AUTH & DATABASE

AngularFire

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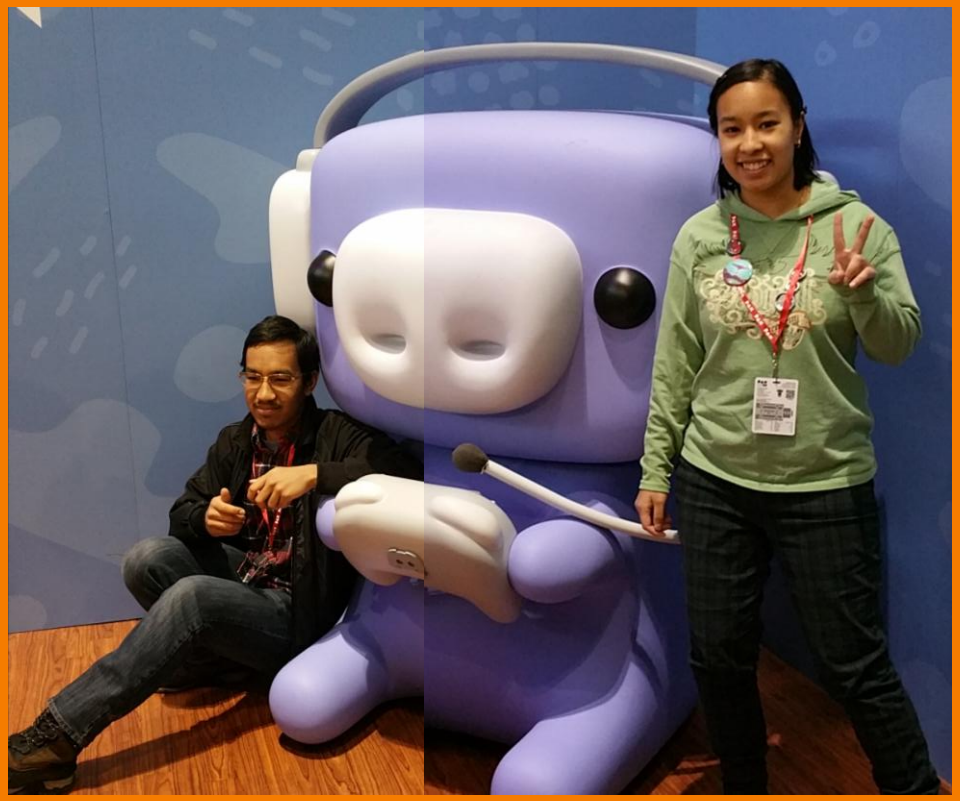
HELLO WORLD!



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1

BUILD FOR MOBILE

Progressive Web App

2

USER INTERFACE

Material

3

AUTH & DATABASE

Firebase

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AngularFire

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AngularFire
WHAT is it ?
HOW can I use it ?
WHY should I care ?

Why should I care about REALTIME DATA ?

