

DEMO

# FRANCISCO VILCHEZ

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# EDUCATION

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**100** años  
**PUCP**

B.S. in Computer Engineering (2014)

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← → ↻ 🏠 🔒 [ieeexplore.ieee.org/document/7435956](https://ieeexplore.ieee.org/document/7435956)

## Artificial musical pattern generation with genetic algorithms

**Publisher:** IEEE [Cite This](#) [PDF](#)

[Francisco Vílchez Vargas](#) ; [Jose Astuvilca Fuster](#) ; [César Beltrán Castañón](#) [All Authors](#)

1 Paper Citation 173 Full Text Views

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**Abstract**

**Abstract:**  
This paper describes an implementation for generating artificial musical patterns using genetic algorithms. The proposed algorithm considers the musical theory and the use of smart operators for creating new melodies. We focused on creating jazz music and play it with a rhythmic accompaniment, so that we can get educational uses from it. The results are available in the next link: <https://soundcloud.com/euricide>.

**Published in:** [2015 Latin America Congress on Computational Intelligence \(LA-CCI\)](#)

**Date of Conference:** 13-16 Oct. 2015 **INSPEC Accession Number:** 15871101

**Date Added to IEEE Xplore:** 21 March 2016 **DOI:** [10.1109/LA-CCI.2015.7435956](https://doi.org/10.1109/LA-CCI.2015.7435956)

**Document Sections**

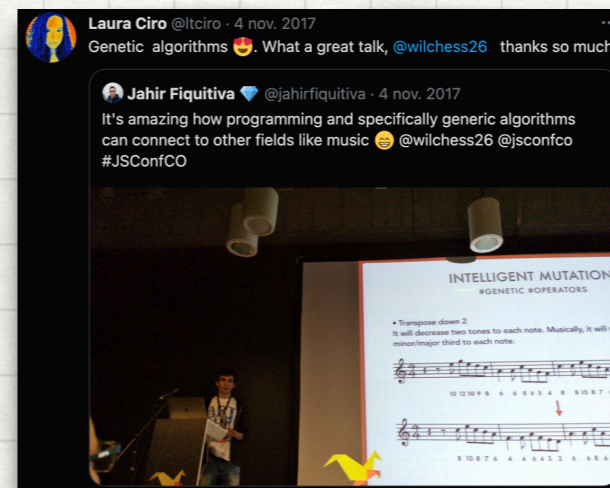
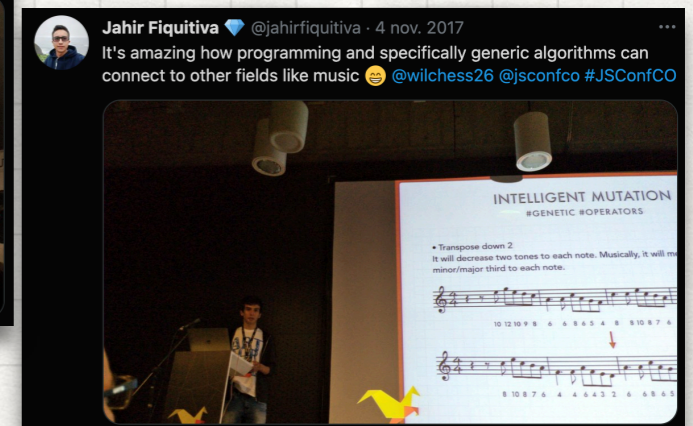
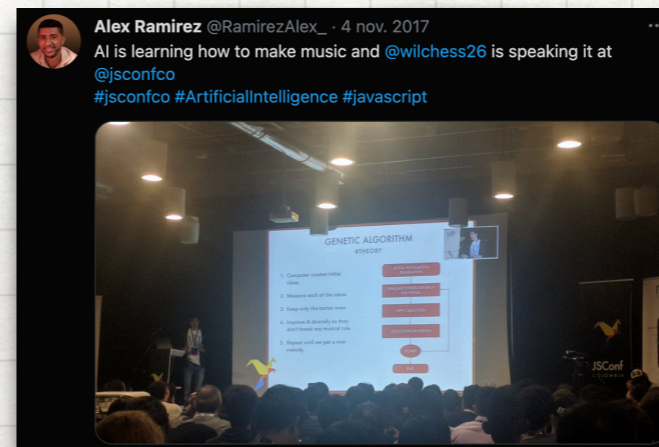
- I. Introduction
- II. Technical Background
- III. New Technique or Technique Adaptation
- IV. Implementation
- V. Results

