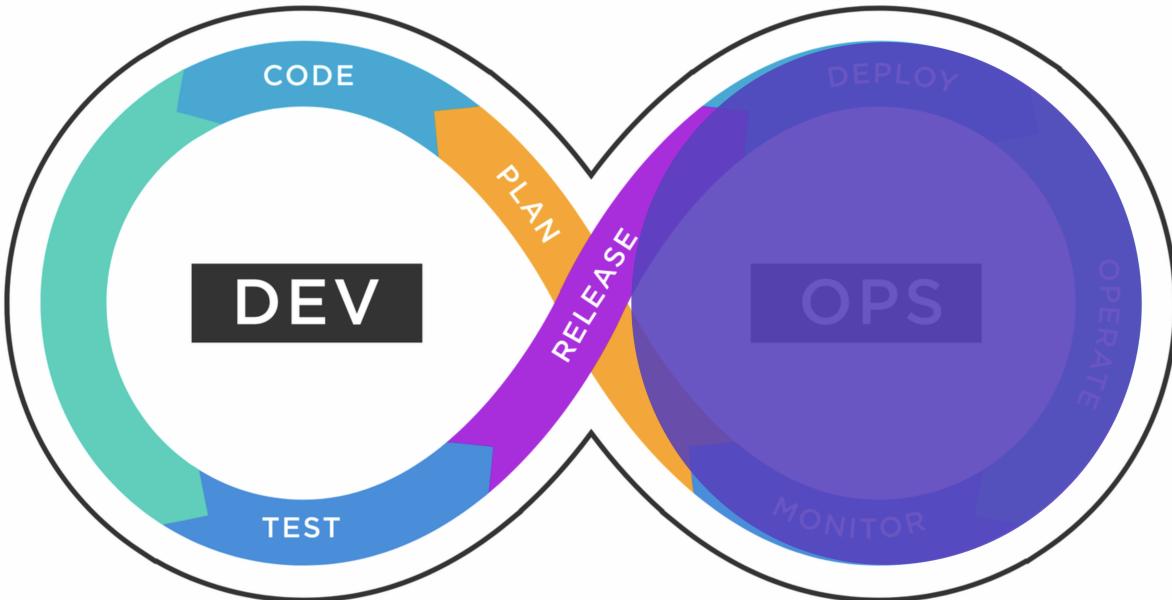


# Cloud and DevOps

**Application Software Development**

by Eduard Bargués



# DevOps

## Development & Operations

# Assemble your group

Unlike these guys ➡,  
**4 people maximum**

```
self.file = None
self.fingerprints = set()
self.logduplicates = True
self.debug = debug
self.logger = logging.getLogger()
if path:
    self.file = open(os.path.join(path, 'fingerprint.log'), 'a')
    self.file.seek(0)
    self.fingerprints.update(fingerprint)

@classmethod
def from_settings(cls, settings):
    debug = settings.getbool('DEBUG')
    return cls(job_dir(settings))

def request_seen(self, request):
    fp = self.request_fingerprint()
    if fp in self.fingerprints:
        return True
    self.fingerprints.add(fp)
    if self.file:
        self.file.write(fp + os.linesep)

def request_fingerprint(self, request):
    return request_fingerprint(self, request)
```

# Local development

“ Code a function that receives an array of integers and returns an object containing the maximum, minimum and sum of the numbers. Include unit tests and execute them from your CLI. ”

