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# RaaS

(Reforestation as a Service)

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# What is the problem we want to solve?

## The problem is a big one: Climate Change

The level of carbon dioxide (CO<sub>2</sub>) in the atmosphere is increasing, causing many environmental problems:

- Floods, droughts, hurricanes, wildfires and heat waves
- Species extinctions
- Decrease of fresh water supplies
- Rising sea levels
- Etc.

Climate change is one of the biggest problems of our time, if not the biggest.

# What is our solution ?

There are many solutions, and one of them is planting trees.

Trees fight climate change by absorbing CO<sub>2</sub> from the atmosphere. Each tree can absorb 22kg (50 pounds) of CO<sub>2</sub> per year for 40 years.

There are many organizations focused on global reforestation. Businesses and individuals can make donations to these organizations to have trees planted for 1\$ per tree.



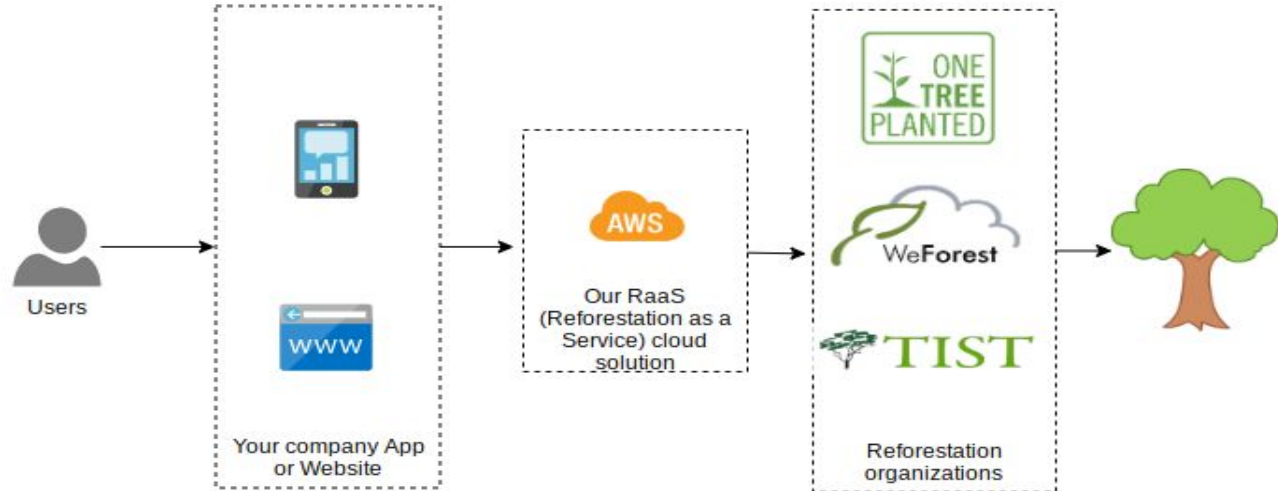
Furthermore, trees contribute to economic growth, poverty alleviation, food security and biodiversity conservation.



*"Forests represent one of the largest, most cost-effective climate solutions available today."  
(New York Declaration on Forests, 2014).*

# So, what do we do?

We provide simple and easy to use Application Programming Interfaces (APIs) to help connect websites and mobile applications to reforestation organizations to have trees planted.



# What's in it for your company?

- Make the world a better place
  - Corporate social responsibility
  - More sales
  - Reward customers social impact
  - Tax charity returns
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# How does it work?

- Choose a reforestation project from our list.
- Add a few line of code we provide in your website or mobile app.
- Your end users make a specific action on your website or app. Some examples:
  - buying an item in a mobile game
  - subscribing to online billing
  - subscribing to a 6 months plan
  - buying a specific product on your website
- The PlantTree API sends a request to plant a tree.
- Your user is informed that a tree will be planted.
- You receive a monthly bill for the number of trees to plant (1\$ each)

