

*Welcome*

# Continuous Everything: Visual Studio Mobile Center

Keith Ballinger, Principal Director  
Mobile Center

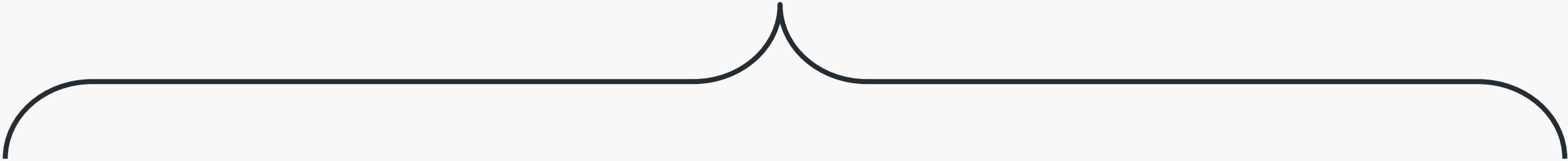
The problem with app development

# Typical Day



Code Awesome Features

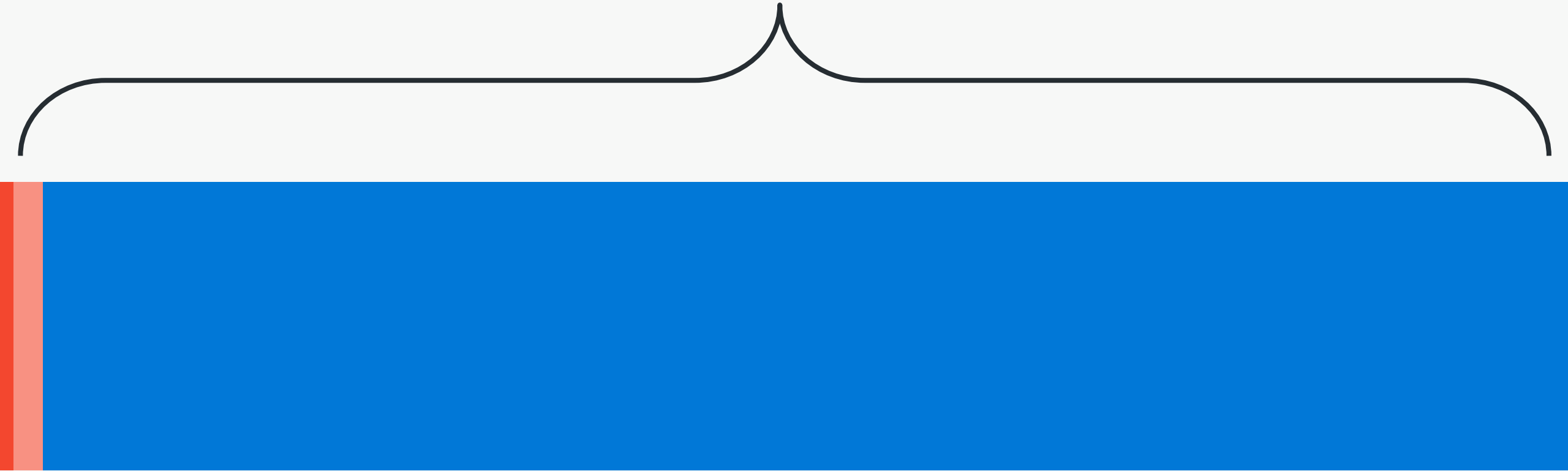
# Typical Day



The most important part of your day.