Need

Demand

1. Up to date information

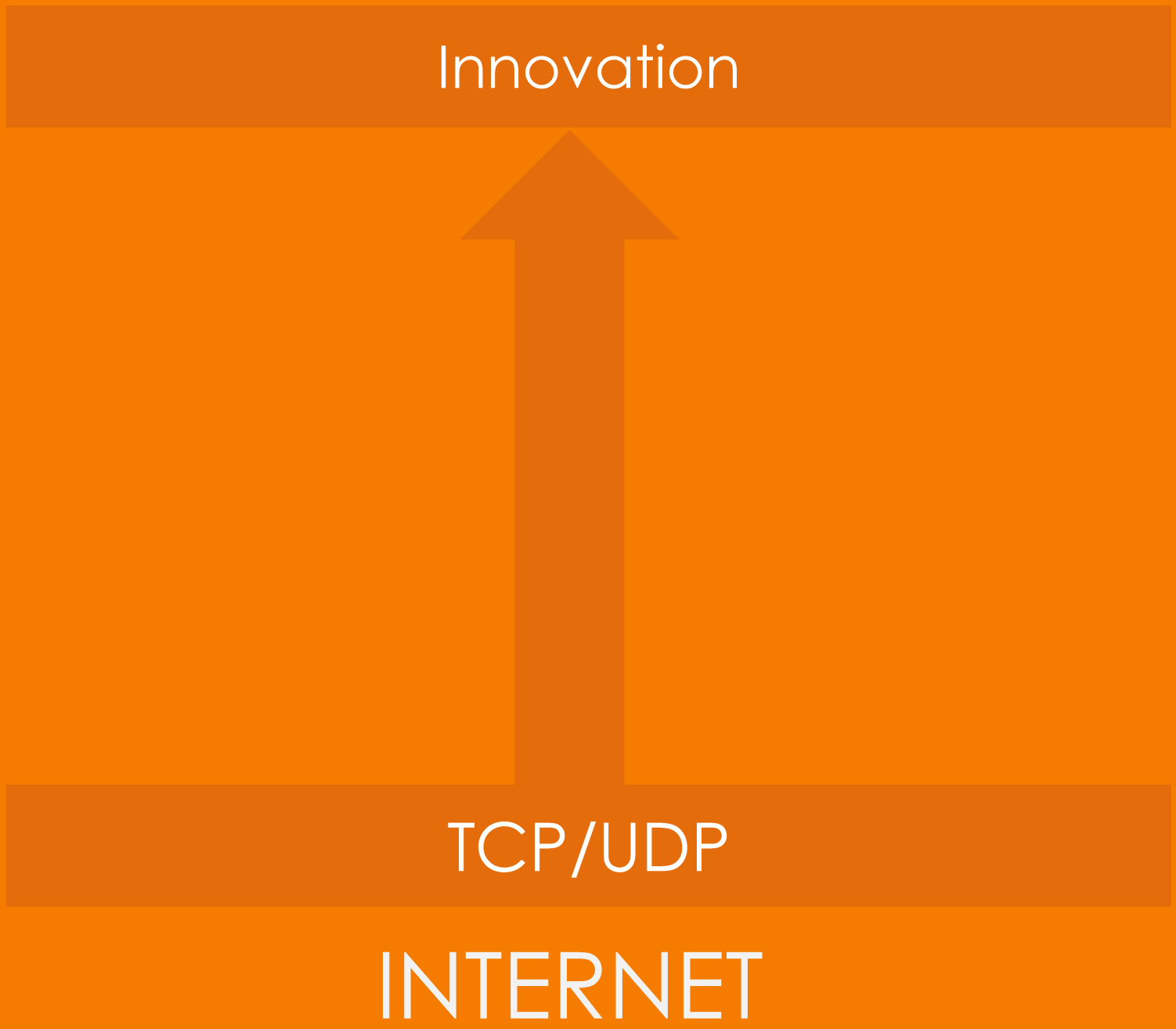
2. Interaction to maintain engagement (UX)

