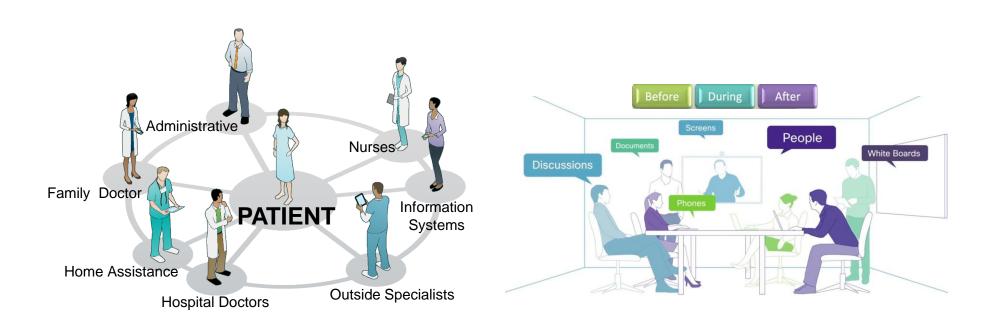
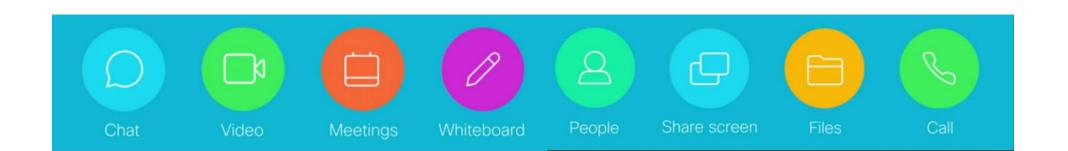
Invent a new Hospital Experience

« Leverage Next Generation Collaboration tools to optimize the Journey of Patients & Doctors »

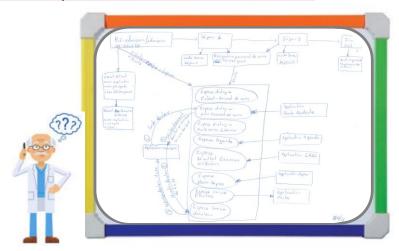






Tools for the challenge

1) Get help from our Medical consultants



2) Patient admission barcodes





1) React Widget, Rest API ...

3) Spark Mobile App



2) SparkBoard (at the booth)



How Healthcare Chatbots Empower Patients and Save Lives

October 16, 2017 / artificial intelligence, chatbot industries

Because health chatbots excel in providing hyper-personalized services, they make a natural fit for the healthcare industry. Personal data is incredibly important when it comes to providing healthcare. A physician assesses the patient's medical history as well as everyday details like their diet, exercise regimen, symptoms and more. With healthcare chatbots, patients can use this data to help them discover likely ailments and find out the best course of action for them.

https://botanalytics.co/blog/2017/10/16/health-chatbots-empower-patients/

Challenge: scenario

before

The hospital gets notified of the future patient arrival Triggers the opening of a Spark space (prior hospitalization) The patient receives a link to start the conversation

during

The patient is hospitalized

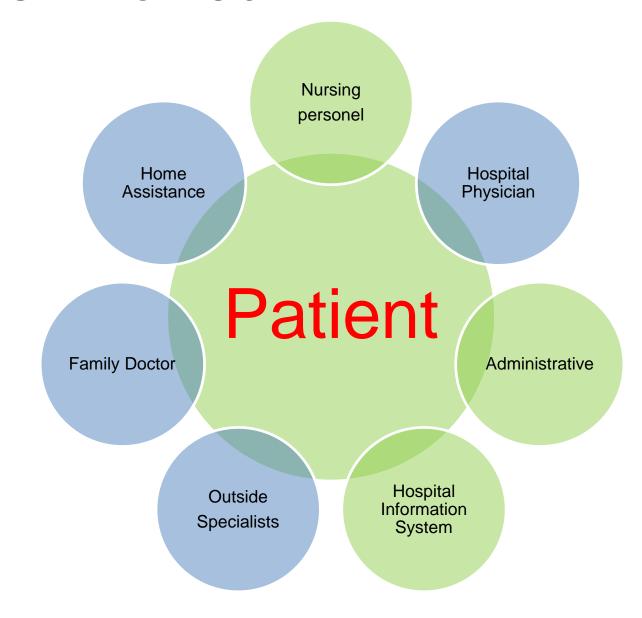
The information related to his journey is transmitted to him The patient communicates with the care staff