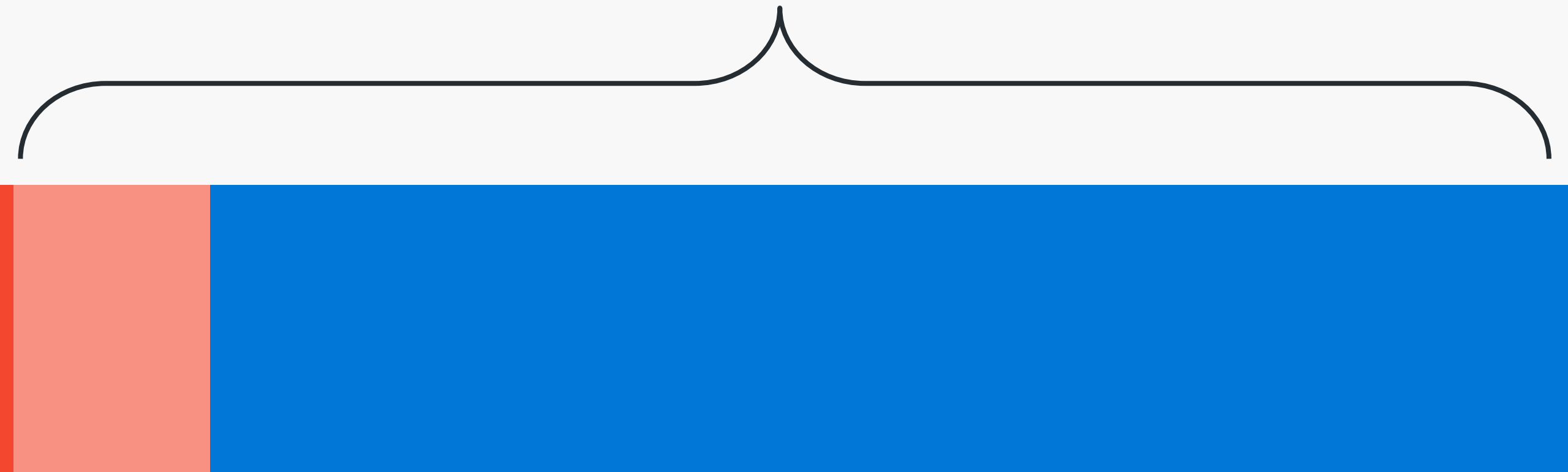


# Typical Day



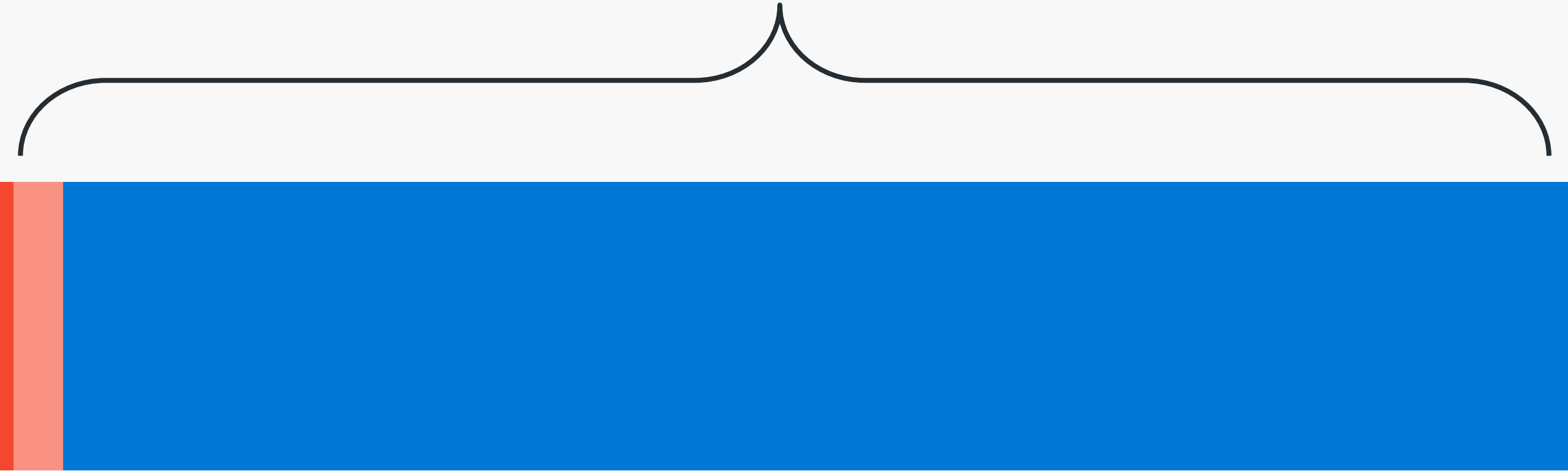
hacker news

# Typical Day



hacker news

