

PEBBLENYC

TIMELINE: 0 TO 24



OTHER PEBBLE APPS I'M WORKING ON...

venmo

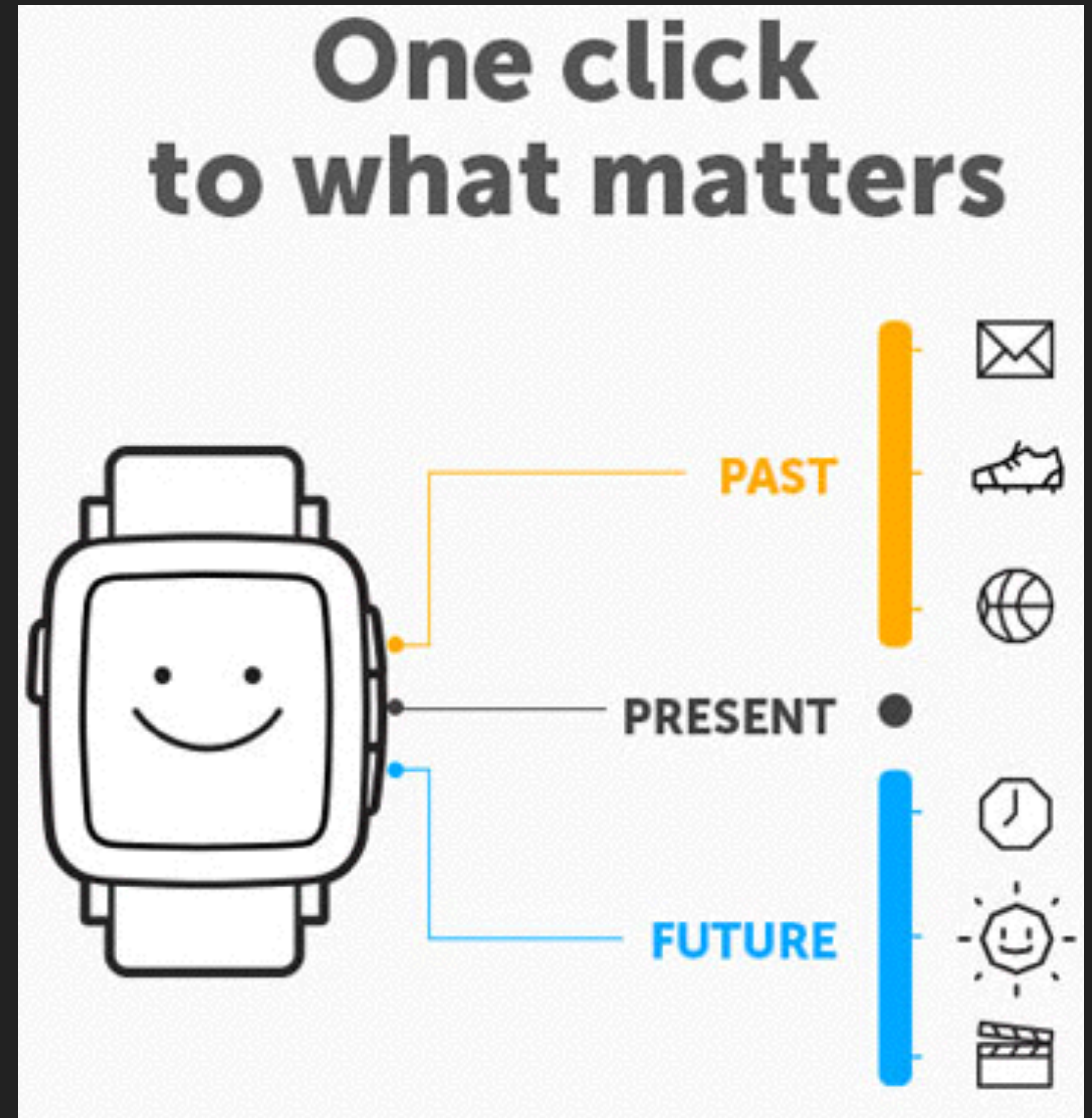


WHAT IS TIMELINE?

WHAT IS TIMELINE?