NOT New Need

Demand

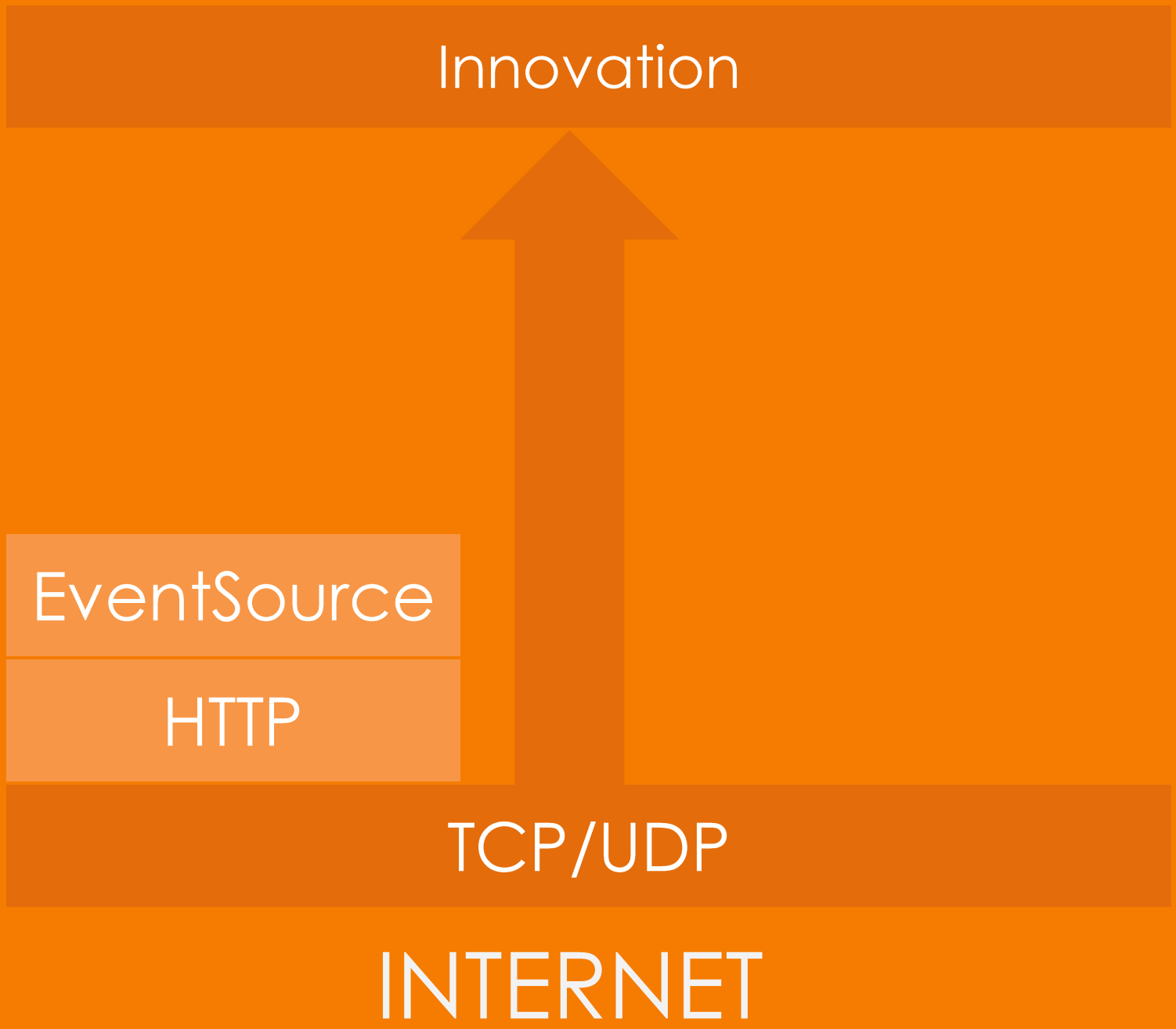
1. Up to date information

2. Interaction to maintain engagement (UX)


Innovation
TCP/UDP
INTERNET

TCP/UDP

INTERNET


Innovation
EventSource
HTTP
TCP/UDP
INTERNET

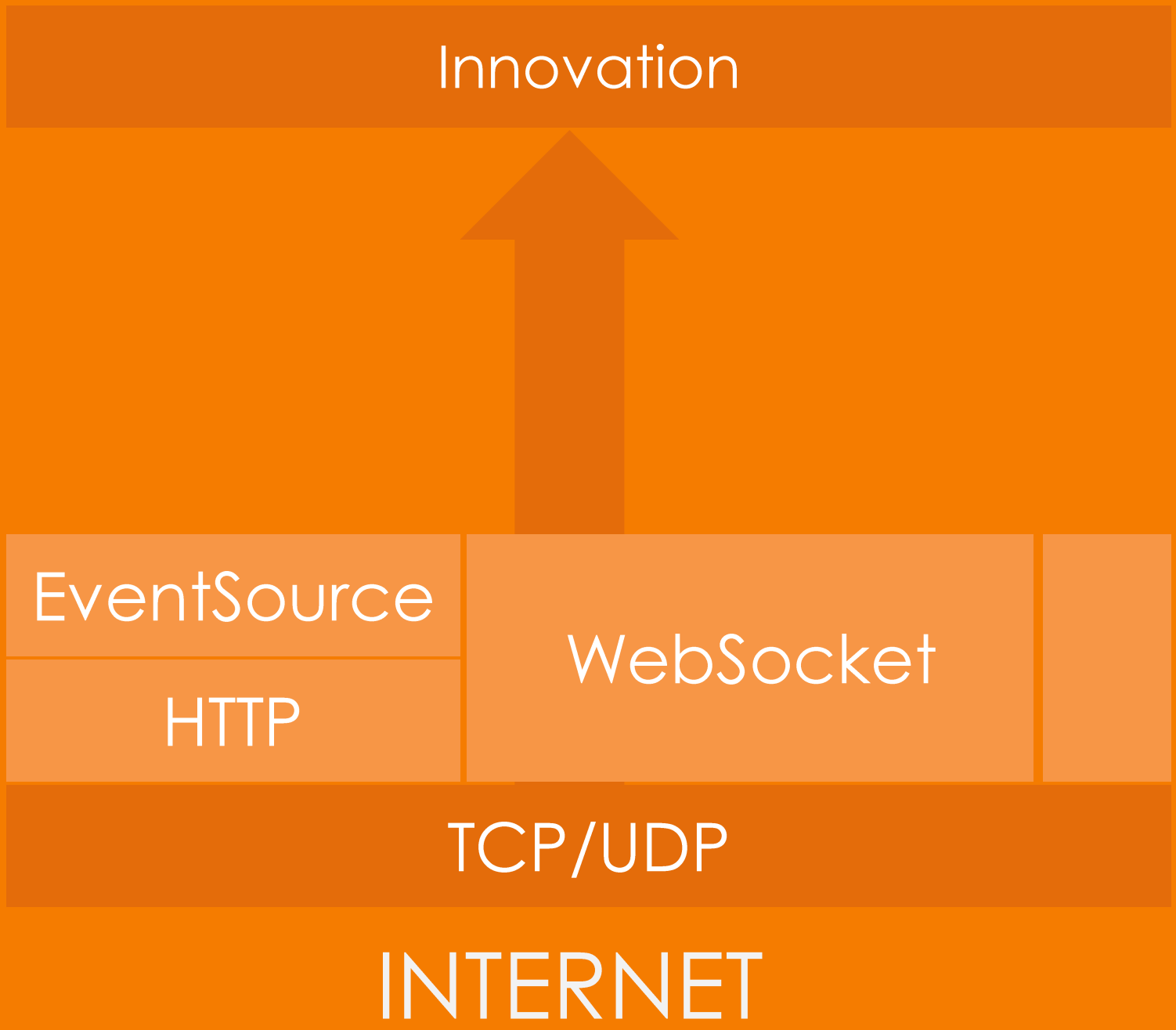
Innovation

EventSource

HTTP

TCP/UDP

INTERNET


Innovation
EventSource
HTTP
WebSocket
