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# Facial Recognition Application

By Sean Remenyi

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# What is it

An application where:

- users can upload a picture of themselves
- pictures analyzed using AWS' machine learning
- metrics returned

## Facial Recognition

Choose File

No file chosen

Upload

	Filename	Last Modified	File Type	
Scan	1.jpg	4 days ago	image/jpeg	Delete

# Results

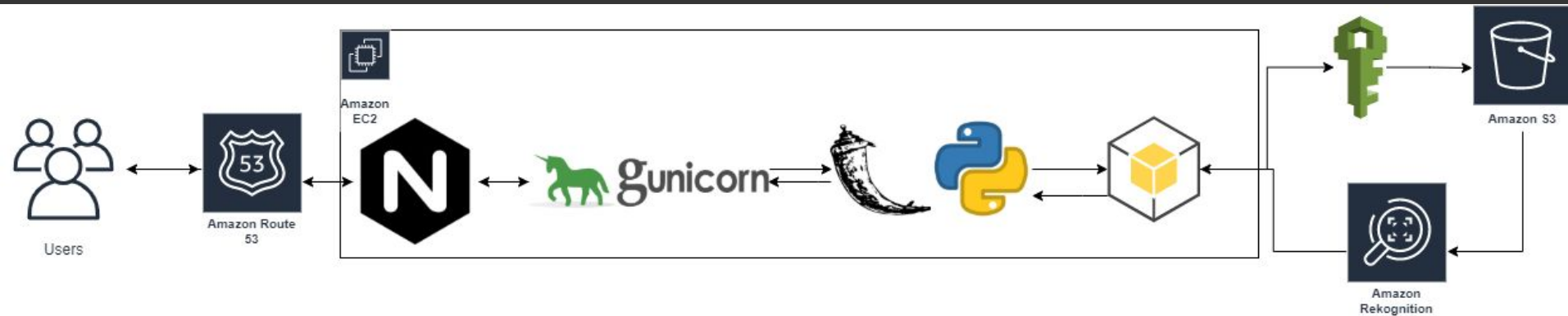
<b>Age Range:</b>	23 - 35	<a href="#">Back</a>
-	-	<b>Confidence</b>
<b>Gender</b>	"Female"	99.82351684570312
<b>Mustache</b>	false	99.82327270507812
<b>Beard</b>	false	99.49271392822266
<b>Glasses</b>	false	99.94226837158203
<b>Sunglasses</b>	false	99.98467254638672
<b>Eyes Open</b>	false	97.28523254394531
<b>Mouth Open</b>	false	90.56816101074219
<b>Smile</b>	false	97.33445739746094
-	-	-
<b>Emotions</b>	<b>Confidence</b>	-
<b>Happy</b>	63.6105842590332	-
<b>Sad</b>	0.1281716525554657	-
<b>Angry</b>	0.16057978570461273	-

# AWS Services

- IAM: Users/Roles to use S3 and Rekognition
- EC2: Hosting the Application
- S3: Object Storage for images
- Amazon Rekognition: AWS artificial intelligence service
- Route53: DNS web service



