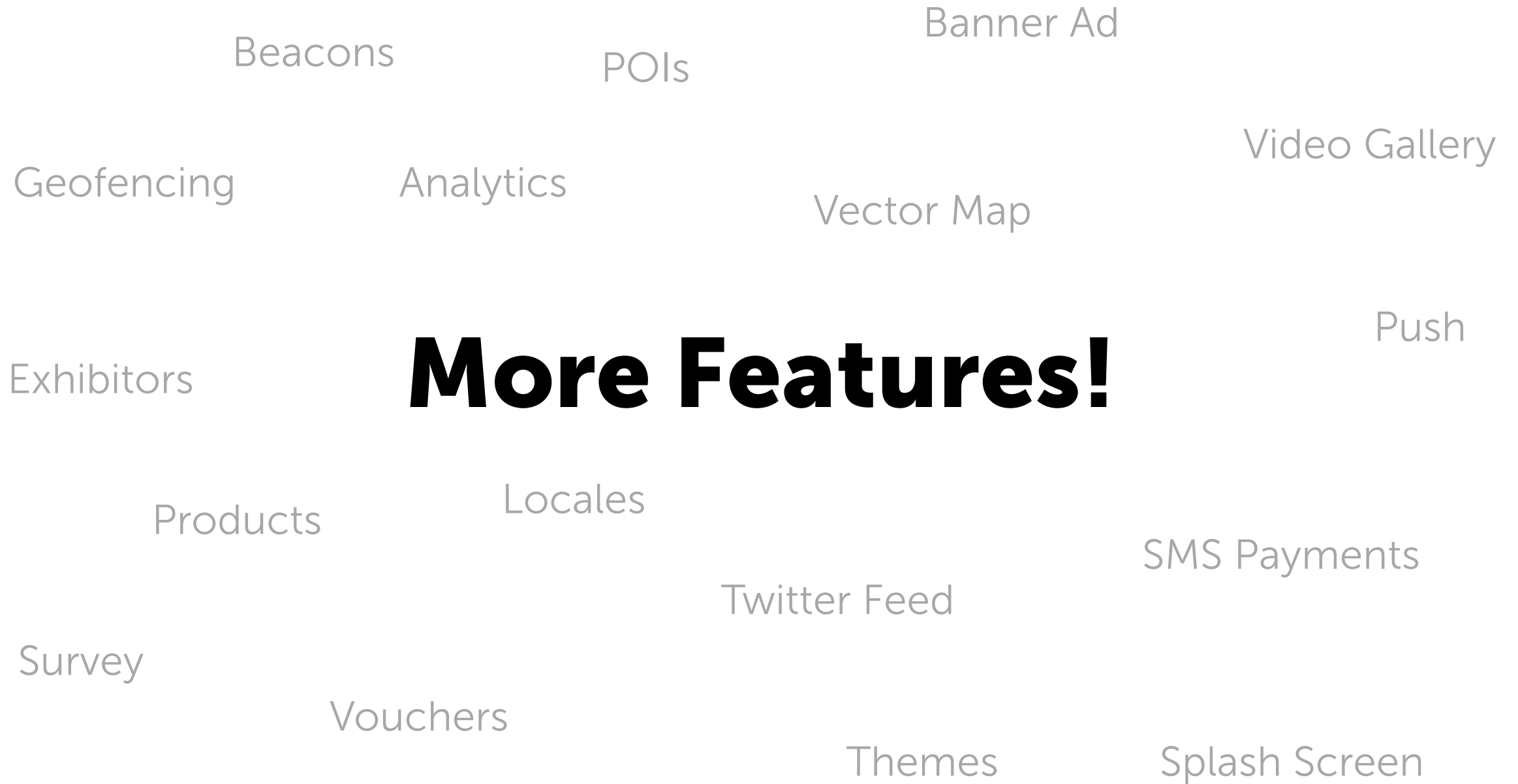
More Features!

Locales

Twitter Feed

Survey

Splash Screen
























No Time Left!

More Features
+
No Time Left
=
Technical Debt

Technical Debt

Who Needs **Unit Tests,** Anyway?