Care staff communicate with patients and each-other

The hospitalization ends for the patient

The patient keeps a discussion link with the care staff

Actors involved



Bonus: Take inputs

- Patient
 - Pain on a scale of 0 to 10

- Staff
 - Request for pain monitoring every Xmin over a period Yhours
 - Follow-up request at D days after discharge

Patient Admission Barcode

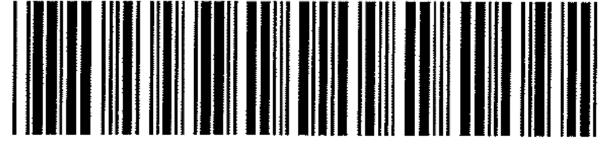
LE VERT, ALBERT

01/01/1950 M IPP: 0000808460

Séjour: 317049002 10/05/2017 14:12

UFrm: CHVH Héb: CHVH - 15N6

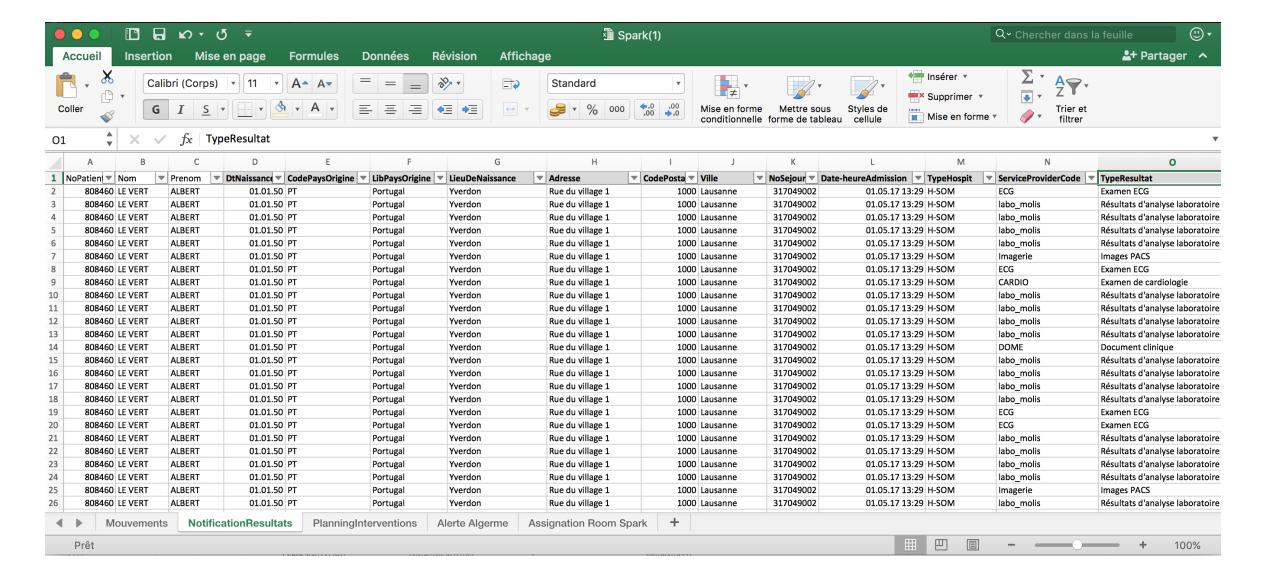
HO- Tél:42230 PP: 447



LE VERT,ALBERT 0000808460 01/01/1950 CHVH / CHVH - 15N6 M

LE VERT,ALBERT 0000808460 01/01/1950 CHVH / CHVH - 15N6 M

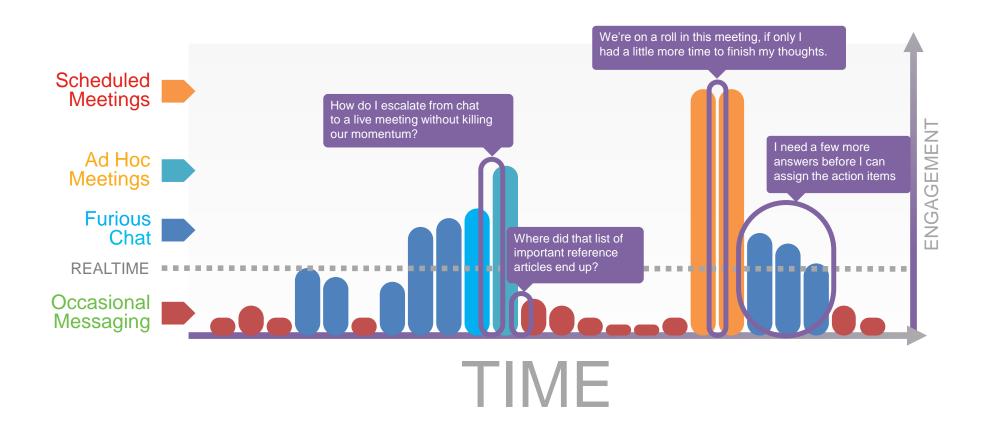
Data



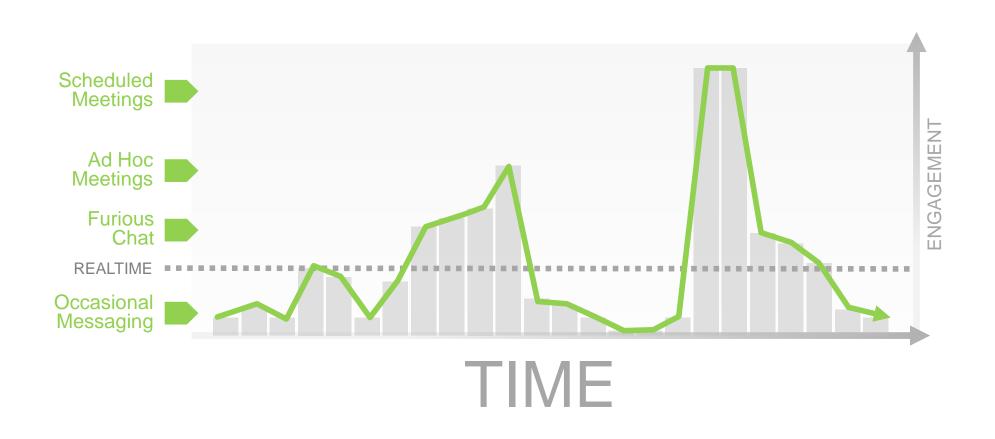
Challenge Criteria

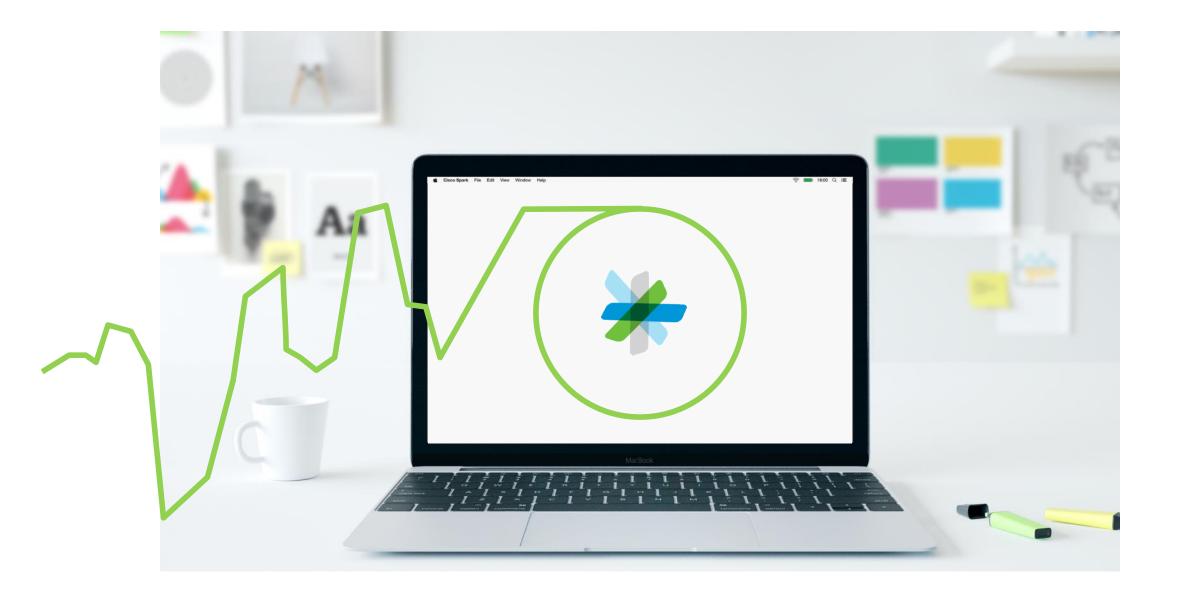
- User experience
- Usage of Spark messages or Spark videos or both capabilities
- Code pushed on a public repo with explanations, a few snaphsots and an opensource license