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M.S. in Computer Science (2021)



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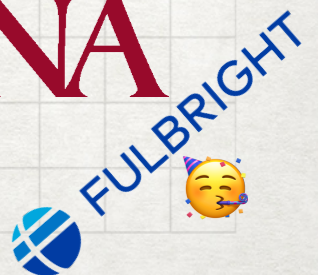


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# EXPERIENCE

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## Teaching Assistant (6y)

- Introduction to Programming (VBA, PSInt)
- Programming Fundamental (Prolog, Haskell, Smalltalk)
- Operating Systems

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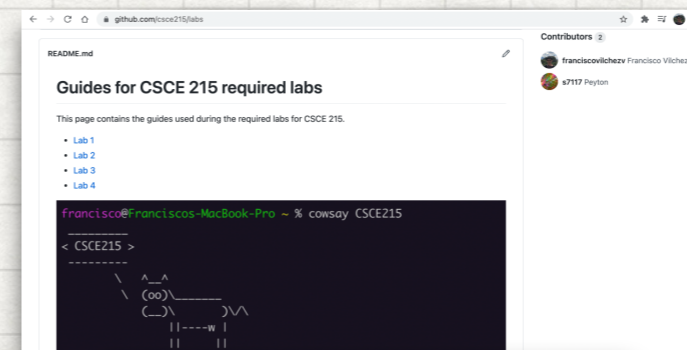
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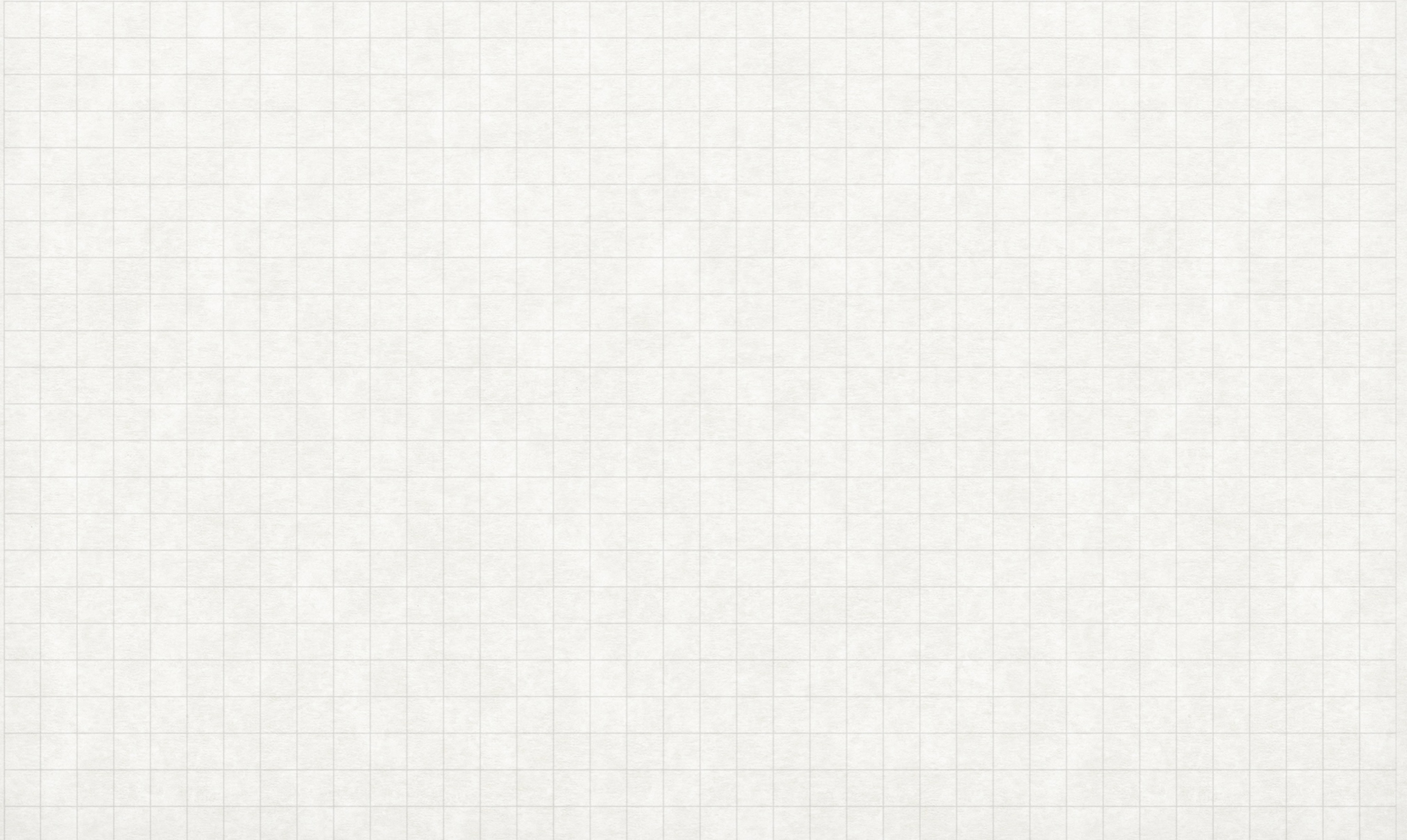
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[github.com/csce215](https://github.com/csce215)