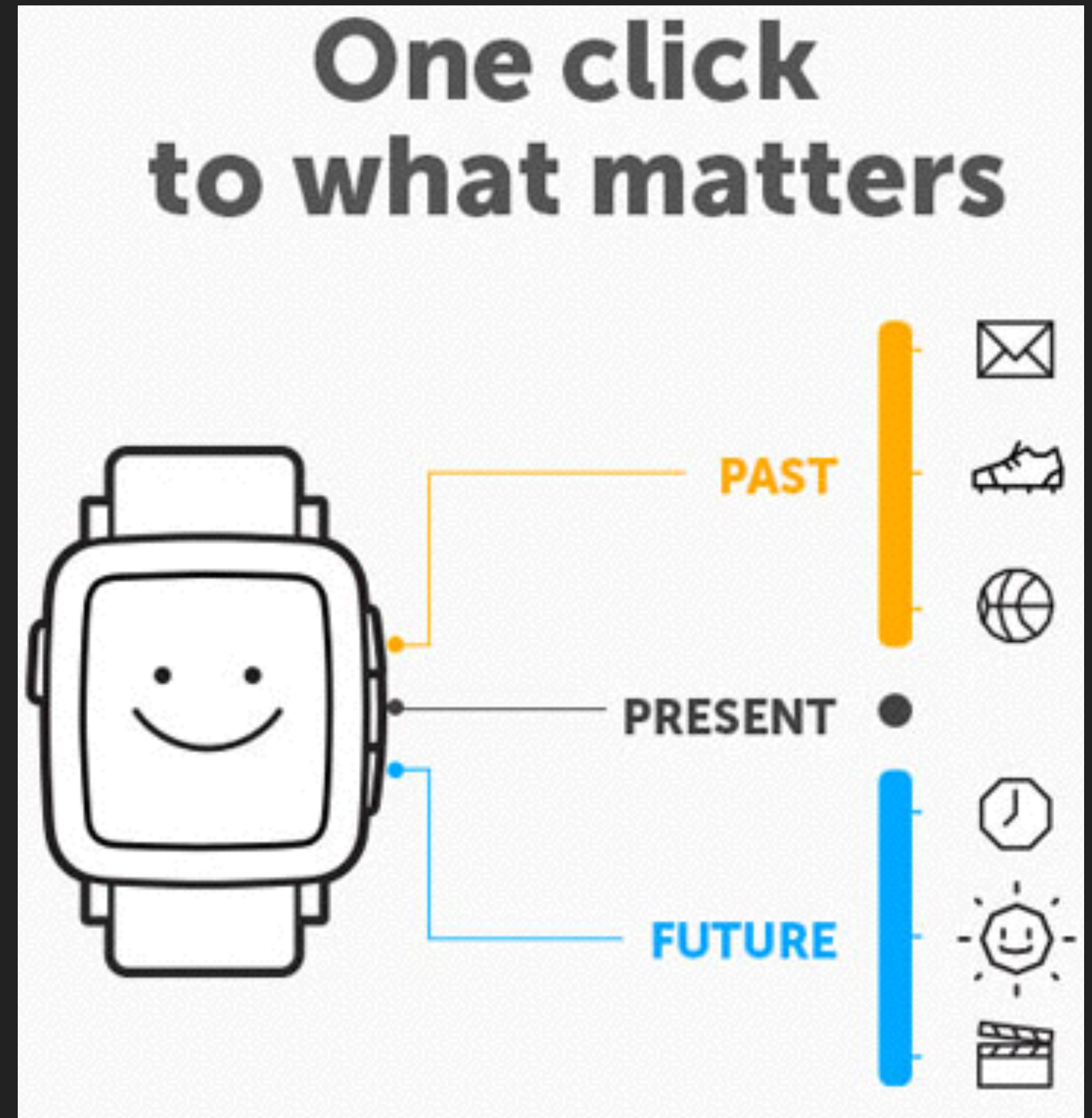
- ▶ 2 days in the Past* and 2 days in the Future
- ▶ Available on every Pebble with Pebble OS 3+
- ▶ Notifications from Web services
- ▶ Calendar
- ▶ Alarms
- ▶ Sports Scores via ESPN
- ▶ Weather
- ▶ Health Activities Summary

*Past is being removed in Pebble OS 4 later this year



WHAT IS TIMELINE?

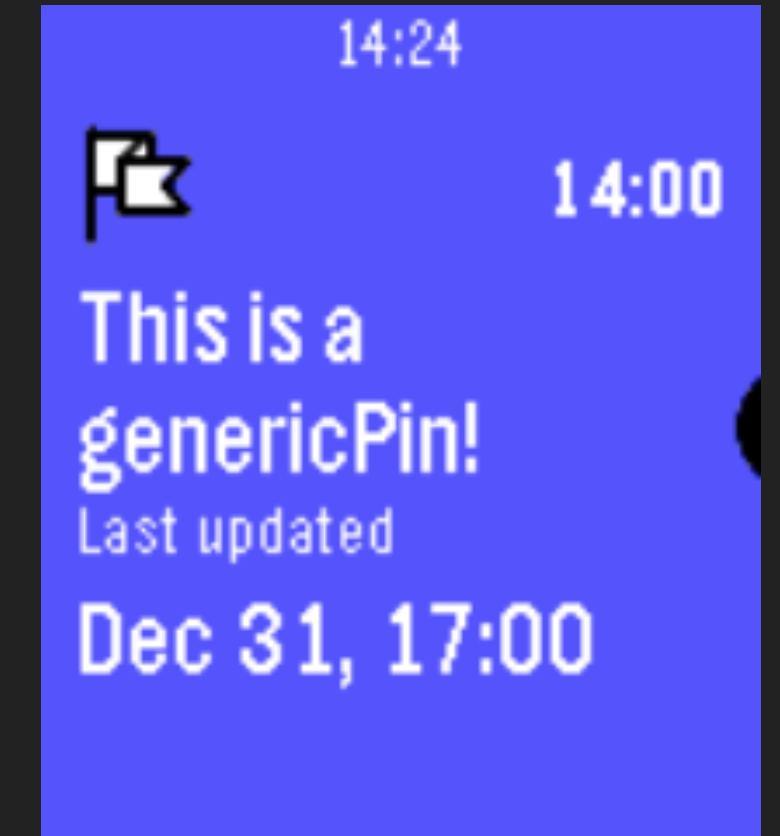
- ▶ Collection of JSON Objects
- ▶ RESTful Web Service
- ▶ Part of PebbleKit.JS / Pebble.JS
- ▶ 2 Contexts (Sandbox / Production)
- ▶ Layouts Available for different Data Types
- ▶ Highly (but not infinitely) Customizable
- ▶ Pins can be updated on the fly
- ▶ Variable Delivery Time (Up to 15 Minutes)



TIMELINE PIN ANATOMY

BASIC PIN

```
{  
  "id": "example-pin-generic-1",  
  "time": "2016-06-2T18:00:00Z",  
  "layout": {  
    "type": "genericPin",  
    "title": "Hello World",  
    "tinyIcon": "system://images/NOTIFICATION_FLAG"  
  }  
}
```



TIMELINE PIN ANATOMY

LAYOUT OBJECT

Field	Type	Function
<code>type</code>	String	The type of layout the pin will use. See Pin Layouts for a list of available types.
<code>title</code>	String	The title of the pin when viewed.
<code>subtitle</code>	String	Shorter subtitle for details.
<code>body</code>	String	The body text of the pin. Maximum of 512 characters.
<code>tinyIcon</code>	String	URI of the pin's tiny icon.
<code>smallIcon</code>	String	URI of the pin's small icon.
<code>largeIcon</code>	String	URI of the pin's large icon.