Optimizing the Space between Spaces

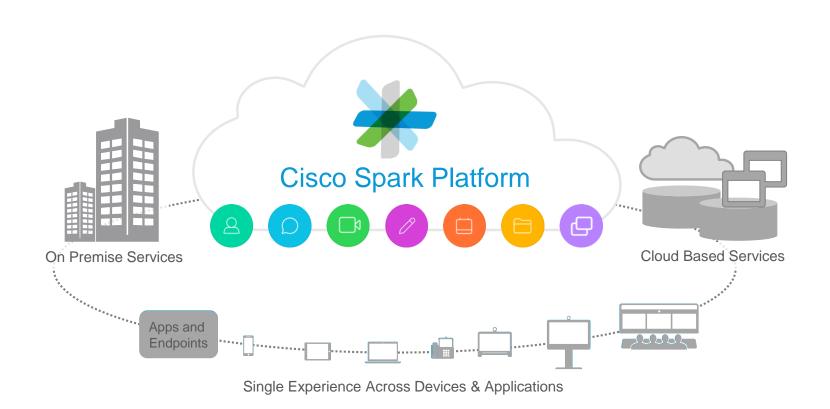


Continuous Collaboration





Continous collaboration



Every Pocket, Desk, Room









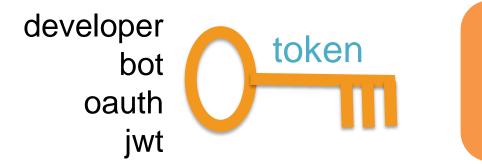


Cisco Spark 'Free' plan

- Web, Desktop, Mobile clients
- Illimited messaging & spaces
- Up to 3 participants in a Video Call

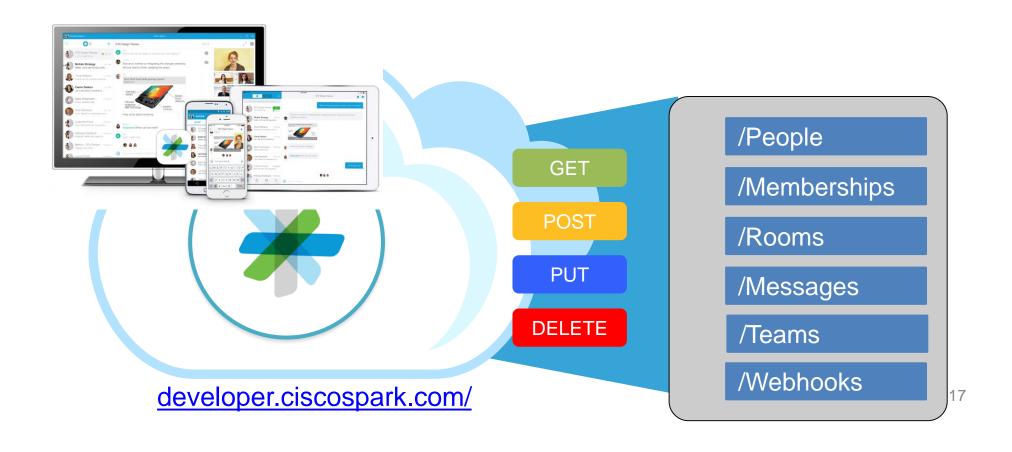
 Developer access to Cisco Spark APIs https://developer.ciscospark.com