# FUN FACTS

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# FUN FACTS

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ME



# FUN FACTS

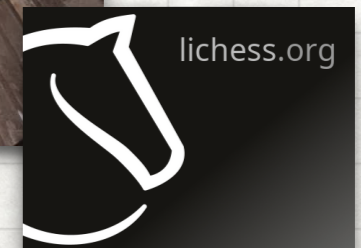
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# FUN FACTS

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2100+ rating (>94%)


# FRANCISCO VILCHEZ

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## Hello, I'm Francisco

A passionate Full Stack Software Developer 🚀 having an experience of building Web applications and Back end systems with JavaScript / Angularjs / Nodejs / Python and some other cool libraries and frameworks.



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[FRANCISCOVILCHEZV.GITHUB.IO](https://franciscovilchezv.github.io)

**Q&A SOBRE MI**

# DESARROLLO BASADO EN PLATAFORMAS



# TODAY'S LECTURE

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- ¿Desarrollo basado en plataformas?

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- ¿Desarrollo basado en plataformas?
- Motivación del desarrollo basado en plataformas.

# ¿DESARROLLO BASADO EN PLATAFORMAS?

PLATFORM BASED DEVELOPMENT (PBD)



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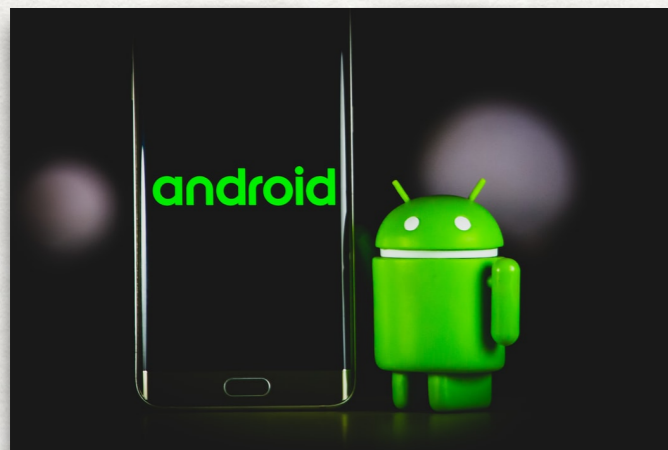
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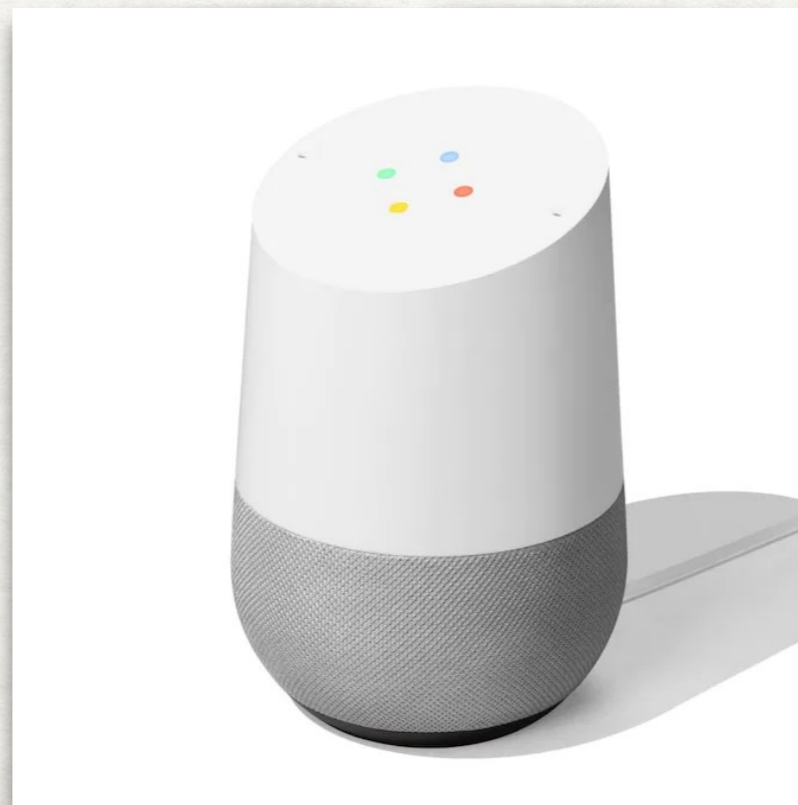
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## PLATFORM BASED DEVELOPMENT (PBD)