TIMELINE PIN ANATOMY

PIN LAYOUT TYPES

```
{  
  "id": "example-pin-generic-1",  
  "time": "2016-06-2T18:00:00Z",  
  "layout": {  
    "type": "genericPin",  
    "title": "Hello World",  
    "tinyIcon": "system://images/NOTIFICATION_FLAG"  
  }  
}
```


TIMELINE PIN ANATOMY

PIN LAYOUT TYPES



Generic



Calendar



Sports



Weather

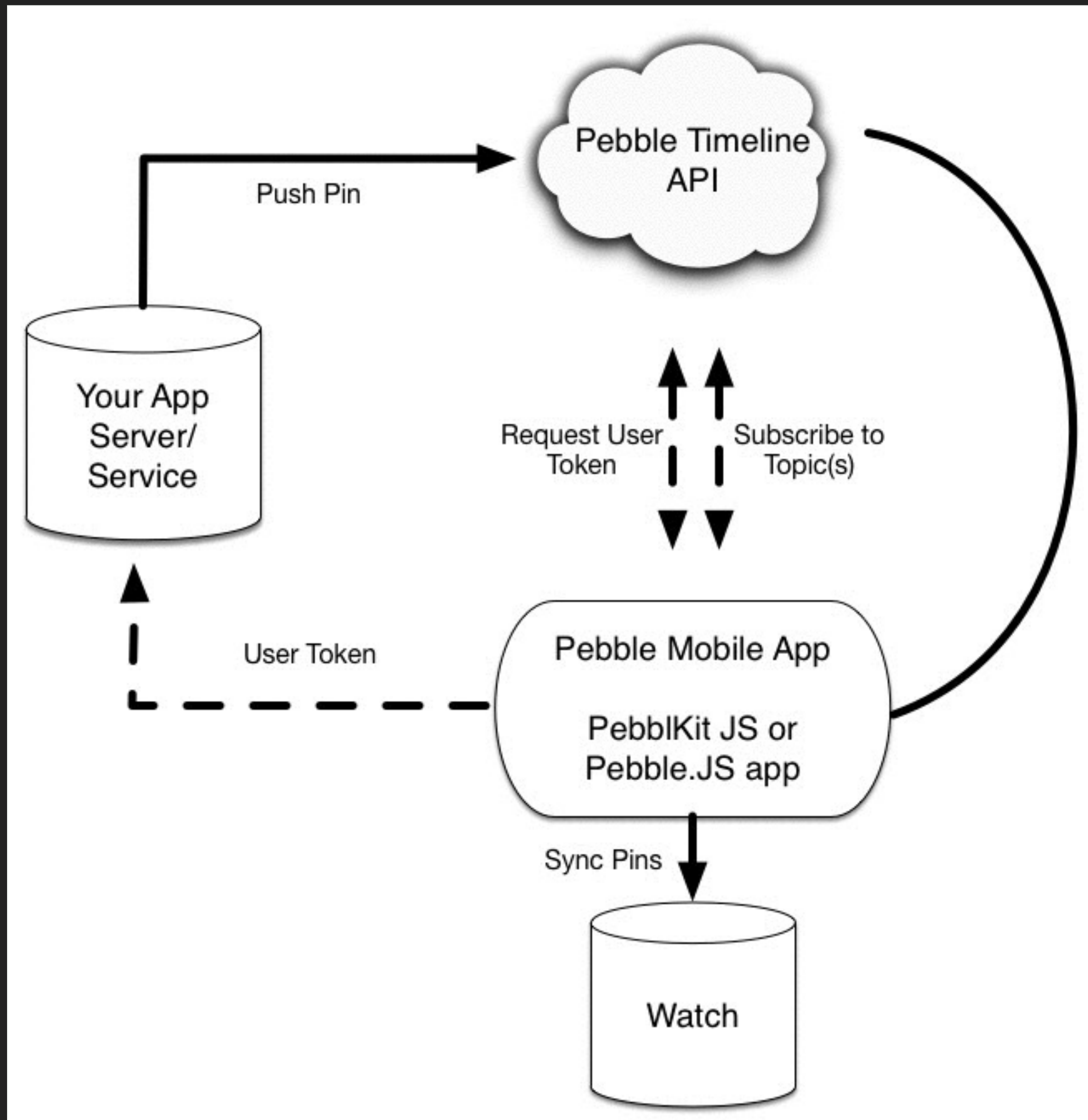
TIMELINE PIN ANATOMY

PIN NOTIFICATION

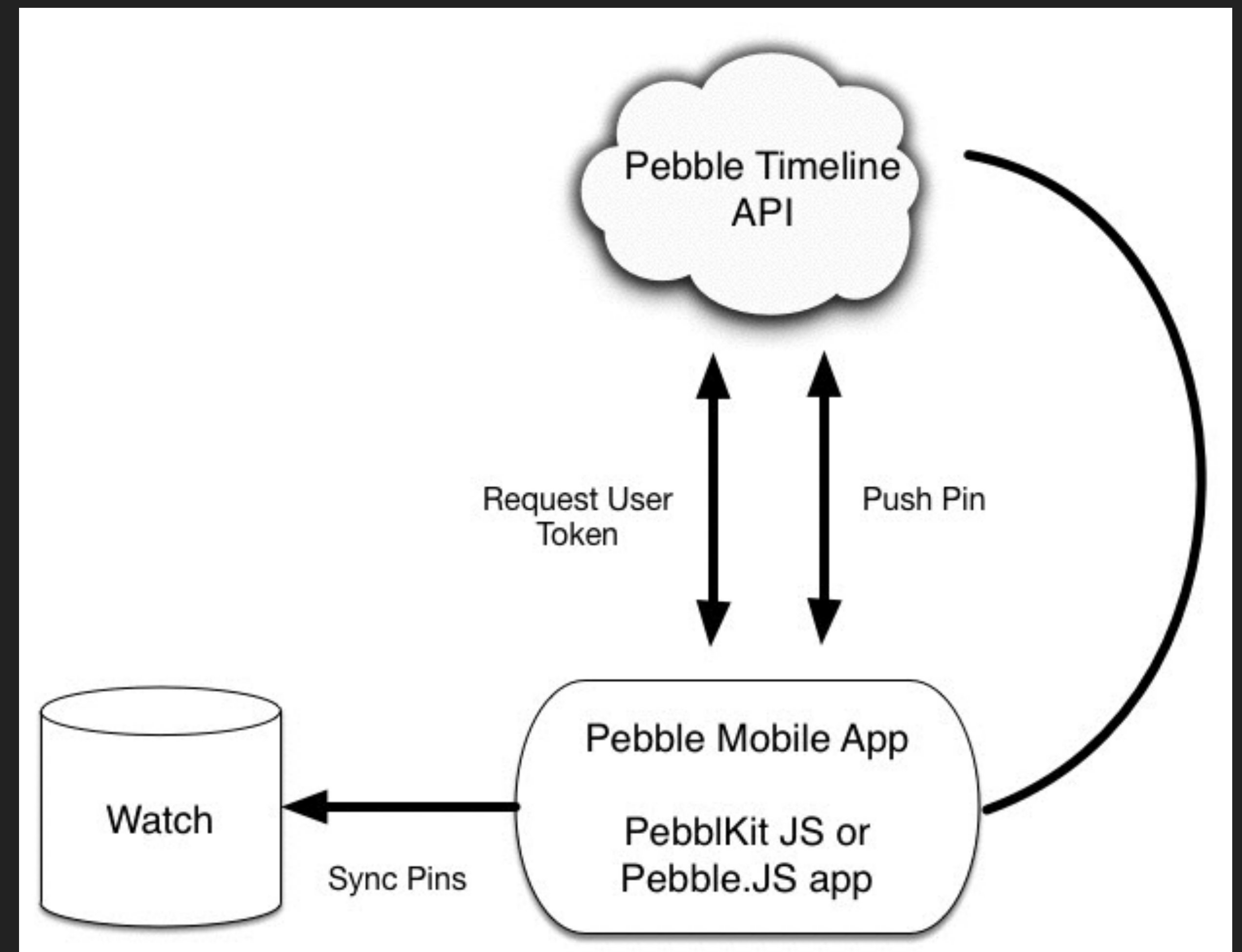
```
...
  "createNotification": {
    "layout": {
      "type": "genericNotification",
      "title": "Notification!",
      "tinyIcon": "system://images/NOTIFICATION_FLAG",
      "body": "A wild pin has appeared!"
    }
  }
}
```