Name	Coverage ▾
▶  AFNetworking.framework	<div><div></div></div> 1.6%
▶  ABFCoreApp.framework	<div><div></div></div> 0.5%
▶  ABFCoreUI.framework	<div><div></div></div> 0.5%
▶  ABFDataAccessLayer.framework	<div><div></div></div> 0.2%
▶  ABFInfoModule.framework	<div><div></div></div> 0.0%
▶  ABFPhotoGalleryModule.framework	<div><div></div></div> 0.0%
 ABFProgramModule.bundle	<div><div></div></div> 0.0%
▶  HTMLReader.framework	<div><div></div></div> 0.0%
▶  MATableManager.framework	<div><div></div></div> 0.0%
 ABFDataAccessLayer.bundle	<div><div></div></div> 0.0%
▶  ABFLocalization.framework	<div><div></div></div> 0.0%
▶  ABFAdvertisementModule.framework	<div><div></div></div> 0.0%
▶  ABFNewsModule.framework	<div><div></div></div> 0.0%
 ABFVideoGalleryModule.bundle	<div><div></div></div> 0.0%
▶  ABFCouponModule.framework	<div><div></div></div> 0.0%
▶  ABFMapModule.framework	<div><div></div></div> 0.0%
 ABFAttachmentsModule.bundle	<div><div></div></div> 0.0%
 ABFProductModule.bundle	<div><div></div></div> 0.0%
▶  ABFTwitterNewsModule.framework	<div><div></div></div> 0.0%
▶  ABFVideoGalleryModule.framework	<div><div></div></div> 0.0%
▶  ABFCoordinator.framework	<div><div></div></div> 0.0%

