PYTHON FOR BEGINNERS

by Sam and Gabby

How we approached Python

Why Python? We wanted to work with a language highly sought after in the industry, and Python consistently appeared in job ads. Its reputation as an accessible, beginner-friendly language was also a major factor.

Our Goal: To create a simple demonstration that effectively highlights the key differences between Python and JavaScript. This comparison allowed us to better understand both languages.

HISTORY

01

Created in 1989

Guido Van Rossum began developing Python as a hobby project, to create a simpler and more readable programming language.

02

Official Release in 1991

Python is officially released with core features like functions and modules.

03

Gained popularity in the 2000s

Python 2 gains popularity for web development, scripting and automation.

04

2008+

Python 3 fuels Python's rise in data science, AI and education.

How we learnt Python

Videos

We watched a lot of youtube videos because we both learn better watching how something is done over reading. This visual approach was helpful for quickly understanding the new concepts that come with python

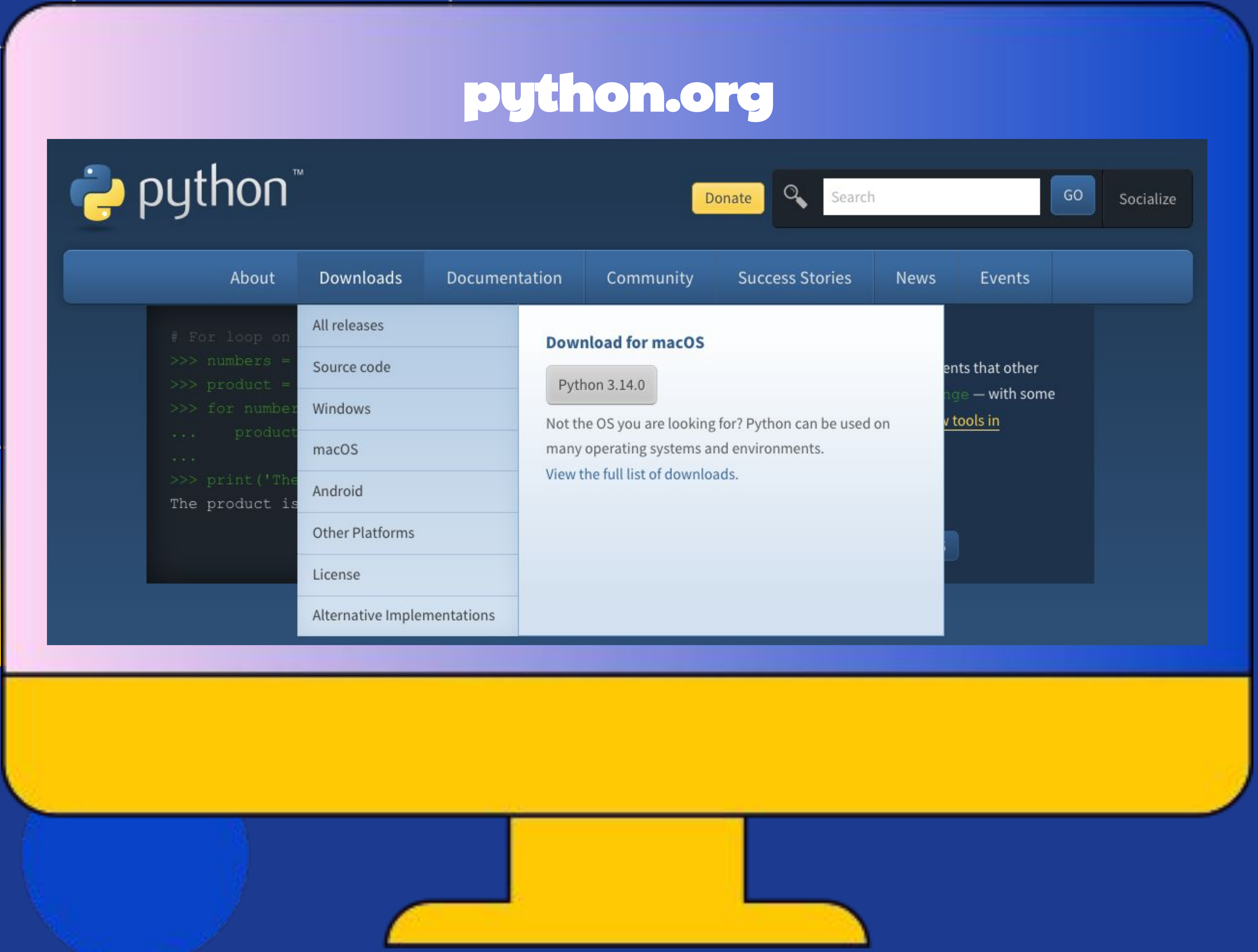
Documentation

All of the documentation we used are listed within our GitHub repository. These served as our reference for syntax, functions and best practices.

Tech Ed

The knowledge we have learned over the last 10 weeks on this course helped provide a good foundation and framework for our journey to learn the basics of Python.

HOW TO INSTALL



```
# For loop on
>>> numbers =
>>> product =
>>> for number
...     product
...
>>> print('The
The product is
```

Download for macOS

Not the OS you are looking for? Python can be used on many operating systems and environments.
View the full list of downloads.

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The installation process for Python varies depending on the operating system you use.

We followed the documentation provided on the Python website, and YouTube tutorial for visual guidance. *For further information, you can refer to our GitHub repo where we wrote step-by-step guides for installation.*

Once Python is installed, on VS Code, it is recommended to install the following extensions:

- Python
- Python Debugger
- Pylance

Congratulations! You now have Python installed!