TIMELINE ARCHITECTURE

CLIENT/SERVER

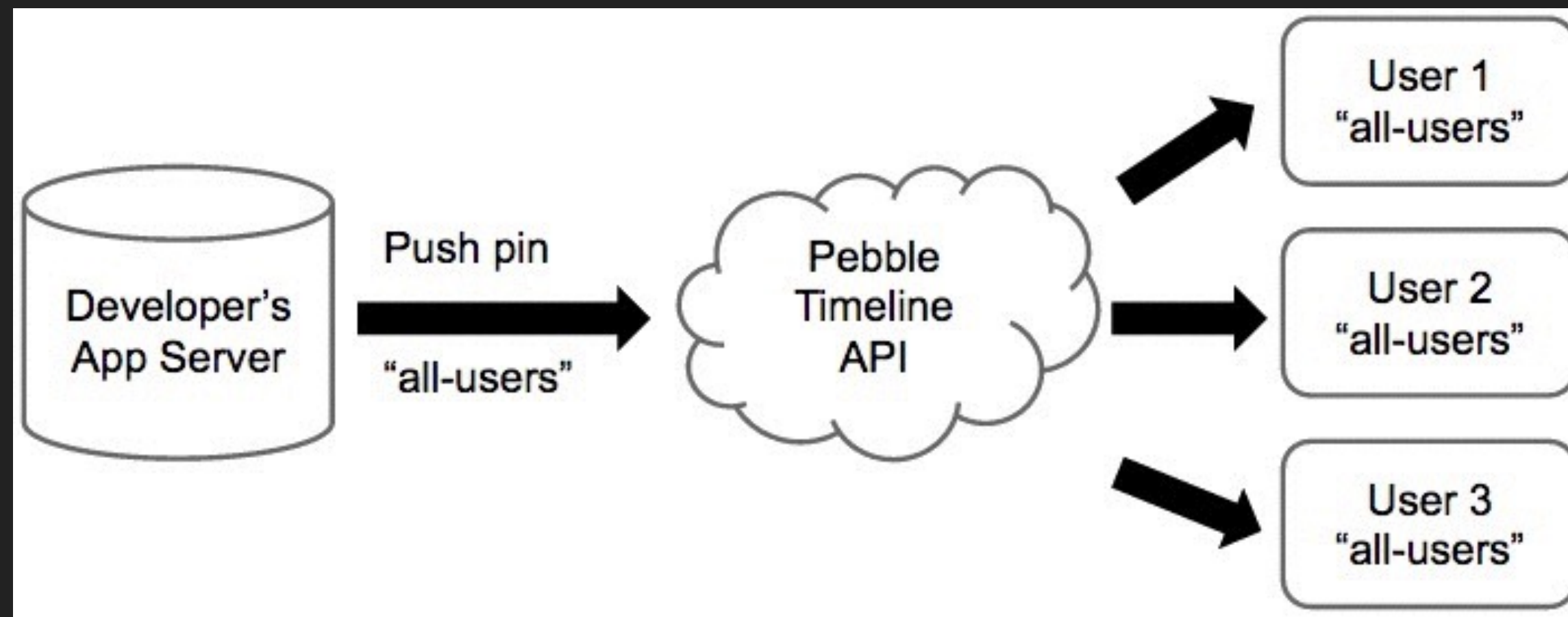


CLIENT (WATCH) ONLY

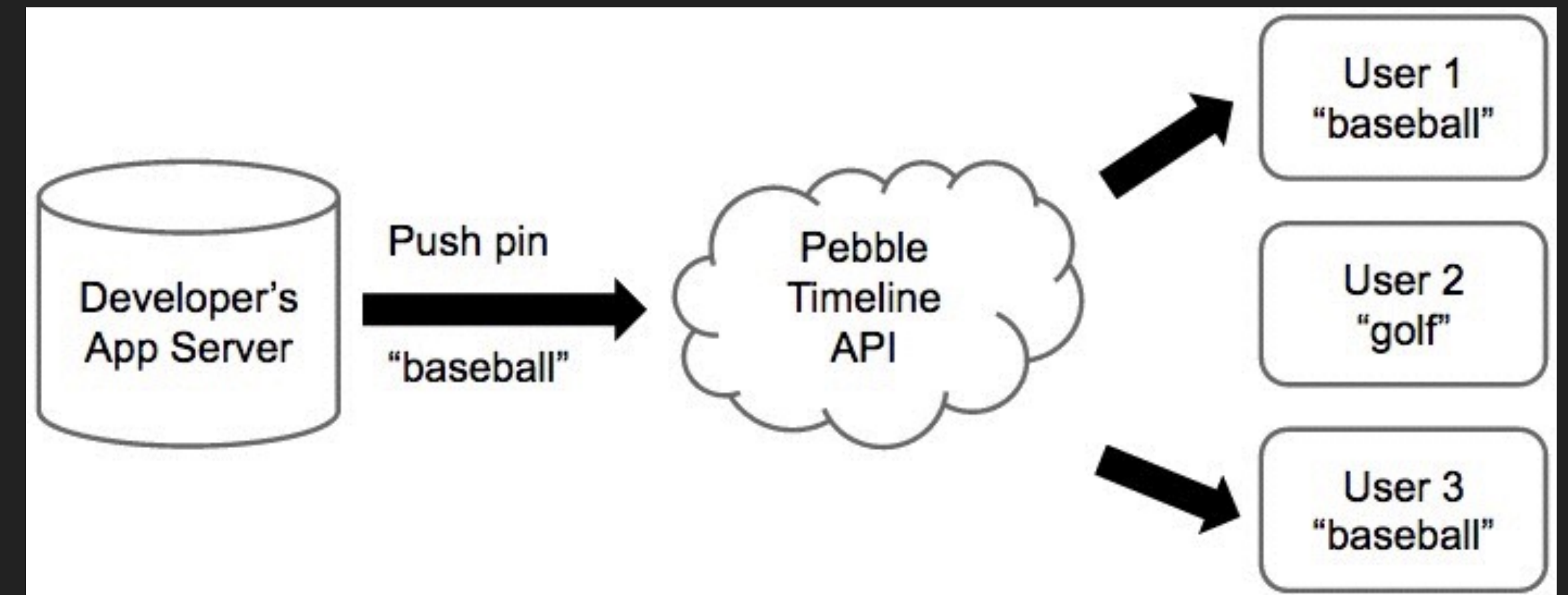


TIMELINE ARCHITECTURE

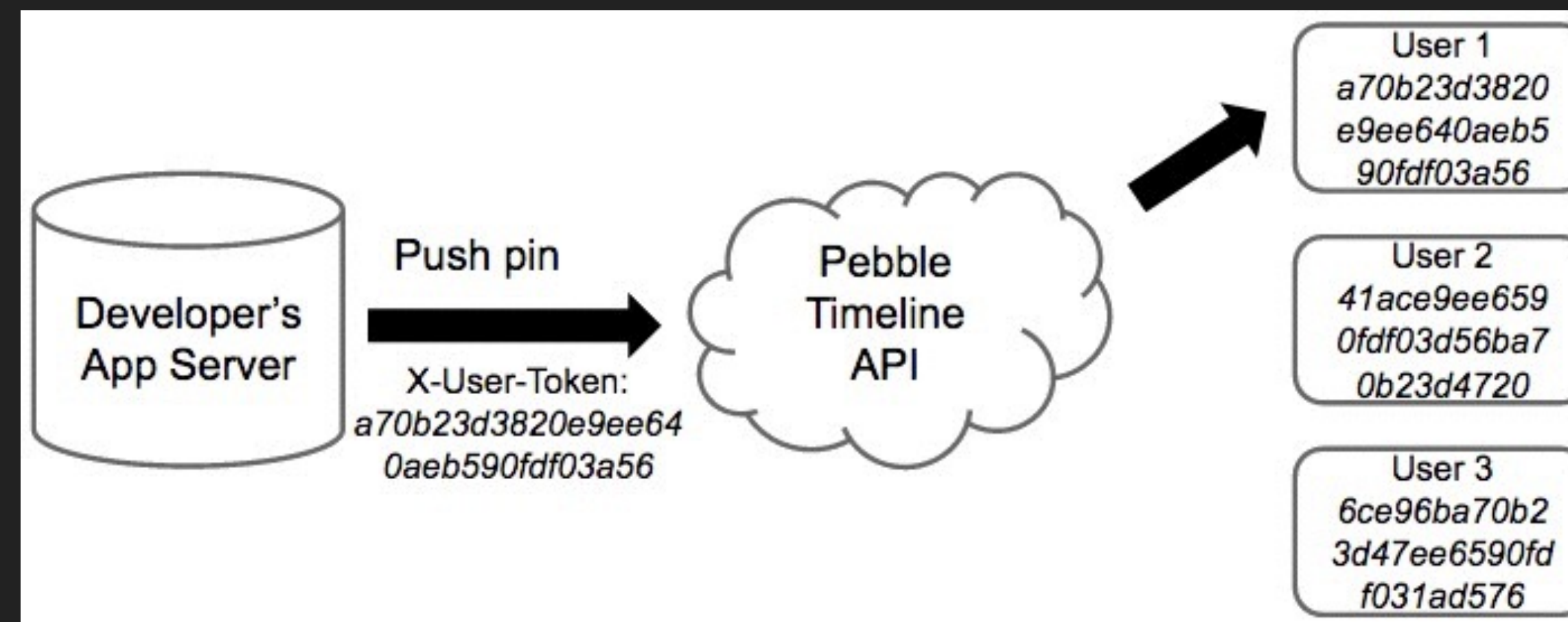
3 METHODS FOR SENDING PINS IN CLIENT/SERVER



Target Everyone



Target Interests



Target Specific User

**PUTTING IT ALL
TOGETHER**

FULFILLING PREREQUISITES FOR TIMELINE

```
$> pebble new-project MySuperAwesomeApp --javascript  
$> pebble build && open build
```

OR

CREATE NEW PROJECT

PROJECT NAME

PROJECT TYPE

SDK VERSION

TEMPLATE

CREATE

CANCEL

COMPILATION

GITHUB

SOURCE FILES

main.c

RESOURCES

LAST BUILD

STARTED: 2 June, '16 – 11:12

BUILD TIME: 6 seconds

RUN BUILD

GET PBW

BUILD LOG

FULFILLING PREREQUISITES FOR TIMELINE

My Apps

Add a Watchface

Add a Watchapp

Add a Companion App

Create your Pebble Watchapp Profile

You're creating a Pebble Watchapp.
To create a Pebble Watchface click [here](#). To create a Pebble Companion App click [here](#).