# Code to Add in your Application/Website

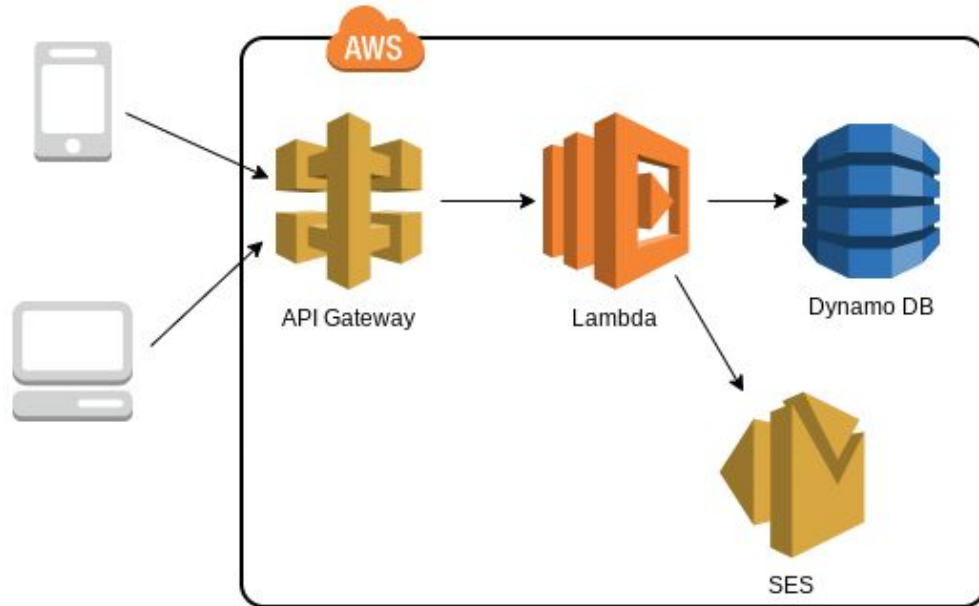
It would be something like this:

```
xhttp.open("POST", "https://DigitalHumani.com/PlantTree", true);  
xhttp.setRequestHeader("Content-type", "application/json");  
xhttp.send(JSON({  
    CompanyId:23, <--- Your company number  
    UserId: 123456 <--- Unique identifier of your user  
    ReforestationCompany:2, <--- Reforestation company you chose  
    ProjectId:15, <--- Reforestation projectID  
    NumberOfTrees:1})); <--- Number of trees to plant (default is one)
```

# Our IT architecture on AWS

Our architecture is 100% on AWS (Amazon Web Services), offering us the following benefits:

- No infrastructure to maintain
- Scalable
- Cost effective, with a free tier
- Secure
- High performance
- Reliable (always running)





# Reforestation company:

## One Tree Planted

Current reforestation projects in:

- North America (California, Oregon, British Columbia, etc.)
- Latin America (Brazil, Haiti, Guatemala, etc.)
- Asia (Indonesia, India and Vietnam)
- Africa (Ethiopia, Kenya, Rwanda, etc.)

One Tree Planted is a Registered 501(c)(3) charity in the US.



# Reforestation company: WeForest

Current reforestation projects in:

- Brazil
- India
- Zambia
- Ethiopia

WeForest inc. is a Registered 501(c)(3) charity in the US. Also, donations are tax deductible in Belgium, France, and most of Europe.



# Reforestation company:

**TIST** (The International Small Group and Tree Planting Program)

Current reforestation projects in:

- Kenya
- India

TIST is a project, run through a public-private partnership. Tax-deductible donations to I4EI, TIST's non-profit arm and a Registered 501(c)(3) charity.



**TIST**

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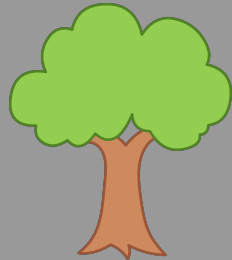
# Money Q&A

**Q:** How do we pay for these trees?

**A:** You directly pay the reforestation organizations 1\$ for each tree. This way, you can be sure that the money is going directly to these trusted reforestation organizations. It also helps you benefit from tax deductions.

**Q:** Since we pay only the reforestation company, how do you make money?

**A:** We don't make any money. AWS allows free use of the services until there's a lot of usage. As an example, the DynamoDB service offers 25 free gigs of storage per month and 200 million requests per month. LOTS of trees will be planted until we have to pay AWS.



# Who am I ?

Jonathan Villiard

- Solutions Architect Consultant
- 20+ years of IT experience (CGI, National Bank of Canada, Videotron, Desjardins, Hydro-Québec, etc.)
- AWS Certified Solutions Architect

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# Appendix A - Amazon Web Services (AWS) used

- **Amazon API Gateway** is a fully managed service that makes it easy for developers to create, publish, maintain, monitor, and secure APIs at any scale.
- **AWS Lambda** lets us run code without provisioning or managing servers.
- **Amazon DynamoDB** is a nonrelational database that delivers reliable performance at any scale.
- **Amazon SES** is a cloud-based email sending service.

