#### Platforms for Networked Communities

#### Introduction to the Google Cloud Platform

Boni García

http://bonigarcia.github.io/ boni.garcia@uc3m.es

Telematic Engineering Department School of Engineering

2020/2021

uc3m Universidad Carlos III de Madrid



### Table of contents

- 1. Introduction
- 2. Main technologies
- 3. Projects

#### 1. Introduction

- The objective of "Platforms for Networked Communities" is to learn to develop conversational agents
- For that, we use the Google Cloud Platform (GCP):
  - GCP is a suite of cloud computing services provided by Google
  - These services includes computing, data storage, data analytics, machine learning, etc.



https://cloud.google.com/

## 2. Main technologies

- We will use the following components of GCP in this course:
- Google Assistant: Artificial Intelligence (AI) powered virtual assistant developed by Google



- Dialogflow: Dialog engine based on Natural Language Processing (NLP) and Machine Learning (ML) algorithms



- Firebase: Platform developed by Google for creating mobile and web applications (backend-as-a-service, BaaS)

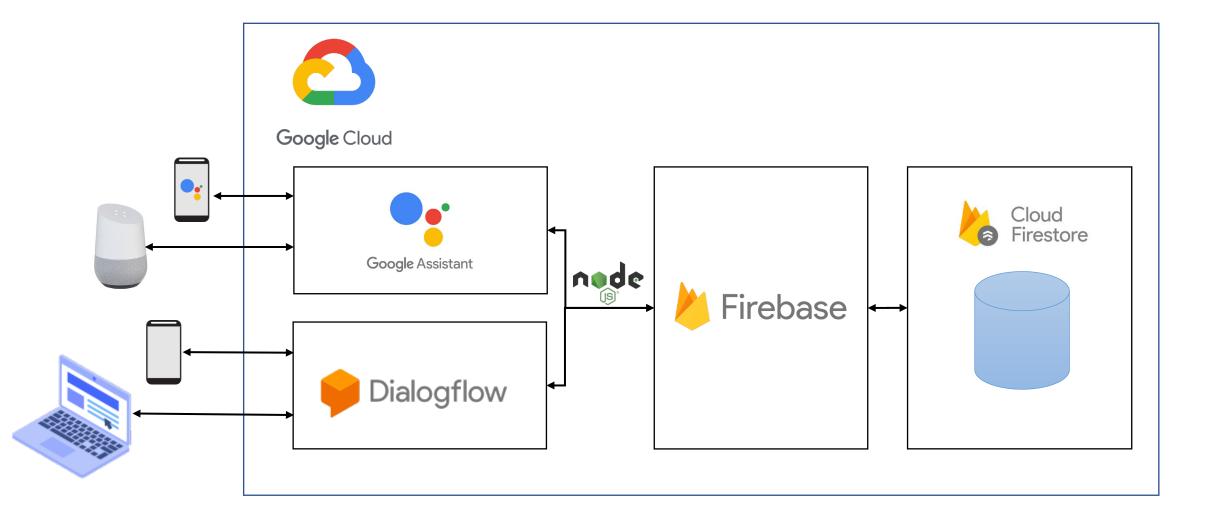


- Firestore: NoSQL cloud database



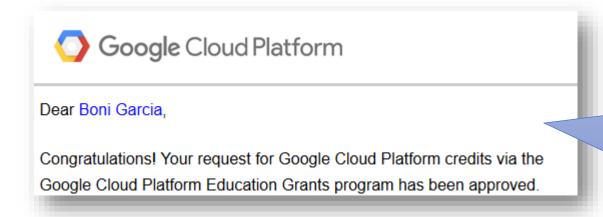
- ...

# 2. Main technologies



## 3. Projects

- Problem: GCP is not free (it follows a pay-as-you-go pricing structure)
- For small projects (like ours) this is not very expensive (even free, using the free tier)
- But even using this free tier, to use some of the GCP services, we need to include some bank account or credit card info in our Google account
- To avoid that, we requested several coupons using the Google Cloud Platform Education Grant



To use these coupons, first we need to create some **GCP projects**. Each project will be assigned to a group of students (composed by 3 or 4 people)