TCP/UDP
INTERNET

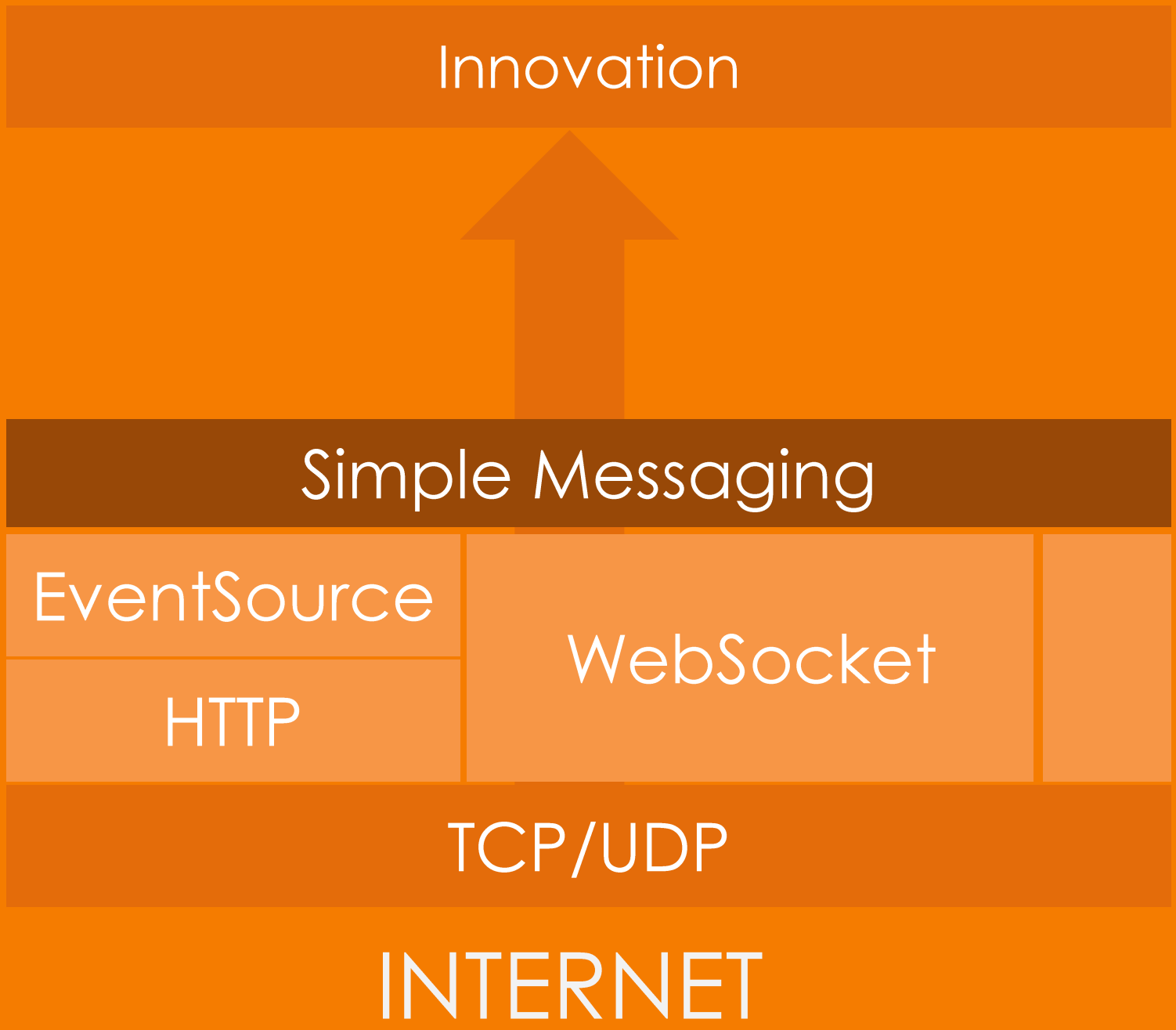
EventSource

HTTP

WebSocket

TCP/UDP

INTERNET


Innovation
Simple Messaging
EventSource
HTTP
WebSocket
TCP/UDP
INTERNET

Innovation

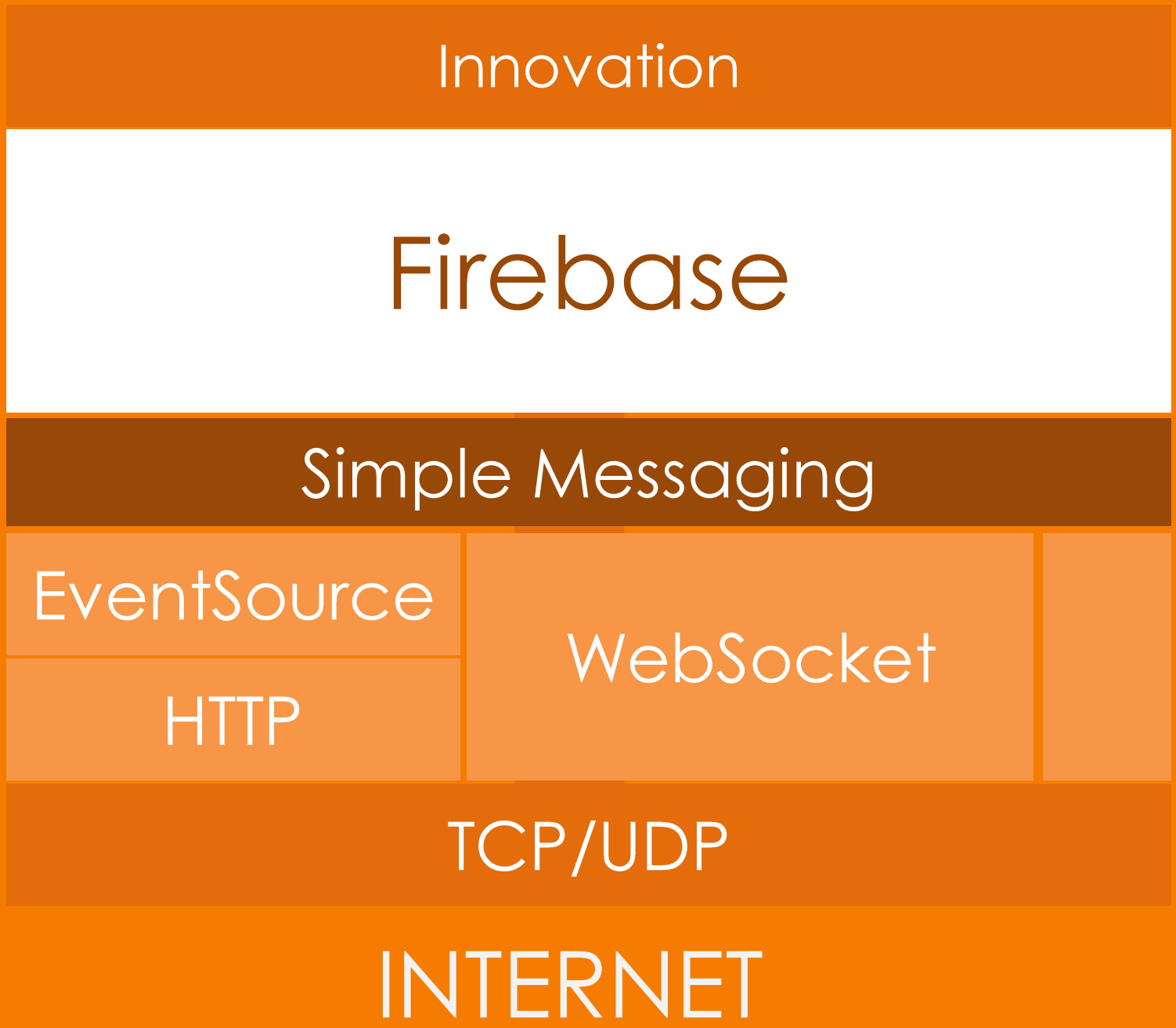
Simple Messaging

Client

```
var ws = new WebSocket('ws://localhost/');

ws.onmessage = function(evt) {
  var data = JSON.parse(evt.data);