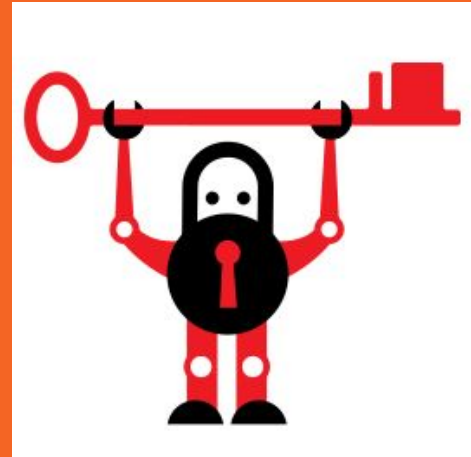
# Data flow



**Hosted:**

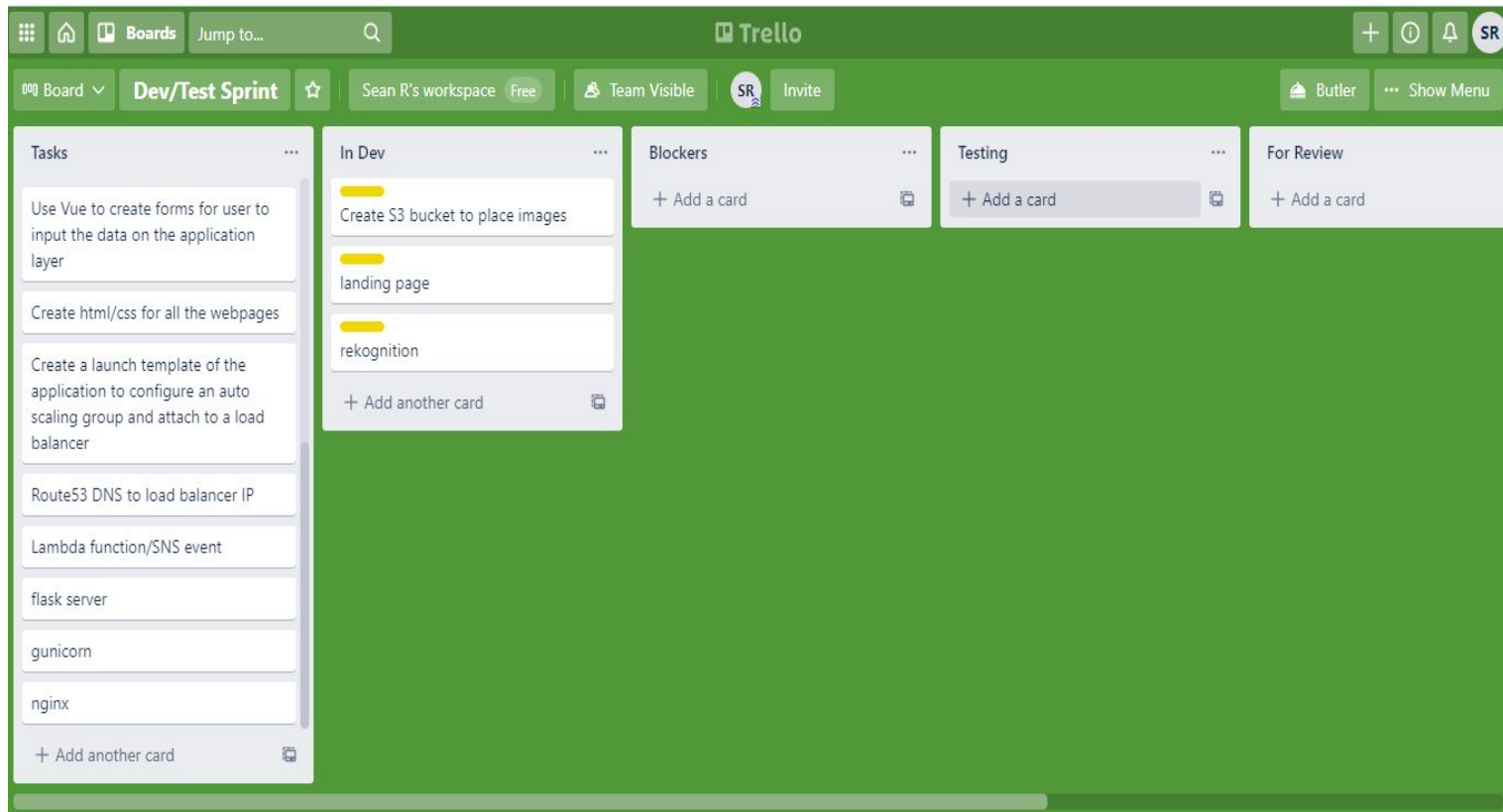
<http://nuage.technology>

<https://nuage.technology>



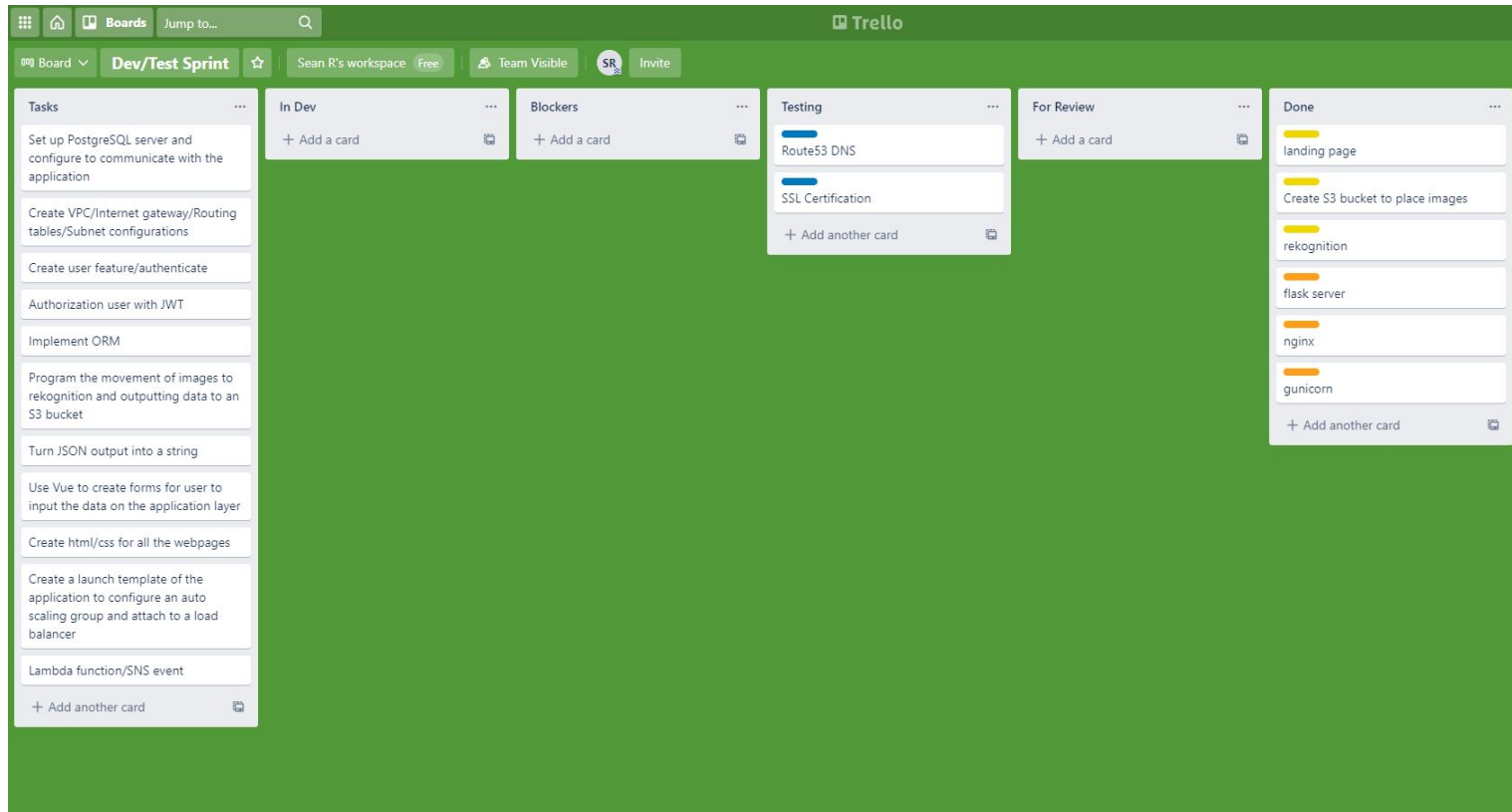
# APP RUN THROUGH

# Workflow

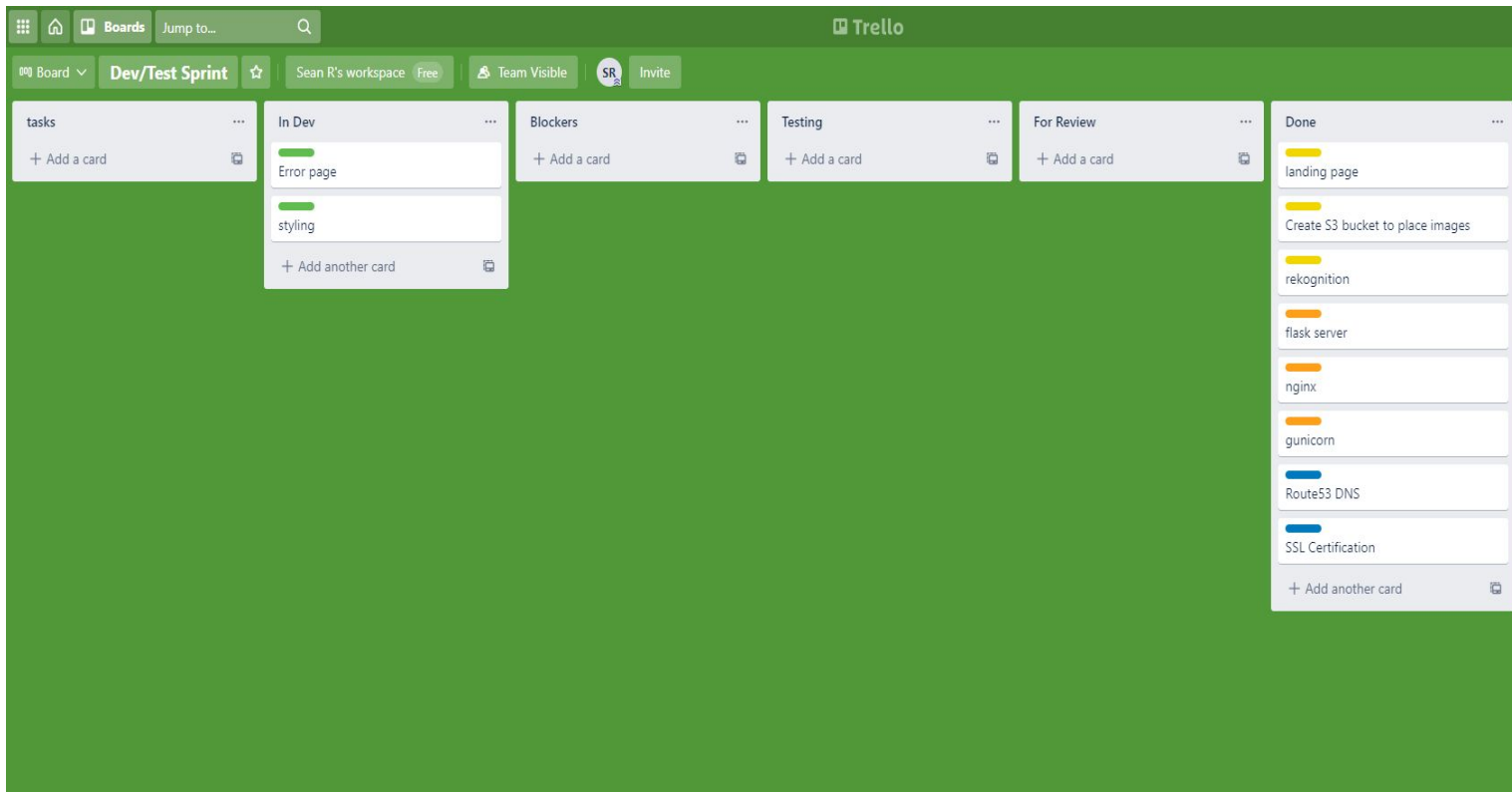




# Workflow



# Workflow



# Workflow

The screenshot displays a Trello board interface for a project named "Dev/Test Sprint". The board is organized into six columns representing different stages of the workflow: "tasks", "In Dev", "Blockers", "Testing", "For Review", and "Done". Each column has a header with a title, a three-dot menu, and a "+ Add a card" button. The "Done" column is currently populated with eight cards, each representing a completed task. Each card features a yellow progress bar at the top, indicating 100% completion. The tasks listed in the "Done" column are: "landing page", "Create S3 bucket to place images", "rekognition", "flask server", "nginx", "gunicorn", "Route53 DNS", and "SSL Certification". Below these cards is a "+ Add another card" button with a card icon. The top navigation bar includes the Trello logo, a "Jump to..." search bar, and various board management options like "Board", "Dev/Test Sprint", "Sean R's workspace", "Free", "Team Visible", and "Invite".

tasks ...  
+ Add a card

In Dev ...  
+ Add a card

Blockers ...  
+ Add a card

Testing ...  
+ Add a card

For Review ...  
+ Add a card

Done ...