- Desarrollo Basado en Plataformas

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<sup>1</sup>API: software intermediary for exchanging data

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- También conocido como “Cross-Platform Mobile Development” (Stanford), “Mobile Web Design & Development” (CMU), etc.

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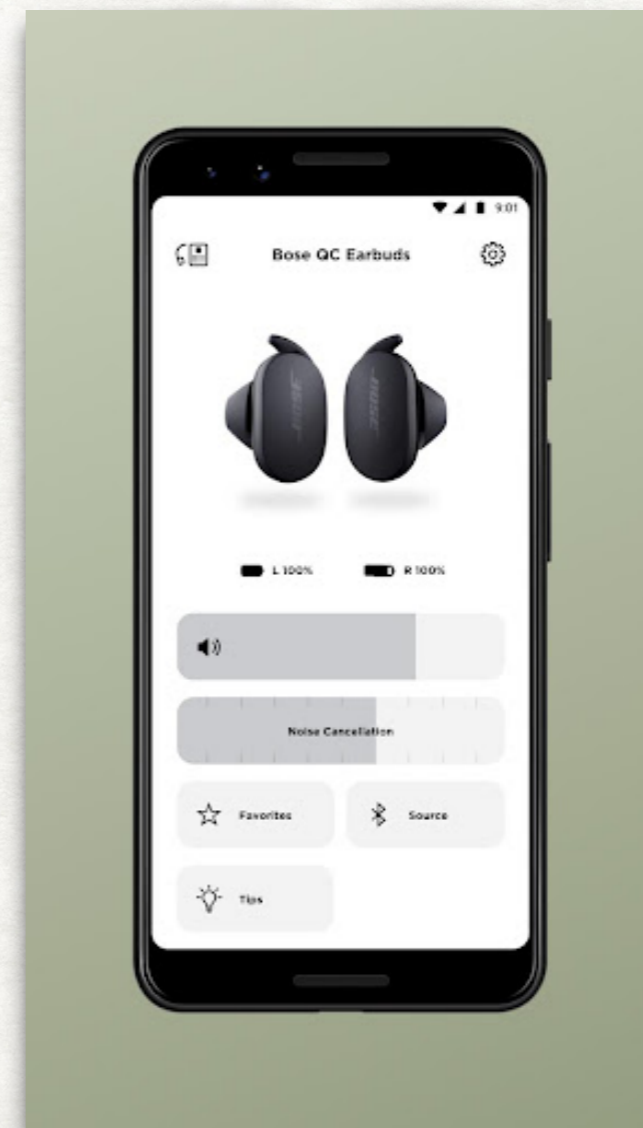
MOTIVACIÓN

¿POR QUÉ LA  
IMPORTANCIA  
DEL DESARROLLO  
BASADO EN  
PLATAFORMA?