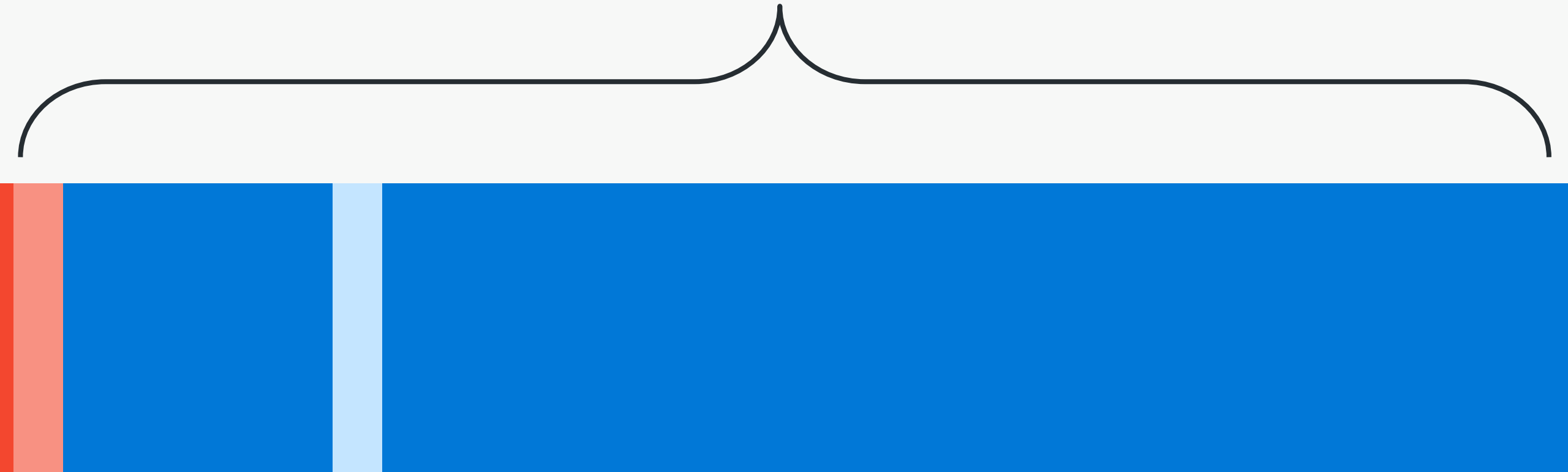
# Typical Day



hacker news

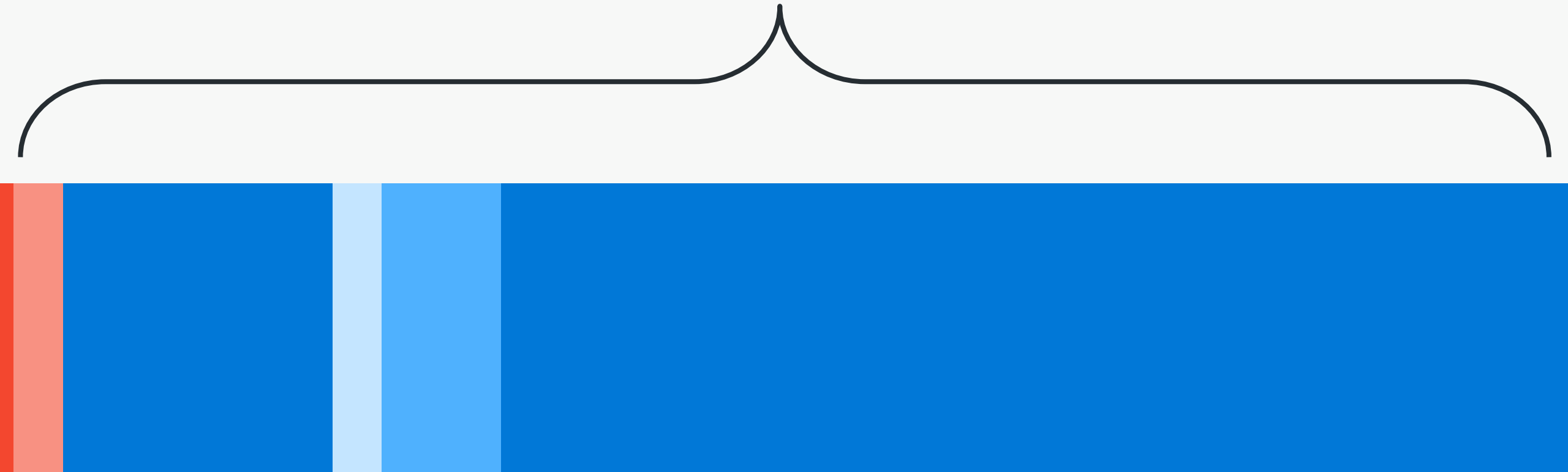


# Typical Day



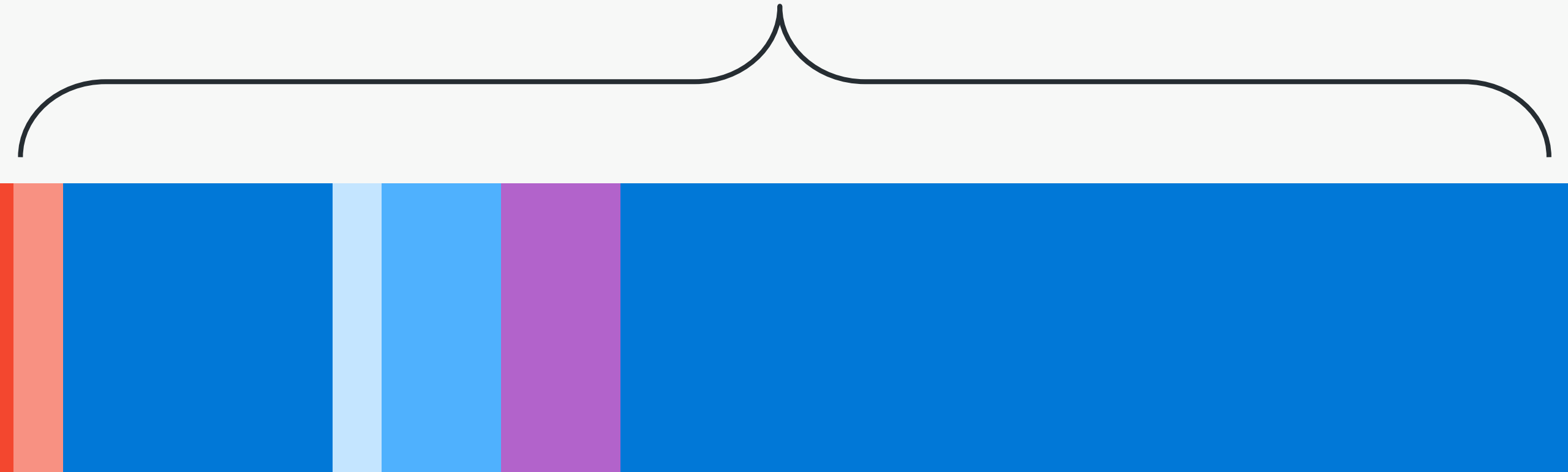