CHOOSE TITLE AND DETAILS

Enter Watchapp title here

Enter website url here

Enter source url here

Enter support email here

Your Pebble Watchapp's name, which is shown on all listings in the Pebble appstore.

Use this if you need to link to an external site. This will be displayed with your Pebble Watchapp profile.

Opensource? Add a link to your code. This will be displayed with your Pebble Watchapp profile.

Use this if you want support emails from users of your application to go to a different email address than your developer email address.

Timeline

MySuperAwesomeApp is not currently setup to be able to use the new timeline API. If you want to allow MySuperAwesomeApp to use timeline, click the button below.

Enable timeline

BUILDING TIMELINE APP

SENDING PINS FROM JAVASCRIPT

```
var timelinePin = function timelinePin(method, id, pin) {  
  var req = new XMLHttpRequest();  
  req.open(method, 'https://timeline-api.getpebble.com/v1/user/pins/' + id, true);  
  req.setRequestHeader('Content-Type', 'application/json');  
  req.setRequestHeader('X-User-Token', timeline_token);  
  
  req.onload = function complete() {  
    if (req.readyState === 4) {  
      if (req.status === 200) {  
        console.log(req.responseText);  
      } else {  
        console.log(req.responseText);  
      }  
    }  
  };  
  req.send(JSON.stringify(pin));  
};
```

BUILDING TIMELINE APP

GETTING USER TOKEN

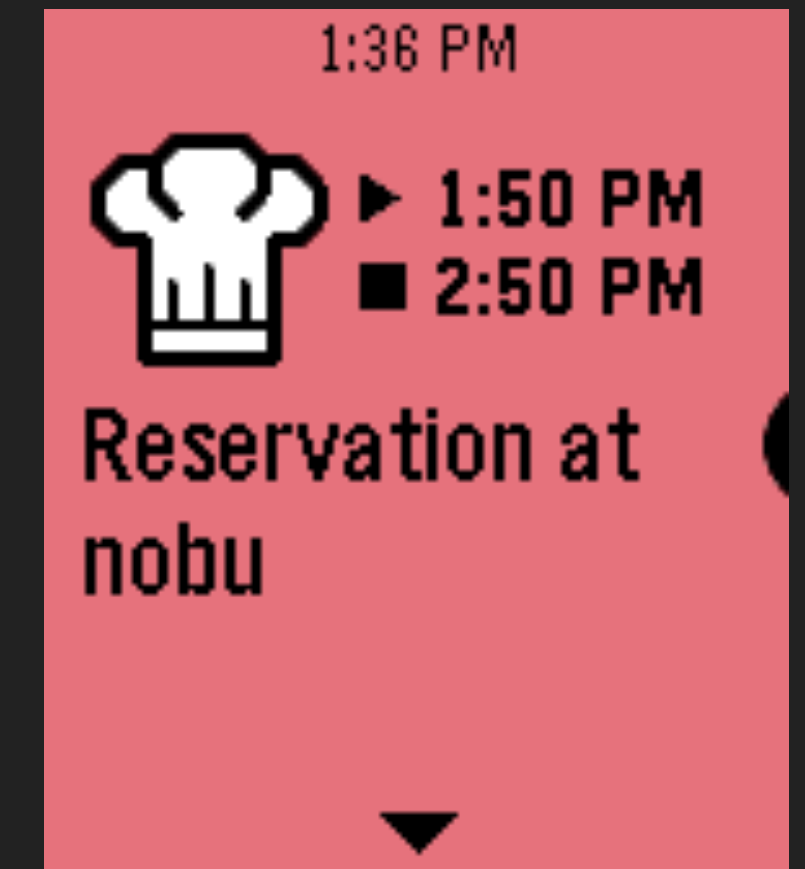
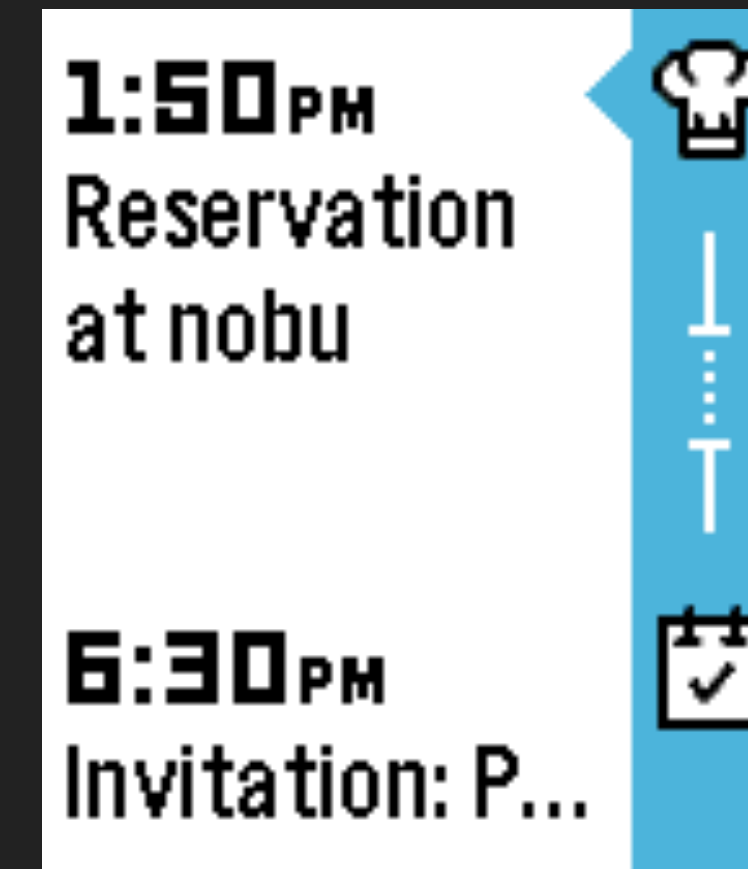
```
var timeline_token;
Pebble.addEventListener("ready", function(e) {
  Pebble.getTimelineToken(function(token) {
    console.log('Timeline Token: ' + token);
    token = timeline_token;
  }, function(error) {
    console.log('Error getting timeline token: ' + error);
  });
});
```

```
>>>Timeline Token: UNBQLEoLtLTsToHzDviGC3IiGxqSrAMl
```