Follow along



# Repository

**Commit and push the  
code to Github.**

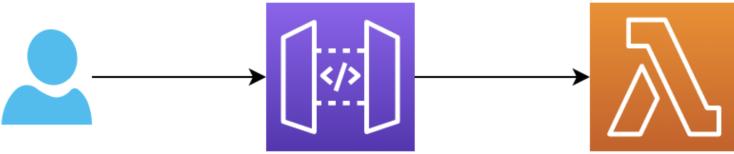
**Introduction to Git**



# Lambda+Python

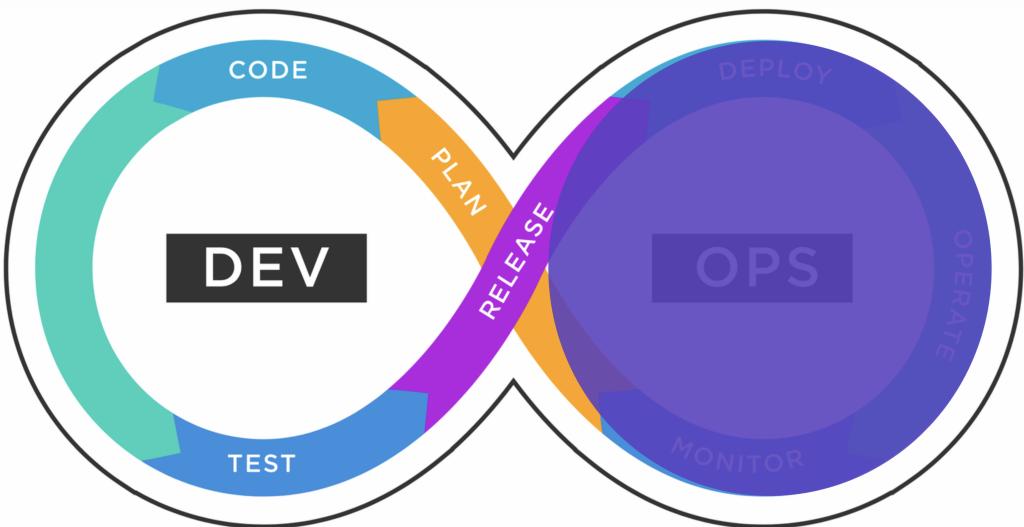
- “ Get familiar with your code in AWS ”
- Create a *hello world* lambda.
  - Test it from the same UI.
  - Paste your code in the lambda.
  - Test it again.

# Api



“ Connect your Lambda with APIGW ”

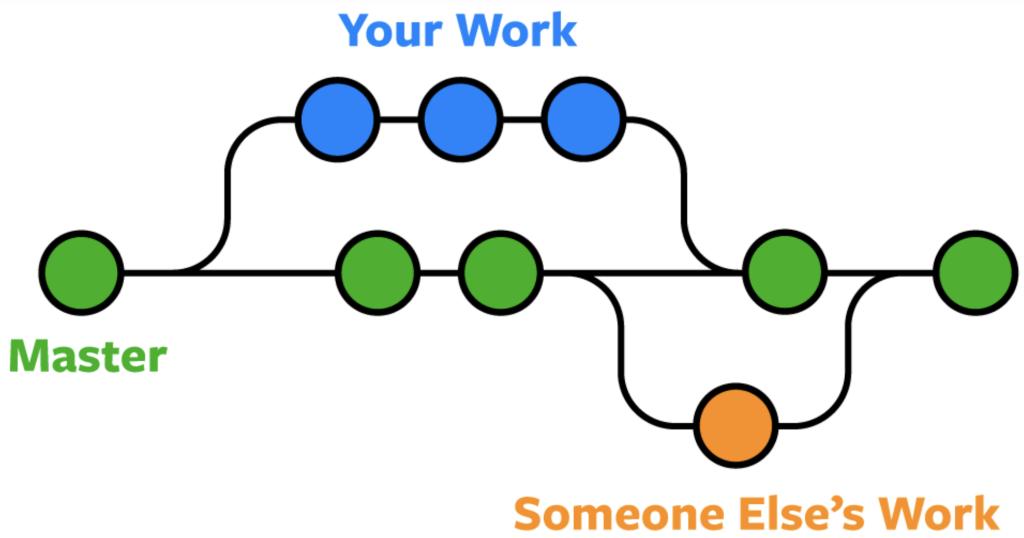
- Create an REST API via AWS' UI.
- Add a resource and a method.
- Create a 'mock' integration.
- Test it.
- Conect the method with Lambda.
- Test it again.



# Continuous Integration

“  
Methodology that allow developers to safely integrate their code.  
Answers the question: **Is my code ready to be released?**

”



# CI: Branches & Pull requests

“ Developers separate their code in **branches** and use **pull requests**(PRs) to review their code. ”



# CI: Github actions

“ Github provides a tool so developers can create workflows that are triggered by 12s of events. ”

Check out this [repository](#).

# CI: Testing

“ Create a workflow that triggers every time a pull request is updated. Execute the unit tests previously created as a job. ”