build

# Typical Day



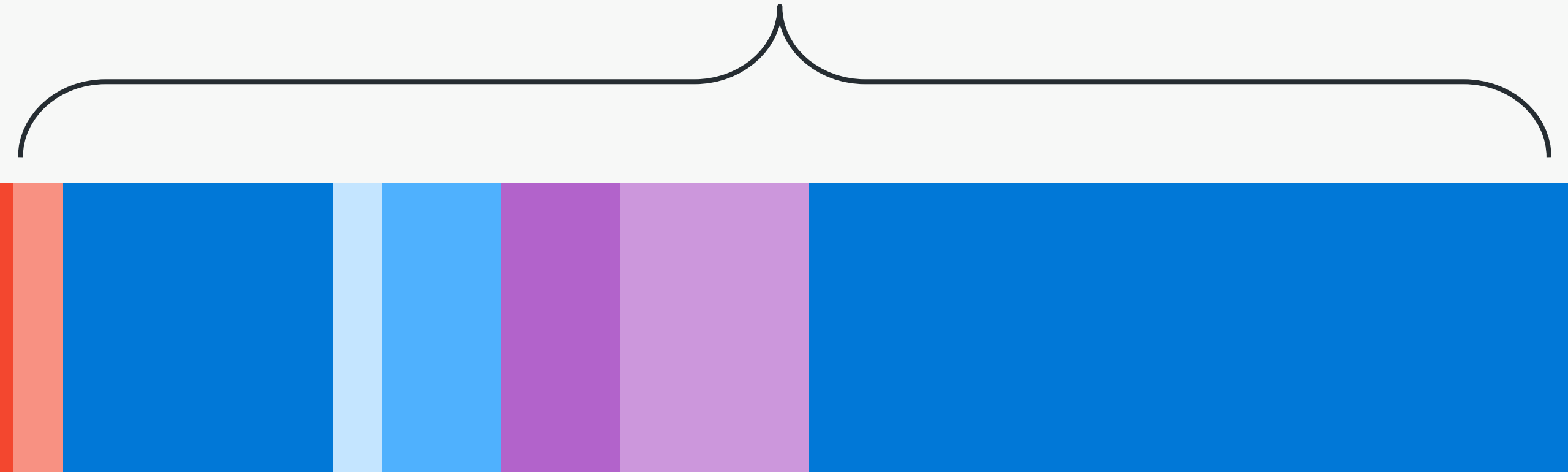
unit test

# Typical Day



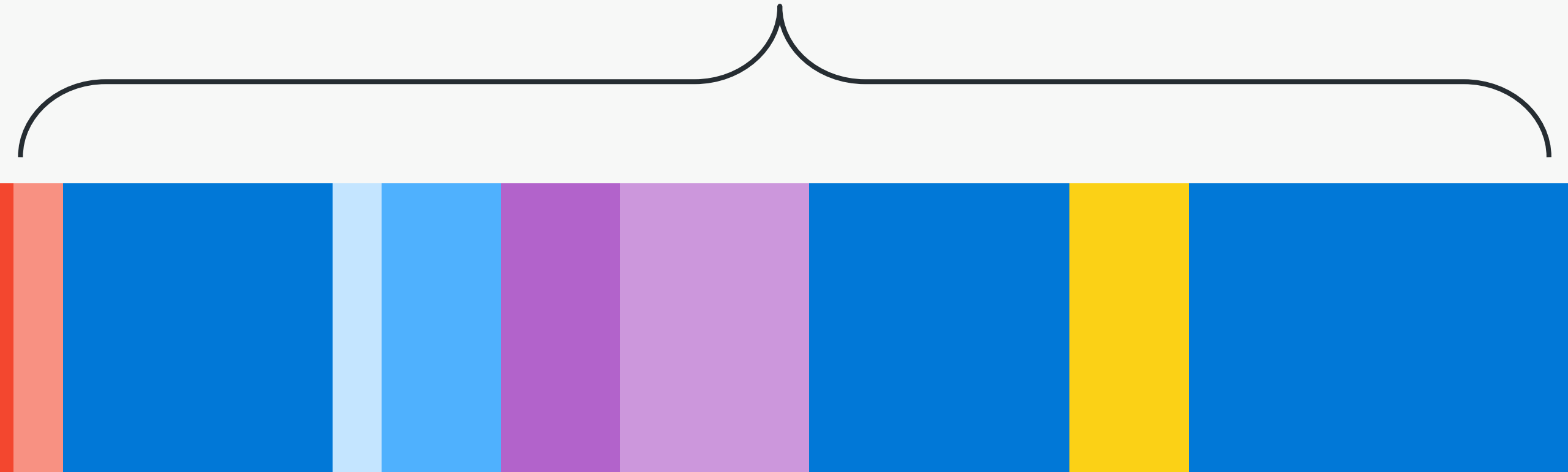