BUILDING TIMELINE APP

SEND PIN TO USER TOKEN

```
var pin = {  
  "id": "dinner-reservation-060216",  
  "time": "2016-06-02T19:00:00Z",  
  "duration": 60,  
  "layout": {  
    "type": "calendarPin",  
    "title": "Reservation at nobu",  
    "body": "Table for 2",  
    "tinyIcon": "system://images/DINNER_RESERVATION"  
  }  
};  
...  
timelinePin('PUT', 'dinner-reservation-060216', dinnerReservationPin);  
...  
req.setRequestHeader('X-User-Token', timeline_token);
```



BUILDING TIMELINE APP

TOPICS

```
Pebble.timelineSubscribe('wordOfTheDay', function (e) {  
  console.log("Subscribed to The Word of the Day;  
});
```

BUILDING TIMELINE APP

TOPICS

DEMOAPP

Analytics

Manage Asset Collections

Manage Timeline Settings

Appstore Preview

Edit

Application data

DEMOAPP » TIMELINE SETTINGS

Add Sandbox Key

Add Production Key

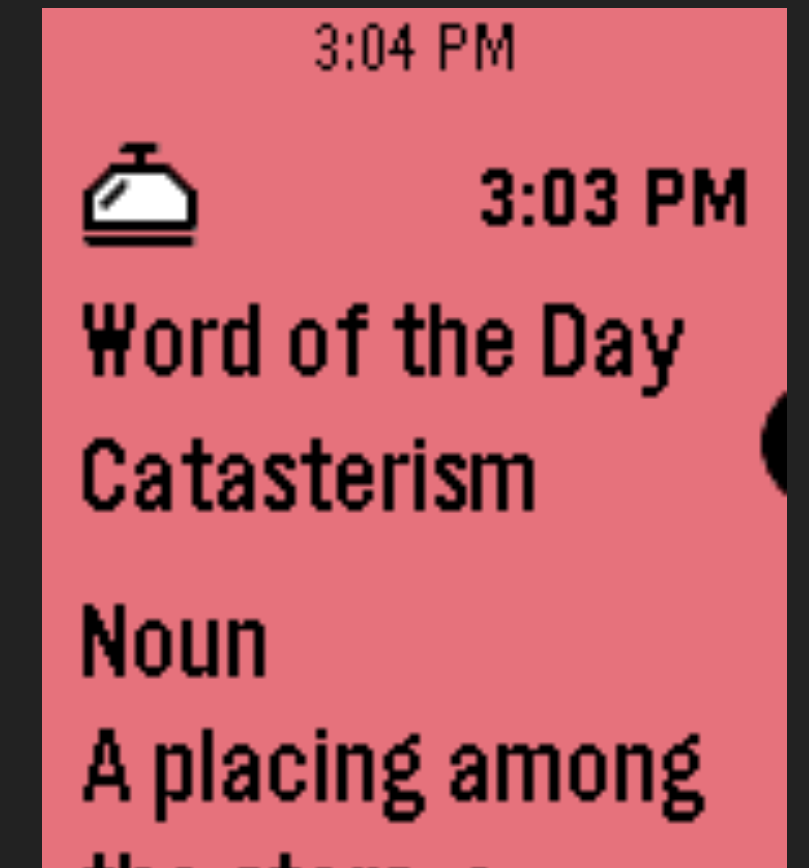
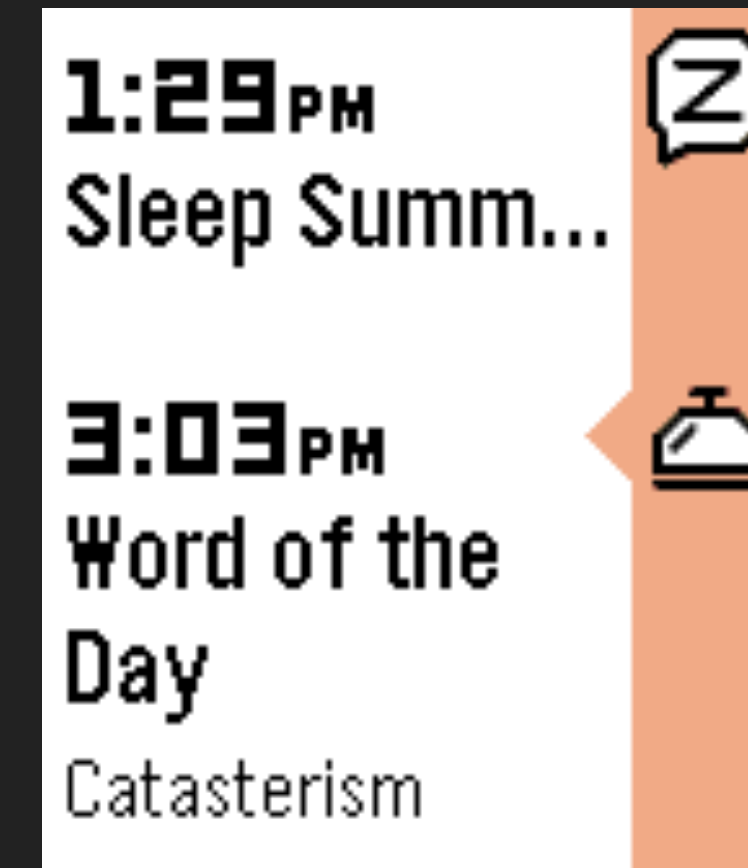
API Key	Environment	Manage Keys
9irj14dxii079u01zw8pupiafxk	Production	Delete
SBtt4wrporypqzg1yb6bdzvwdr	Sandbox	Delete