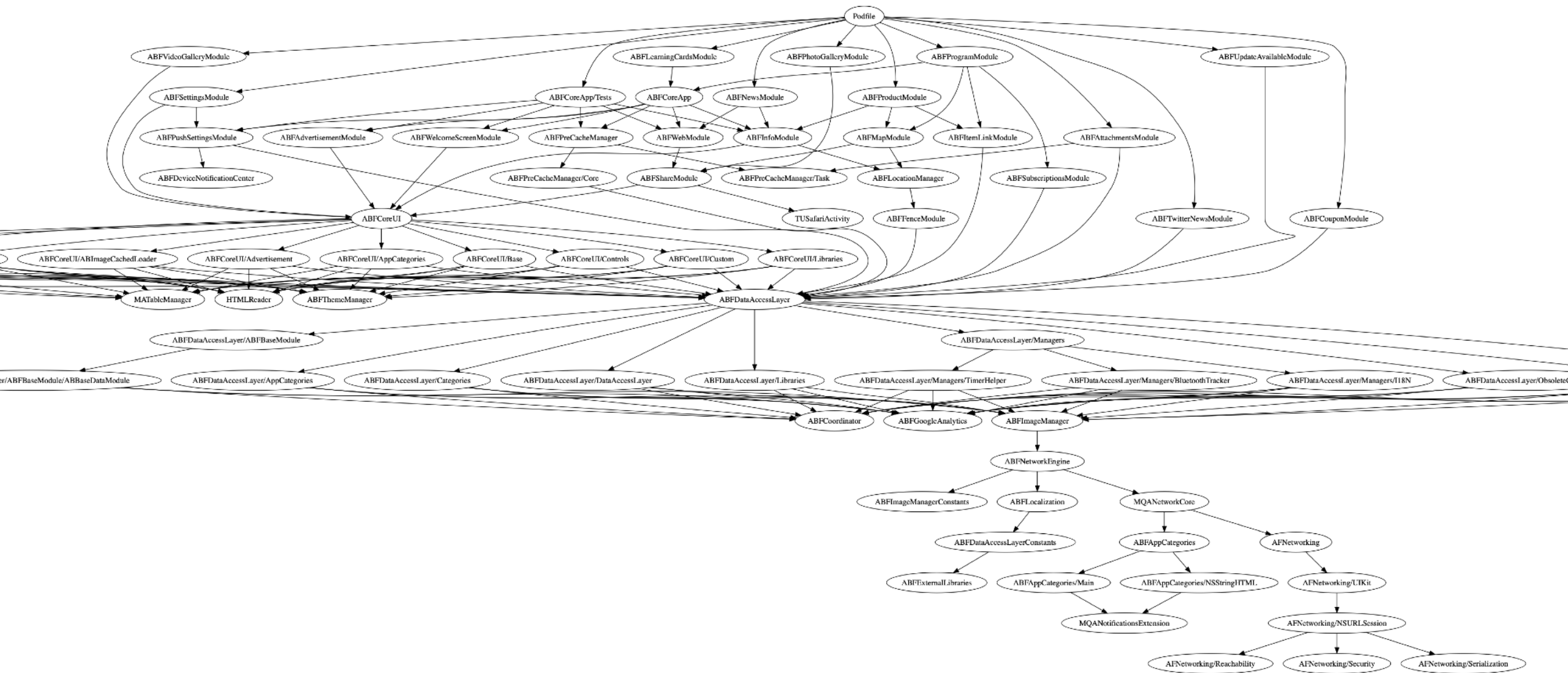
Guessing Game: What does Util do?

```
Pods > Development Pods > ABFDataAccessLayer > Utils > Util.h > No Selection
1 //
2 //  Util.h
3 //  OvoApp
4 //
5 //  Created by Olivier Oswald on 08.11.10.
6 //  Copyright 2010 Apps with love. All rights reserved.
7 //
8
9 #import <Foundation/Foundation.h>
10 #import <MessageUI/MFMailComposeViewController.h>
11
12 @interface Util : NSObject
13
```

```

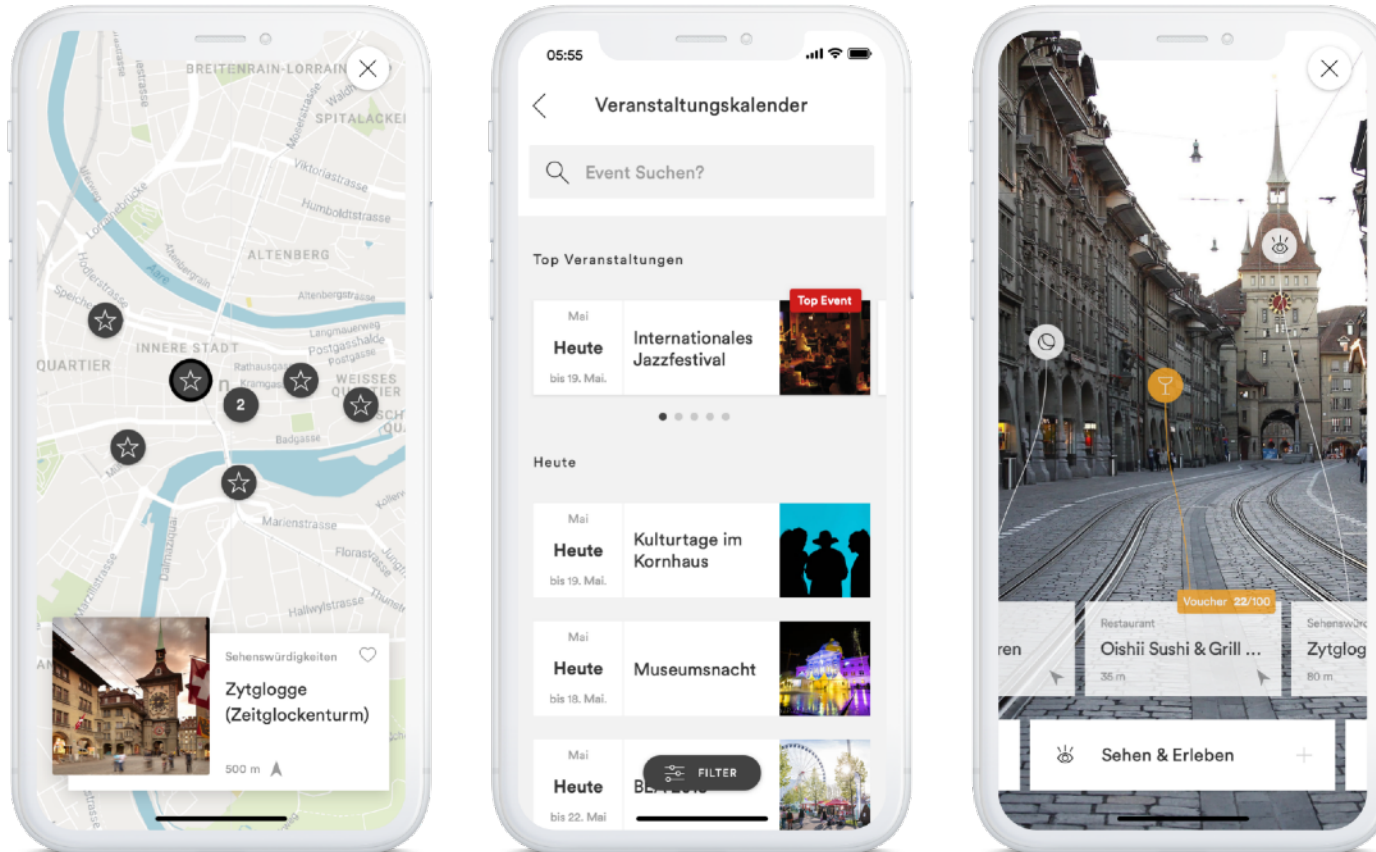
1 //
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9 #import <Foundation/Foundation.h>
10 #import <MessageUI/MFMailComposeViewController.h>
11
12 @interface Util : NSObject
13
14 + (NSString*)trimString:(NSString*)string;
15
16 + (NSDate*)dateWithDay:(NSInteger)day withMonth:(NSInteger)month withYear:(NSInteger)year;
17 + (NSDate*)dateWithDay:(NSInteger)day withMonth:(NSInteger)month withYear:(NSInteger)year
18     withHour:(NSInteger)hour withMinute:(NSInteger)minute withSecond:(NSInteger)seconds;
19
20 + (NSString *)abfMessageForError:(NSError *)error;
21 + (void)abfShowAlertForError:(NSError *)error;
22 + (void>alertWithTitle:(NSString*)title withText:(NSString*)text;
23 + (void)errorAlertWithText:(NSString*)text;
24 + (void)unexpectedErrorAlert;
25
26 + (bool)isValidEmailAddress:(NSString*)email;
27 + (void)sendEmailMessageTo:(NSArray *)recipients subject:(NSString *)subject text:(NSString*)text image:(UIImage *)image
28     mailComposeDelegate:(id<MFMailComposeViewControllerDelegate>)mailComposeDelegate;
29 + (NSString *)stripHTML:(NSString *)html;
30 + (NSString *)localizeHTML:(NSString *)html;
31
32 + (BOOL)date:(NSDate*)date isBetweenDate:(NSDate*)beginDate andDate:(NSDate*)endDate;
33
34 #pragma mark --- 2014
35
36 + (NSString *)stringWithDate:(NSDate *)date dateFormat:(NSString *)dateFormat;
37
38 + (NSString *)createTextFromDate:(NSDate *)date;
39
40 + (NSString *)convertNumberOfLikesToText:(NSInteger)numberOfLikes;
41 @end
42 |