  if(data.action) {
    // "5
  }

  else if(data.peerId) {
    var connectTo = data.peerId;
  }
};
```

Server

```
// server
server.on('connection', function(socket){

  socket.send(JSON.stringify({action: 'high-5'}));
});
```


Innovation
Firebase
Simple Messaging
EventSource
HTTP
WebSocket
TCP/UDP
INTERNET

Real Time Revolution

“I’m not sure I believe that there is such a thing as “realtime apps” any more. Apps either update instantly and smoothly, or they appear broken. I feel that “realtime” as a feature has moved down the Kano graph. It is much more of an expectation than an “exciter”.”

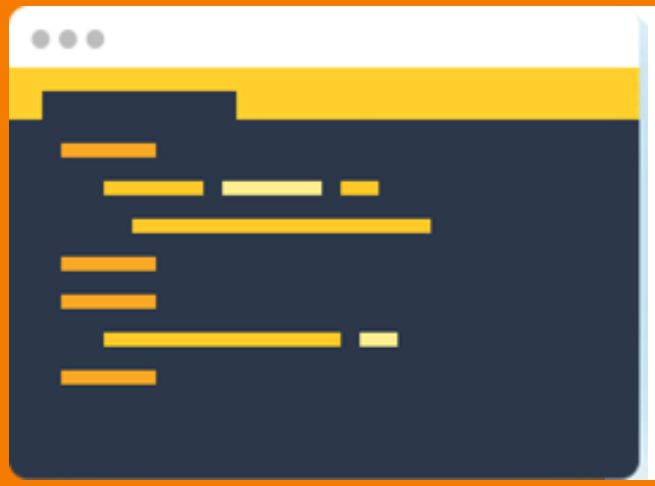
~Max Williams, CEO Pusher

Real Time is an expectation!