BUILDING TIMELINE APP

TOPICS

```
{
  "id": "wordOfTheDay-060216",
  "time": "2016-06-02T21:00:00.00Z",
  "layout": {
    "type": "genericPin",
    "title": "Word of the Day",
    "subtitle": "Catasterism",
    "body": "Noun\nA placing among the stars; a cataloguing or catalogue of the stars.",
    "tinyIcon": "system://images/HOTEL_RESERVATION"
  }
}

header = {
  'X-API-Key': 'SBtt4wrporypqzg1yb6bduzvwdryimxx',
  'X-Pin-Topics': 'wordOfTheDay'
}
```

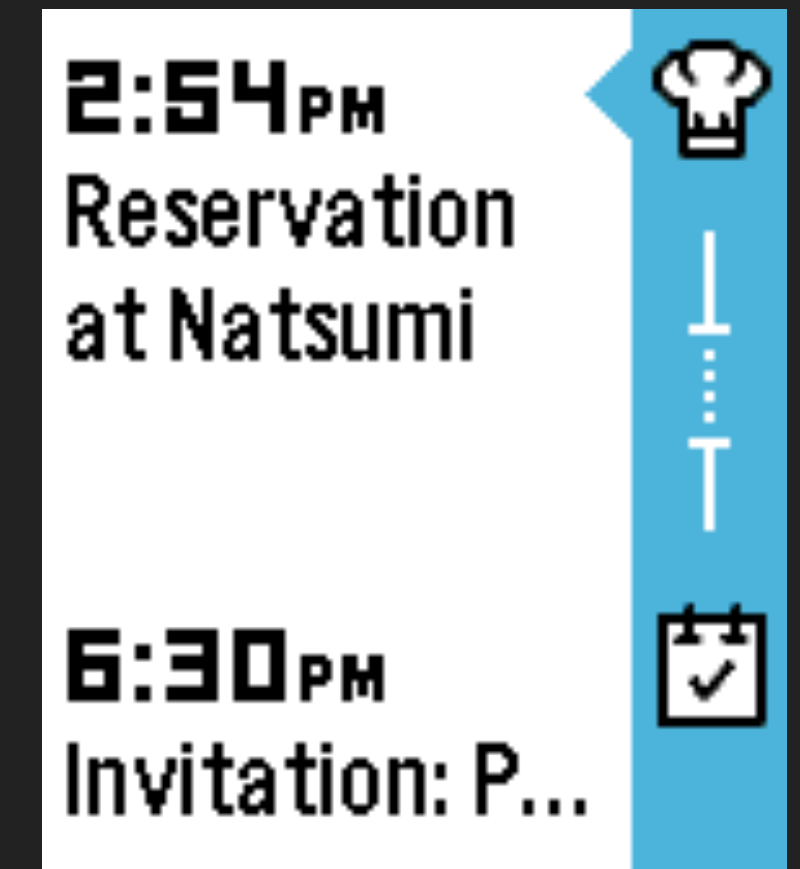
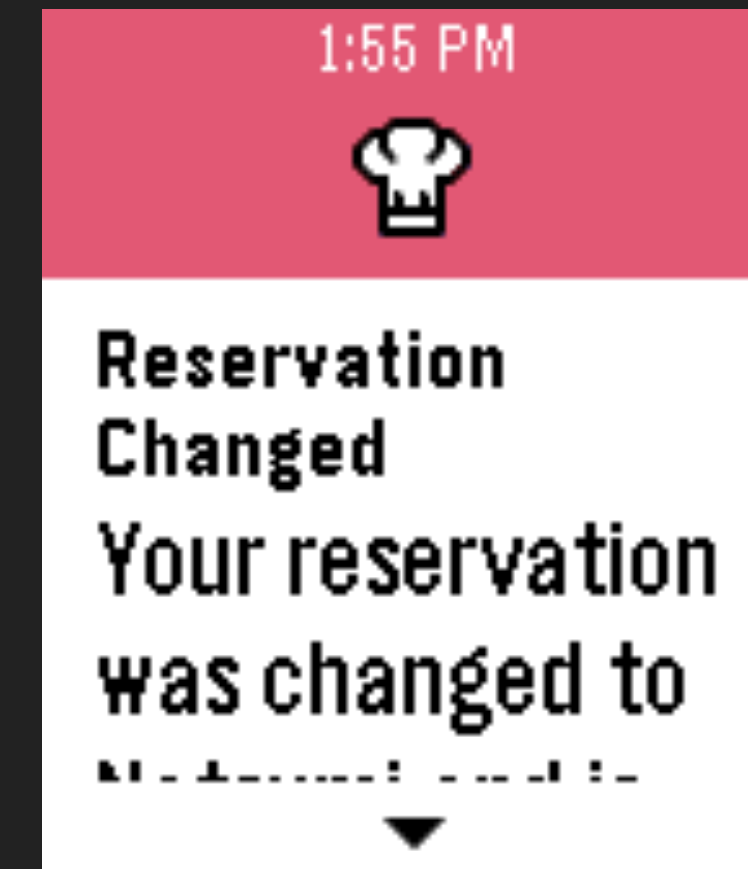


BUILDING TIMELINE APP

ADVANCED: UPDATE EXISTING PIN

```
var dinnerReservationPin = {
  "id": "dinner-reservation-060216",
  "time": "2016-06-02T20:00:00Z",
  "duration": 60,
  "layout": {
    "type": "calendarPin",
    "title": "Reservation at Natsumi",
    "body": "Table for 2",
    "tinyIcon": "system://images/DINNER_RESERVATION"
  },
  "updateNotification": {
    "layout": {
      "type": "genericNotification",
      "title": "Reservation Changed",
      "tinyIcon": "system://images/DINNER_RESERVATION",
      "body": "Your reservation was changed to Natsumi and is now at 8:00"
    }
  }
};
```

```
xhr('PUT', 'dinner-reservation-060216', dinnerReservationPin);
```



RESOURCES

Pebble Developer Docs: <https://developer.pebble.com>

Pebble Developer Subreddit: <https://reddit.com/r/pebbleddevelopers>

Slack (Best Method): <http://slack.pbldev.io>

Q&A?



Via the Washington Post. wapo.st/10JJ02P

FIND ME



@EXIVA



[GITHUB.COM/EXIVA](https://github.com/EXIVA)