```

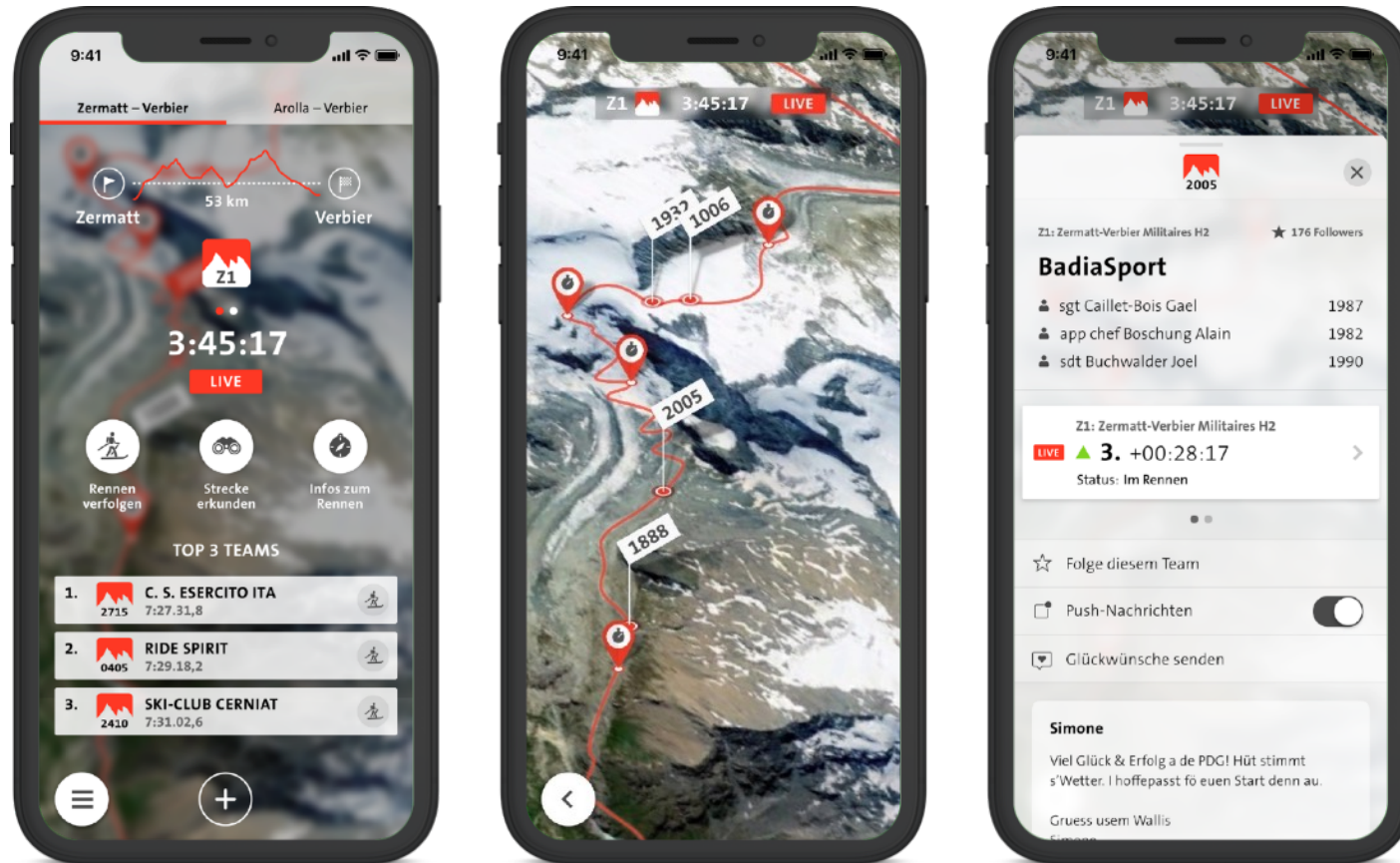


Where We Are Today

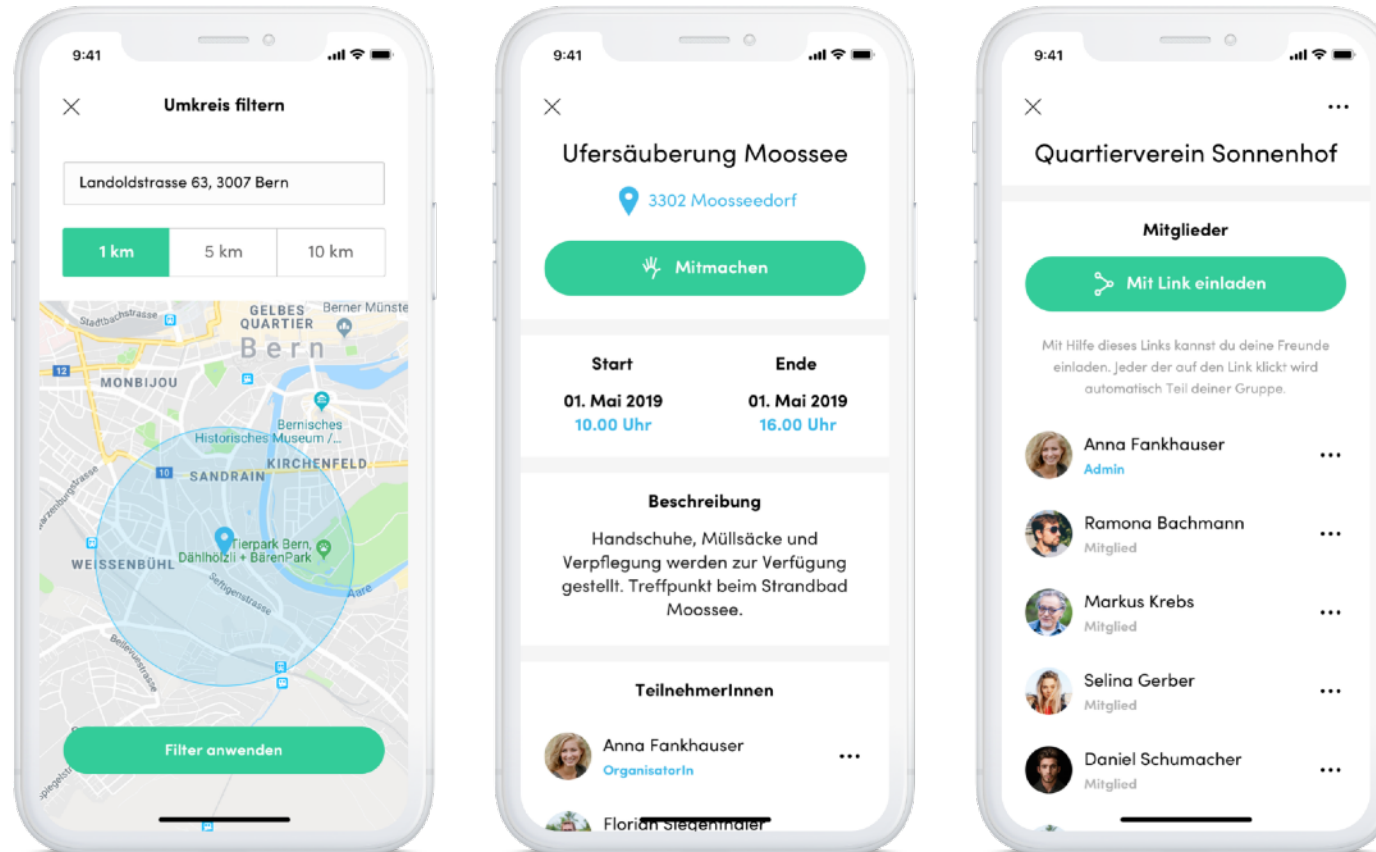
Bern Welcome



Patrouille des Glaciers



Five up



Where We Want To Go

Goals

- Improve code quality
- Make (changing) code safer
- Increase developer efficiency

Goals

- Improve code quality
- Make (changing) code safer
- Increase developer efficiency

Tools

- *Metrics*
- *Automated Tests*
- *Documentation*

How We Want To Do It

Project Phases

1. Preparation
2. Execution
3. Conclusion

Project Phases

1. Preparation
2. Execution
3. Conclusion

- Analysis
 - Overview of state and usage
- Scope
 - Identify core features
- Metrics
 - Define and capture quality

Project Phases

1. Preparation
2. Execution
3. Conclusion

- Setup
 - Fork, prepare systems
- Prioritization
 - Set a strategy
- Development
 - Select, refactor, cover, repeat

Project Phases

1. Preparation
2. Execution
3. Conclusion

- Results
 - Revisit metrics and goals
- Documentation
 - Document and reflect
- Future
 - Workflows, roadmap

Summary

Problem

Technical Debt, hard to make changes

Solution

Improve existing code base through refactoring

Goal

Easier to work on code and make further improvements