What does FIRE mean anyway?

Firebase?

an area in a war zone in which artillery can be massed to provide heavy firepower in support of other military units.



Develop
better Apps

Grow
your Audience

Firebase is a collection of cross-platform tools to develop & test your app, grow & engage your users.

HOW do I use Firebase?

Let’s make a game!

Requirements:

Players can log in to save their music boxes

Players can create new music boxes

Changes are automatically saved

Players can access their saved music boxes

Only the player that created the box can write to it, but anyone can read them

Authentication:

Players can log in
to save their game

Adding data:

Players can create new musical boxes

Updating data:

Updates should automatically be saved to the database

Data Retrieval:

Players can access saved music boxes

Data Security Rules:

Only a logged in player can write to their data

To use Firebase:

1) Setup the firebase database
2) Use the firebase clientside library to listen to db etc

WHAT is AngularFire?

AngularFire is a library of bindings that makes using Firebase in your App smoother

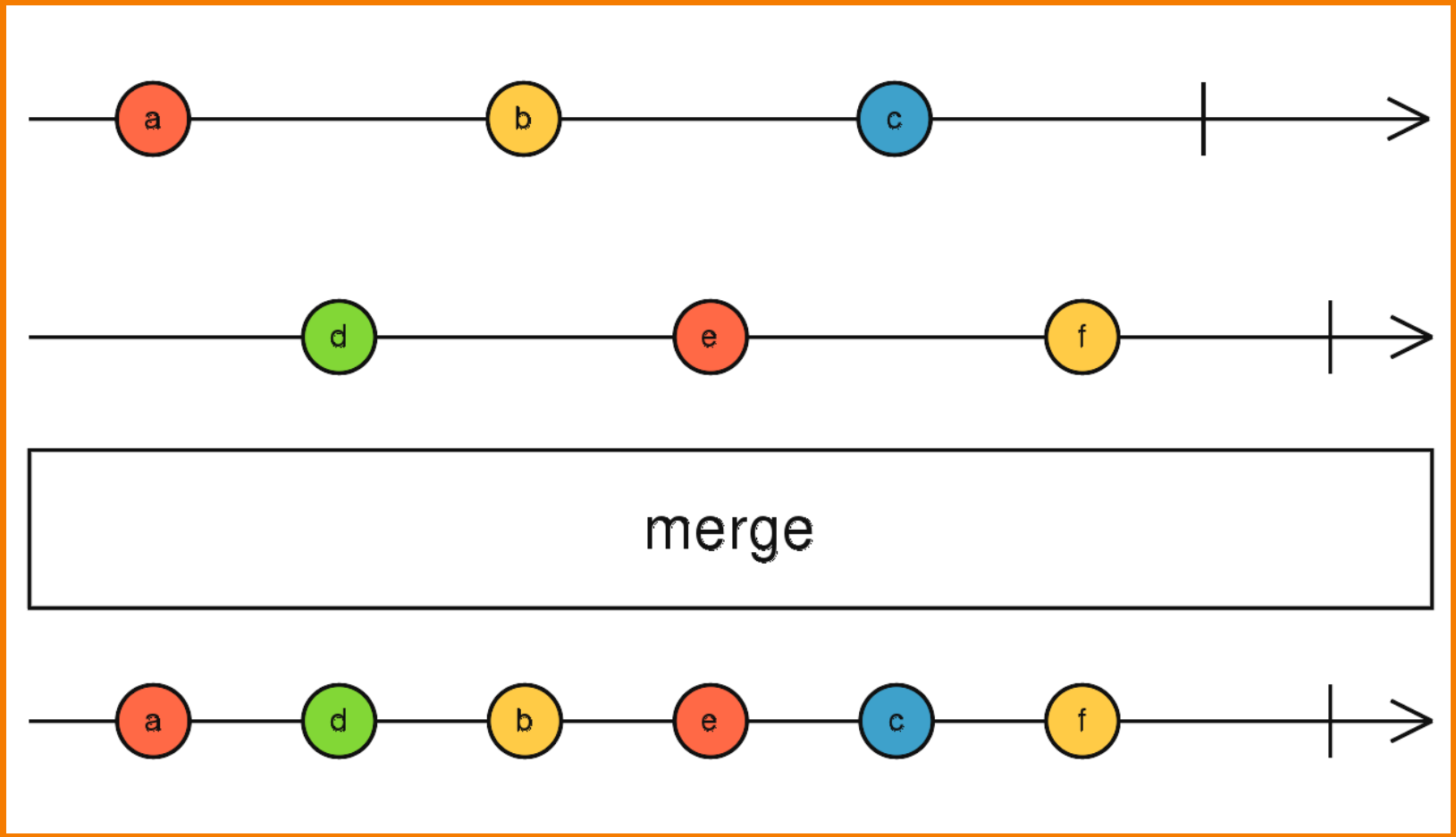
HOW
can I use AngularFire?