Cisco Spark for Developers

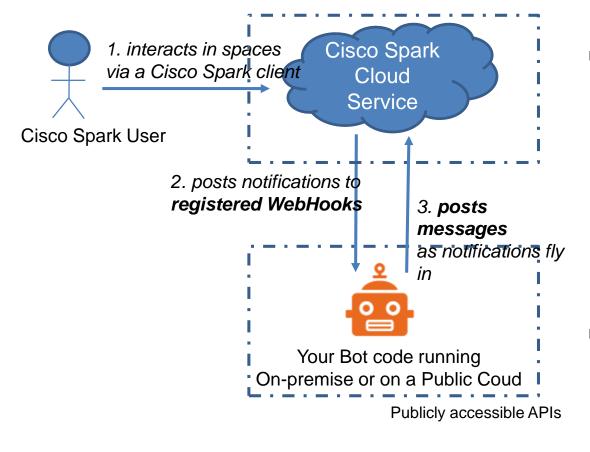




Cisco Spark REST API

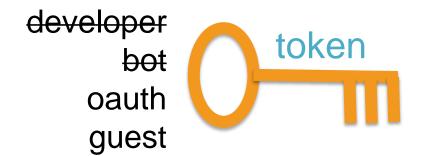


Bot Architecture: Webhooks



- Register events your bot is interested to listened to
 - Messages / created
 - Memberships / created
- As events happen in spaces, receive notifications

Cisco Spark for Developers



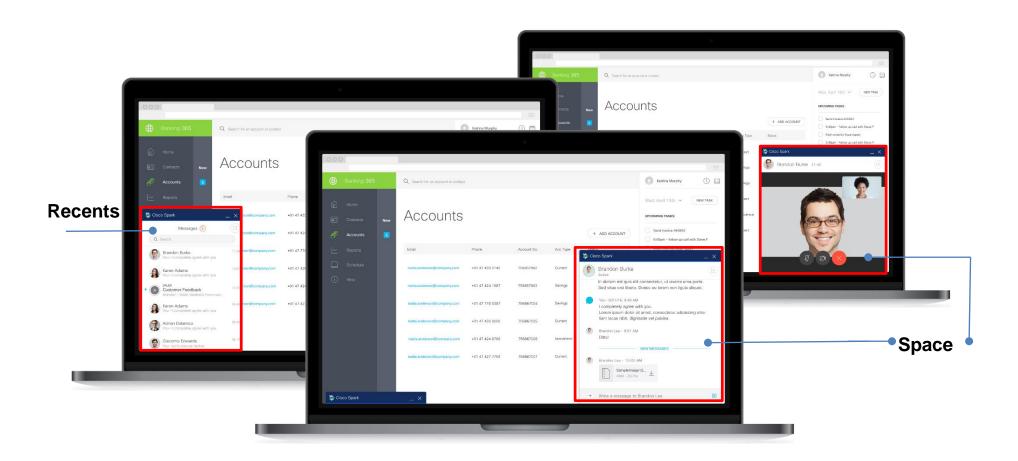
REST API

SDKs

all Spark features

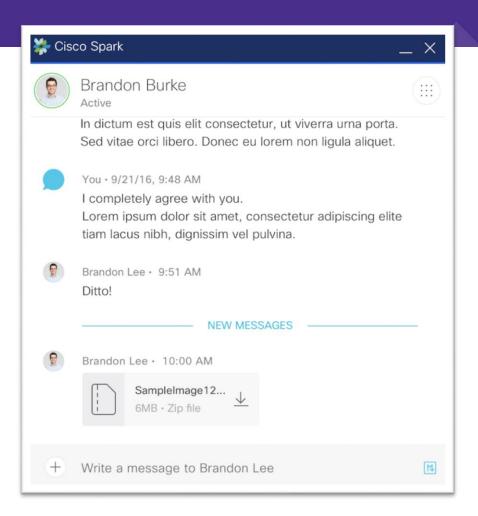
Browsers, iOS, Android

Cisco Spark Client to Widget



Space Widget

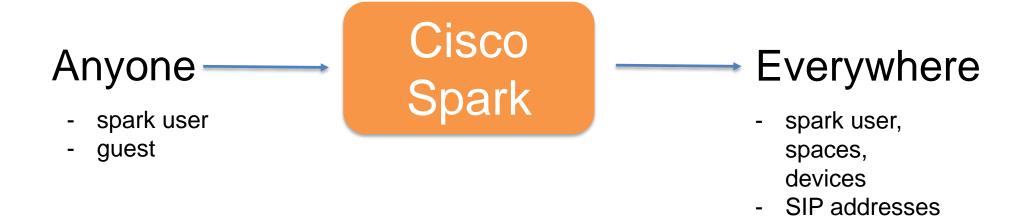
- Audio & video 1:1 calling
- Space & 1:1 messaging
- Markdown support
- File sharing
- Message flags and ability to delete messages
- Read receipts
- Persistent chat