Time for a short demo

HOW IT WENT

Skills improved

Understanding Python basics, collaboration and teamwork skills, communication skills, working with new people, task management and organisation skills, pair programming and adaptability

Communication

We both feel like we communicated really well. We made sure that we both agreed on task and the plan before moving on. We used tools like Trello, Discord and word for daily check-ins and planning the day.

Lessons learnt

We encountered a roadblock when we couldn't get the repository clone working on Gabby's laptop. Manny suggested we try paired programming. This approach helped us quickly recover lost time.

PYTHON VS JS

Python

Package installer tool → PIP
print(“Hello World!”)
Naming convention snake_case → my_name = “Gabby”
no let/const for declaring variables → my_greeting = “Hello World”
Uses readable words: and, or, not.

JavaScript

Package installer tool → NPM
console.log(“Hello World!”)
Naming convention camelCase → myName = “Gabby”
needs let/const for declaring variables → let myGreeting = “Hello World!”
Uses symbols: &&, **`,

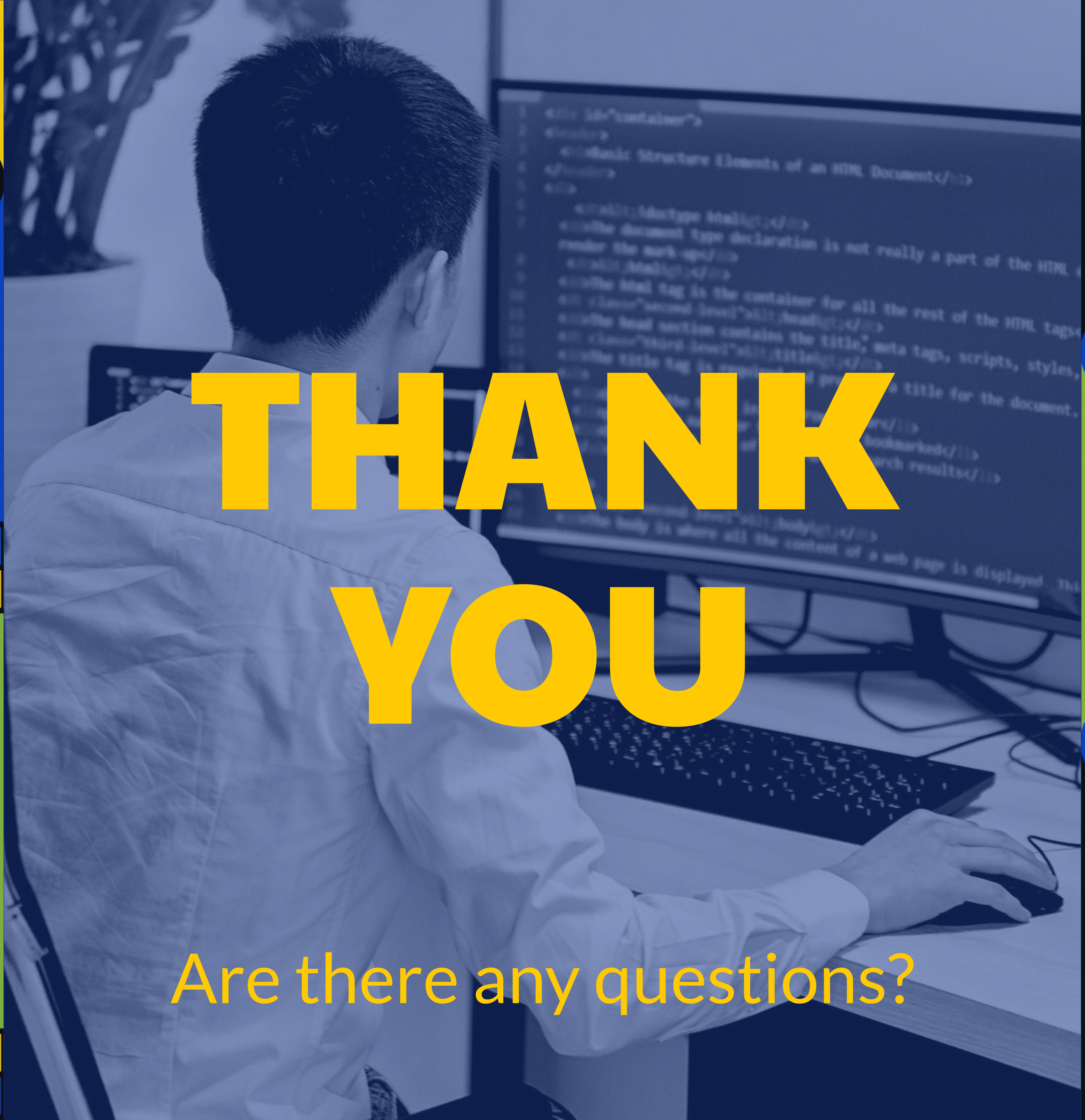
USE CASES

Choose Python for:

- Data-intensive applications: AI/ML, Big Data processing, Business Intelligence
- Complex business logic where code maintainability is paramount
- Rapid prototyping of backend APIs where performance is not the absolute highest priority
- Projects that require strong security and a structured approach (using Django)

Choose Express.js for:

- Real-time applications: Live chat, online games, streaming dashboards
- I/O-bound tasks requiring high throughput (handling many simultaneous connections)
- Projects where having a full-stack JavaScript team is a priority



THANK YOU

Are there any questions?