manual test

# Typical Day



beta test

# Typical Day

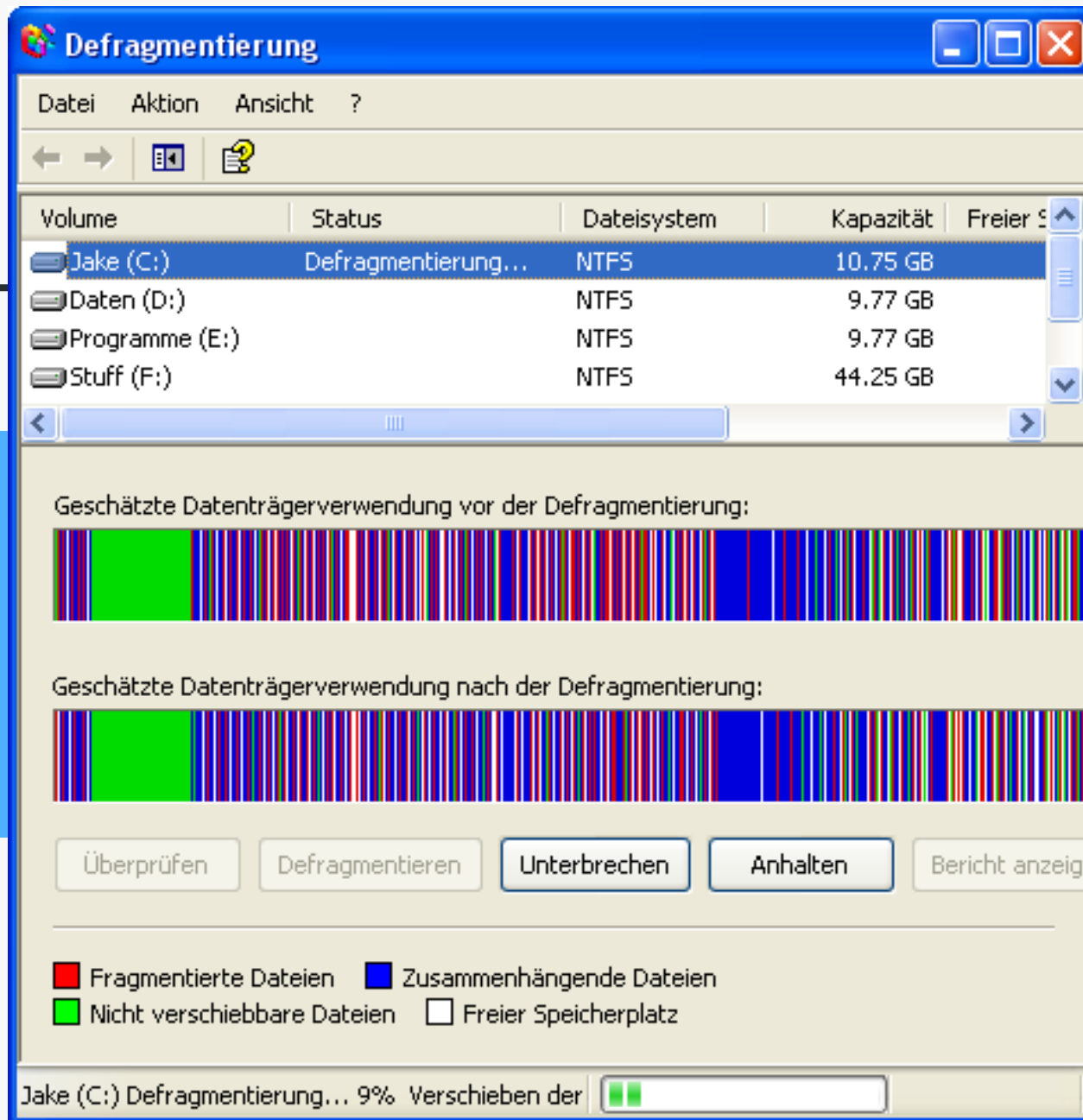


triage

# Typical Day



debug



# Typical Day

Wash.