QUICK REVIEW

Observables

The Observable object represents a push based collection

The Observer and Observable interfaces provide a generalized mechanism for push-based notification, also known as the observer design pattern. The Observable object represents the object that sends notifications (the provider); the Observer object represents the class that receives them (the observer).


a
b
c
d
e
f
merge
a
d
b
e
c
f

```
const sourceOne = Rx.Observable.create(observer => {
  observer.onNext(1);
  observer.onNext(2);
  observer.onNext(3);
})
sourceOne.subscribe(val => console.log('SourceOne:', val));
```

```
const sourceTwo = Rx.Observable.interval(2000);
sourceTwo.subscribe(val => console.log('SourceTwo:', val));
```

```
const {Component} = ng.core;
const {bootstrap} = ng.platform.browser;

@Component({
    selector: 'my-app',
    template: `
        <section>
          <h1>{{number$ | async}}</h1>
        </section>
    `
})
class AppComponent {
  constructor(){
    this.number$ = Rx.Observable.interval(1000);
  }
}

bootstrap(AppComponent);

```

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To use AngularFire:

1) npm install angularfire2
2) Import/setup your project
3) angularFireDatabase.list('item')
4) angularFireAuth.authState

WHY
should I use AngularFire?

AngularFire is awesome because:

- Easy user Authentication
- Real time Database
- Speeds up Development
- ...

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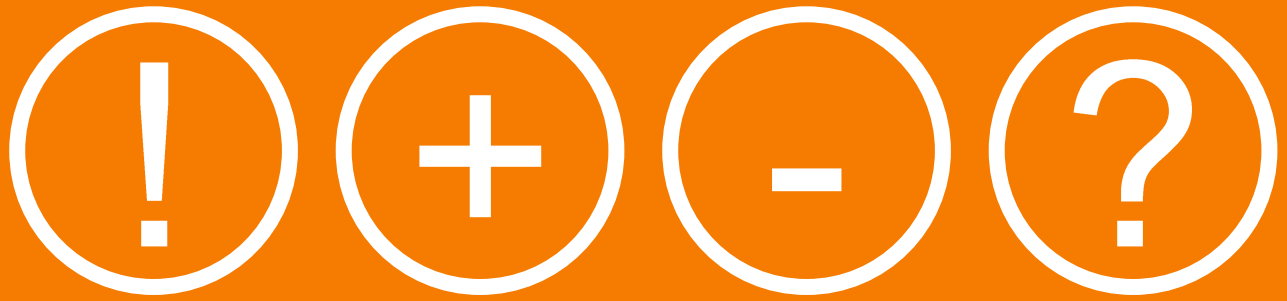
Is AngularFire2+ READY to use in Prod?

AngularFire is in 4.0.0-rc.1

- https://github.com/angular/angularfire2
- https://firebase.google.com/

THANK YOU!



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