# MOTIVATION

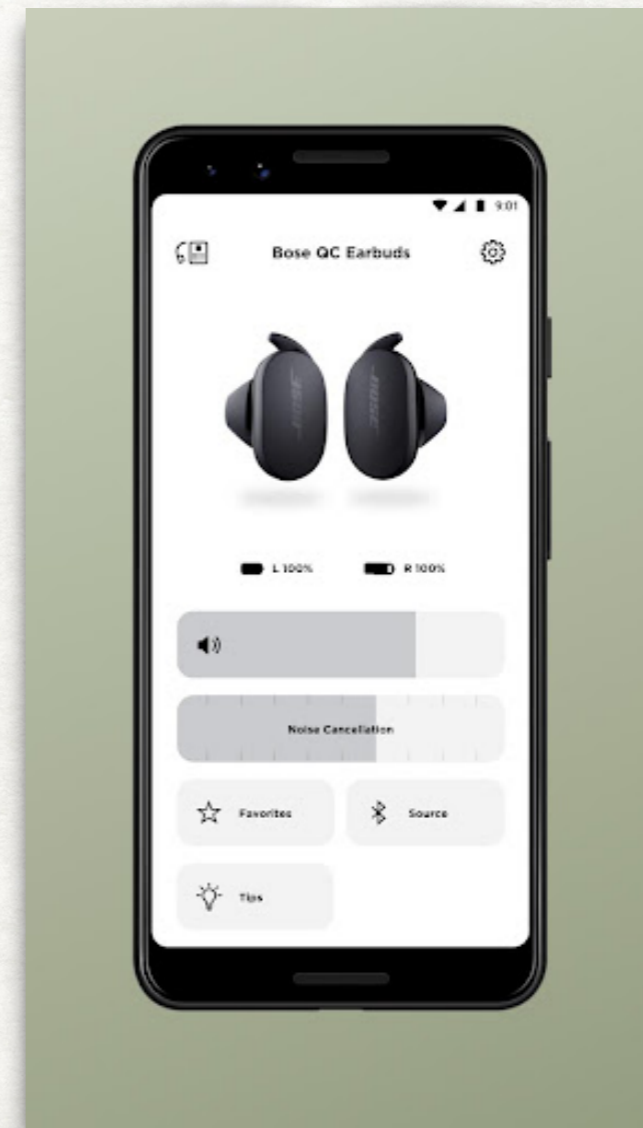
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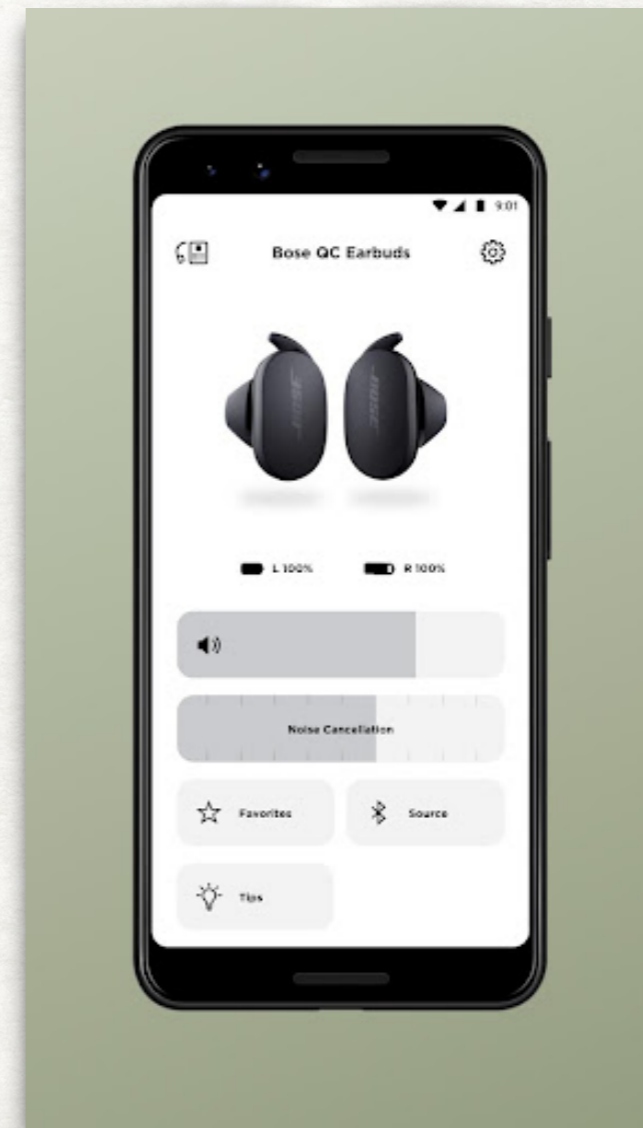
- Los "Bose Noise Cancelling headphones" fueron presentados como una solución para usuarios que querían escuchar música en ambientes con altos niveles de ruido, e.g. aviones.