Rinse.

Repeat.





# Typical Day





Code Awesome Features

Overhead

The problem with app development is too much time wasted

Our Mission:

Make developers more productive



HockeyApp

Distribution • Crashes • Analytics



Xamarin Test Cloud

Device Tests



Xamarin Insights

Crashes • Analytics



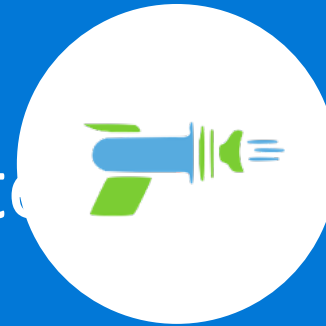
Azure Mobile Engagement

Analytics • Push



Azure App Service

Tables • Auth • Push



CodePush

Distribution

Visual Studio Mobile Center

Customers first

Let developers focus on their apps, not DevOps



# Principles



UNIX philosophy of powerful, single-purpose services that can 'pipe' together

API first

Customers own their data

Great experience across all touchpoints

Direct engagement with customers

Search



**2048**  
Thomas Dohmke

iOS



**HackerNews**  
Thomas Dohmke

iOS



**MyDriving**  
Tom Demo

iOS



**XWeather**  
Tom Demo

Android



**XWeather (iOS)**  
Colby Williams

iOS

## Mobile Center



Shawn



Myunggeun



Daniel

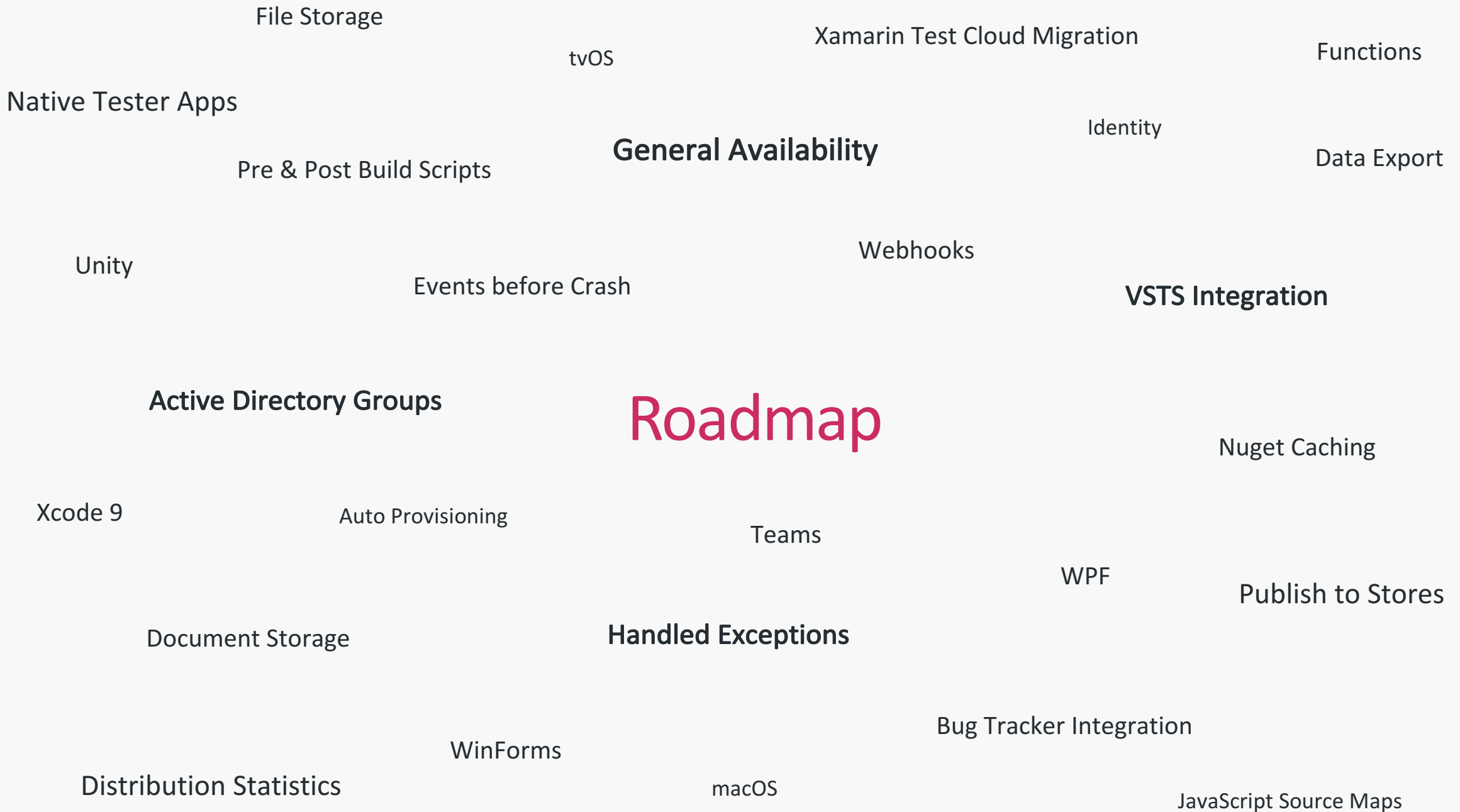
Ask us anything, or share your feedback.  
Please note that we do not monitor this  
real-time so we will get back as early as  
we possibly can.