Embedding the Space React component

```
<div id="space" style="width: 750px; height: 500px;" />
<script src="https://code.s4d.io/widget-space/production/bundle.js"></script>
<script src="https://code.jquery.com/jquery-3.2.1.min.js"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/toastr.js/latest/toastr.min.js"></script>
<script>
 var widgetElement = document.getElementById('space');
 var widget = ciscospark.widget(widgetElement).spaceWidget({
   accessToken: 'SPARK ACCESS TOKEN',
   spaceId: 'CISCO SPARK ROOM IDENTIFIER',
   onEvent: callback
 });
 function callback(type, event) {
   if (type !== "rooms:read") {
     console.log("new event: " + type);
     toastr.info('Event Received', type);
</script>
```

What if my users are not on Spark?



Encoded PASTE A TOKEN HERE

eyJhbGci0iJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJz
dWIi0iJVU0VSSUQiLCJuYW11IjoiVVNFUk5BTUUiL
CJpc3Mi0iJERVZFTE9QRVJfT1JHIn0.swoT9rodEY
x-K4f-PpFh0c7du1-KKLScr09qUerpB_U

https://jwt.io/

Decoded EDIT THE PAYLOAD AND SECRET (ONLY HS256 SUPPORTED)

```
HEADER: ALGORITHM & TOKEN TYPE
   "alg": "HS256",
   "typ": "JWT"
PAYLOAD: DATA
   "sub": "USERID",
   "name": "USERNAME",
   "iss": "DEVELOPER_ORG"
VERIFY SIGNATURE
HMACSHA256(
   base64UrlEncode(header) + "." +
   base64UrlEncode(payload),
   secret
  ☑secret base64 encoded
```

Spark SDKs



- Calling
- Call Events



- Call Control
- Audio Control
- Video Control



- Persistent registration
- Feedback
- Push notifications



Specs

iOS SDK - swift

• iOS 9 and 10

Browsers SDK -

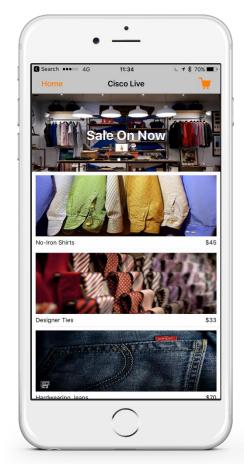
WebRTC

- Chrome current
- Firefox current

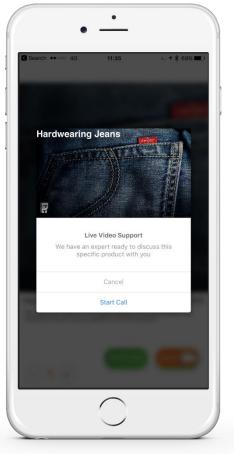
CODECS

- H264
- Opus

Use Case: Retail









Cisco Spark Resources

http://bit.ly/lauzhack-cisco

- developer.ciscospark.com
- awesome-ciscospark
- DevNet learning labs
 https://learninglabs.cisco.com/tracks/collab-cloud

Create Your Own Cisco Spark Apps

Can't wait to create Bots and Integrations of your own? This module provides The concepts apply to other programming languages.

2 Hours 5 Minutes

- Run a Cisco Spark Bot locally Launch a NodeJS bot example on your local machine and register it as a Cisco Spark Bo
- Create conversational Chat Bots with Botkit Configure, run and extend a provided Botkit template.
- Run a Cisco Spark Bot from a Web IDE Learn to run a NodeJS bot example from Cloud9 and register it at as Cisco Spark Bot.
- Deploy a Cisco Spark Bot to Heroku
 Go through the steps of creating an Heroku application and deploying a nodeJS bot sam