- landing page
- Create S3 bucket to place images
- rekognition
- flask server
- nginx
- gunicorn
- Route53 DNS
- SSL Certification
- Error page
- styling

+ Add another card



# Testing

## botocore.exceptions.ParamValidationError

botocore.exceptions.ParamValidationError: Parameter validation failed:  
Invalid length for parameter Key, value: 0, valid min length: 1

### Traceback (most recent call last)

```
File "/home/ubuntu/environment/t4/src/venv/lib/python3.6/site-packages/flask/app.py", line 2464, in __call__
    return self.wsgi_app(environ, start_response)

File "/home/ubuntu/environment/t4/src/venv/lib/python3.6/site-packages/flask/app.py", line 2450, in wsgi_app
    response = self.handle_exception(e)

File "/home/ubuntu/environment/t4/src/venv/lib/python3.6/site-packages/flask/app.py", line 1867, in handle_exception
    reraise(exc_type, exc_value, tb)

File "/home/ubuntu/environment/t4/src/venv/lib/python3.6/site-packages/flask/_compat.py", line 39, in reraise
    raise value

File "/home/ubuntu/environment/t4/src/venv/lib/python3.6/site-packages/flask/app.py", line 2447, in wsgi_app
    response = self.full_dispatch_request()

File "/home/ubuntu/environment/t4/src/venv/lib/python3.6/site-packages/flask/app.py", line 1952, in full_dispatch_request
    rv = self.handle_user_exception(e)

File "/home/ubuntu/environment/t4/src/venv/lib/python3.6/site-packages/flask/app.py", line 1827, in handle_user_exception
    reraise(exc_type, exc_value, tb)
```

# Testing

## botocore.exceptions.ClientError

botocore.exceptions.ClientError: An error occurred (ExpiredToken) when calling the ListObjects operation: The provided token has expired.

### Traceback (most recent call last)

```
File ~/home/ubuntu/environment/t4/src/venv/lib/python3.6/site-packages/flask/app.py, line 2464, in __call__
    return self.wsgi_app(environ, start_response)
File ~/home/ubuntu/environment/t4/src/venv/lib/python3.6/site-packages/flask/app.py, line 2450, in wsgi_app
    response = self.handle_exception(e)
File ~/home/ubuntu/environment/t4/src/venv/lib/python3.6/site-packages/flask/app.py, line 1867, in handle_exception
    reraise(exc_type, exc_value, tb)
File ~/home/ubuntu/environment/t4/src/venv/lib/python3.6/site-packages/flask/_compat.py, line 39, in reraise
    raise value
File ~/home/ubuntu/environment/t4/src/venv/lib/python3.6/site-packages/flask/app.py, line 2447, in wsgi_app
    response = self.full_dispatch_request()
File ~/home/ubuntu/environment/t4/src/venv/lib/python3.6/site-packages/flask/app.py, line 1952, in full_dispatch_request
    rv = self.handle_user_exception(e)
File ~/home/ubuntu/environment/t4/src/venv/lib/python3.6/site-packages/flask/app.py, line 1821, in handle_user_exception
    reraise(exc_type, exc_value, tb)
File ~/home/ubuntu/environment/t4/src/venv/lib/python3.6/site-packages/flask/_compat.py, line 39, in reraise
    raise value
File ~/home/ubuntu/environment/t4/src/venv/lib/python3.6/site-packages/flask/app.py, line 1950, in full_dispatch_request
    rv = self.dispatch_request()
File ~/home/ubuntu/environment/t4/src/venv/lib/python3.6/site-packages/flask/app.py, line 1936, in dispatch_request
```

# Testing

## Uh-Oh, There's an error

### Possible reasons:

Hit the upload button before a file was chosen

Uploaded a non image file

Sean's broke and stopped the Server

[Let's Try Again](#)

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**Thank You**