Typically replies in a few hours

Send a message...



Connecting with the cloud



Developers can focus on delivering more value



Code Awesome Features

Overhead

Code Awesome Features

Overhead



Code Awesome Features

Overhead

Sign up today

[aka.ms/mobile-center](https://aka.ms/mobile-center)

Q & A



June Cho  
Enterprise Mobile App Dev  
App Innovation | Global Black Belt

# Agenda

Time	Topic	Speaker
9:00-9:30am	Welcome Statement	Keith Ballinger
9:30-10:30am	Setup, Build, and Test	Nikhil Keeppanasseril and Sweekriti Satpathy
10:30-10:45am	BREAK	
10:45-11:45am	Distribute, Push, Analytics, and Crash	Derek Loar, Trevor Moore, and Dimah Zaidalkilani
11:45-12:45pm	Working Lunch	Chris Reichard
12:45-1:30pm	Machine Learning	Anuj Bhatia
1:30-2:15pm	Cognitive Services	Michael Watson
2:15-2:30pm	BREAK	
2:30-4:00pm	Hands-On with Sentiment App	Mahdi Alirezaie
4:00-5:00pm	Closing Statement   Gifts	June Cho and ArcTouch

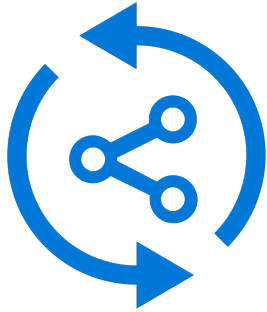


Nikhil Keeppanasseril  
App. Innovation Specialist  
Global Black Belt

# Getting Started

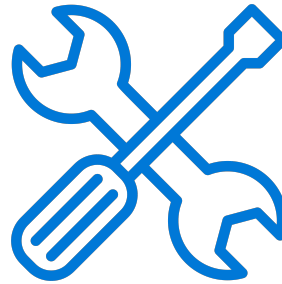
1. Log in to <https://www.visualstudio.com/vs/mobile-center/>
2. Connect directly with Github, your Microsoft login or new sign-up
3. Add new App → choose OS/platform
4. Build:
  1. Select a service
  2. Select Branch
  3. Configure and build

# Mobile Center: Build



## **Build-on-push**

With just a few steps automatically build apps with every commit, and generate packages to test and distribute



## **Work with existing tools**

Connect existing repositories in GitHub, Bitbucket, and Visual Studio Team Services with just a few clicks



## **Build securely in the cloud**

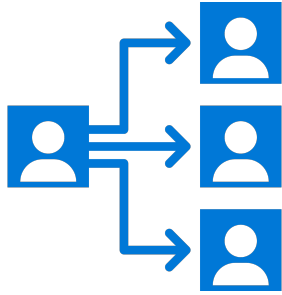
Each build is run on a separate, clean virtual machine hosted on our secure cloud servers





Trevor Moore  
App. Innovation Specialist  
Global Black Belt

# Mobile Center: Distribute



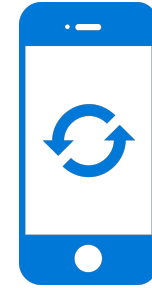
## **Instantly distribute apps**

Quickly get apps in the hands of your beta testers on multiple device platforms



## **Create targeted distribution groups**

With categorized groups of users, send specific builds to specific groups and devices