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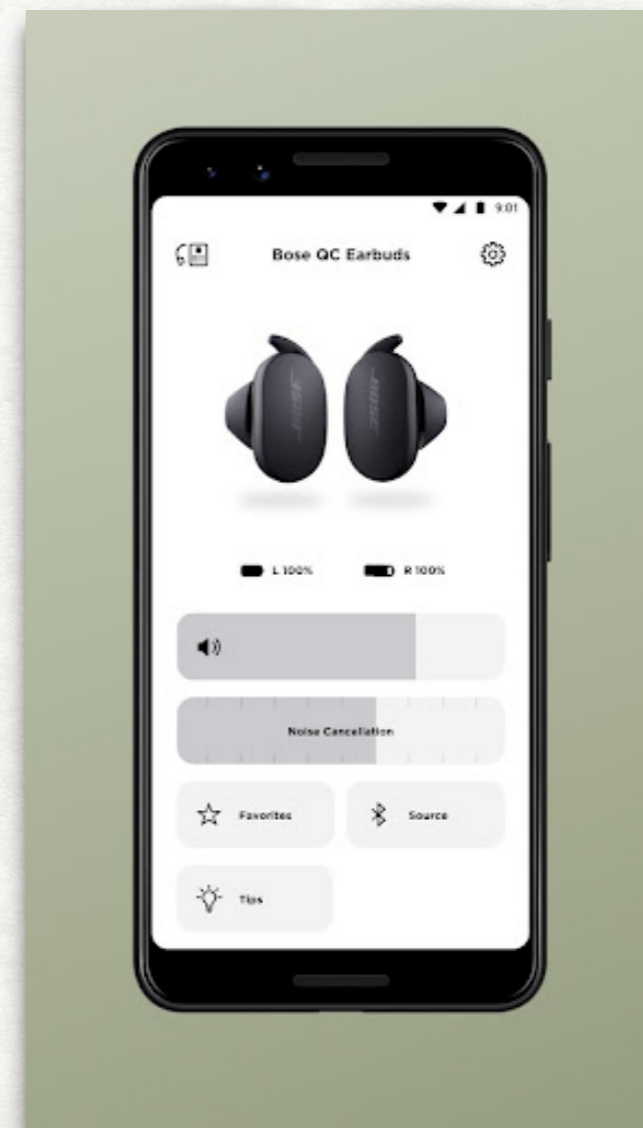




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- Los audífonos funcionaban mediante el uso de una app. Sin embargo, fue sorprendente que la app solicitaba al usuario hacer "login" para controlar el audífono.
- ¿Cuál es el problema con esta funcionalidad?



# MOTIVATION

KNOW YOUR CONSTRAINTS!



# MOTIVATION

## KNOW YOUR CONSTRAINTS!

- Debemos de conocer la limitaciones de la plataforma (hardware + OS) en la que vamos a programar antes de decidir el lenguaje, arquitectura, funcionalidades, etc.



# MOTIVATION

## KNOW YOUR CONSTRAINTS!

- Debemos de conocer la limitaciones de la plataforma (hardware + OS) en la que vamos a programar antes de decidir el lenguaje, arquitectura, funcionalidades, etc.
- En el curso conoceremos la limitantes de diversas plataformas así como de los lenguajes de programación usados en cada una de ellas.



# BIBLIOGRAPHY

## STAY HUNGRY, STAY FOOLISH

1. <https://martinfowler.com/articles/talk-about-platforms.html>
2. <http://foldoc.org/platform>
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# Q&A