## **Send in-app updates**

Notify beta testers as soon as a new build is available, right inside the app

# Getting Started

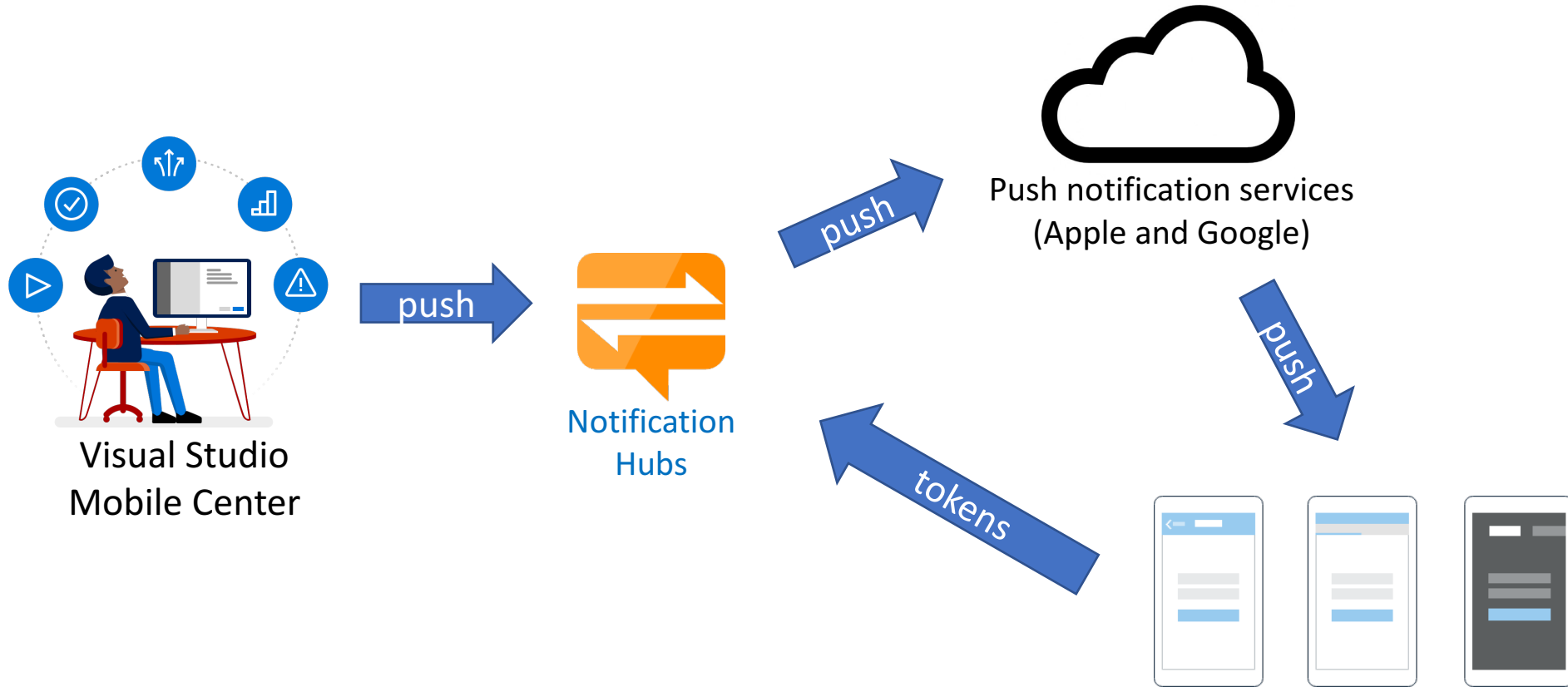
Distributing with Mobile Center is easy, and only requires a few steps. No need for an SDK. Just the application binary.

1. Add users to grant access to all releases.
2. Create Distribution Groups to manage access.
3. Upload a new application release.
  - At the completion of the upload an email will be sent to all users of the app to notify them of the new release.
4. Install the release onto your device by clicking on the link in the email.
5. Enable In-App Updates to help your users stay always on the latest release.



Derek Loar  
App. Innovation Specialist  
Global Black Belt

# Mobile Center: Push Notifications



# Mobile Center: Push Notifications



## **Fast and easy to setup**

Just a few lines of code in your app. No need to specify format for iOS, Android and Windows.



## **Send to specific audiences**

Target push notifications to specific users or devices



## **Fast and easy to send**

Three easy steps: Compose, Target, and Review.  
No need for technical skills!



# Visual Studio Mobile Center

Sweekey Satpathy  
MobCAT Ninja

# Importance of Testing

- **Verify App Integrity**
  - UI loads as expected on different sized screen
  - App performs as expected on different CPUs
- **Accessible UI**
  - Features work as per User Flows
  - Useable Functionality
- **Testing as part of CI**
  - Reliable Development Cycle



# Mobile Center: Test



## **Release faster**

Shrink release times significantly and push new apps out faster



## **Ship high quality apps**

Ensure the highest quality user experience that keeps users continuously engaged



## **Engage a broad audience**

Test on a broad range of devices to make sure apps work on *your* users' devices



## **Create new features**

Spend less time fixing bugs, and more time creating value

# Supported Testing Platforms

- **Xamarin.UITest**

- Tests written in C#
- Supports Xamarin apps, Native (Android, iOS) Apps, React Native Apps, Hybrid Apps

- **XCUITest**

- Tests written in Swift
- Supports native iOS apps

- **Espresso**

- Tests written in Java
- Supports native Android apps

- **Appium**

- Tests written in Java
- Supports native (Android and iOS) apps , Xamarin Apps, React Native Apps, Hybrid Apps