



# POPULAR LANGUAGES IN COMPUTER SCIENCE

## ABSTRACT

The application to explore  
all popular programming  
language around the  
world

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## I. Introduction of the application

My application has a relatively long name, called “Popular languages in Computer Science”. The application is quite simple and has text, images and a map to display the information out on the screen for the user

## II. Why did I build this application

My main motivation for constructing the application can be narrow down to be, the beauty of programming languages diversity. There are many programming languages around the world and each of them has the distinct publication time, author who invent them and their unique application. Each application will have its own strengths and shortcomings. So I would like everyone that learning programming to know more about the programming languages world

## III. Explanations about the application

The application can help user to learn more information regarding the programming languages around the world, most specifically are the top 20 most popular programming languages. User then will understand thoroughly the application of the languages and additional information like the representation logo of the language.

## IV. How to use it

The application is quite simple hence the usage is quite straightforward. We launch the application then we will be taken to the login screen. Type in “Admin” for the username input field, and the “Admin” for the password input field.

Once we have access to the main screen, where a list of programming languages is displayed, we can learn about each of them.

## V. Main features

Main features of the application are:

- a) **List displaying the information**
- b) **Login screen**
- c) **Dark mode**
- d) **Tab View**
- e) **Map for original location of the languages, where it is invented**
- f) **Detailed view for each item in the list**

There is also a Tab View to enter the application information tab, where it shows to user what they can gain from using the app.

## VI. Explain each feature

### a) List displaying information:

The list is displayed once we logged in the application, it listed out the total of 20 programming languages. The list is used to summarize the overall name and the logo of each programming languages. If we click on it, we will be taken into a detailed information page.

### b) Login screen

The login screen is used to authorized user into the app, for now it is just a hardcoded credentials with “Admin” for both username and password for logging in.

### c) Dark mode

The dark mode is used to assist user readability during night-time or in the dark environment, which helps reducing eye strain for long duration of app usage.

### d) Tab view

The tab view is used to navigate between the list of programming language to the user manual, the left tab is for displaying information, the right tab is for user to read should they want to know how to use the app.

### e) Map

Each of the programming language will have their own country of origin, thus, the map is placed inside the detailed view of the app. On the map, there is a small MapMarker pin, it is used to improve the accuracy when the user glance at the map. If we just put a plain map there, user will experience some difficulty in finding the exact location on the map.


The map mostly displays the location of the programming languages via country

### f) Detailed view for each item in the list

Should the user click on the item in the list, they will be redirected to another page, where the detailed information regarding the programming languages is displayed. Inside the page contained the map, the logo of the programming language, the name of the author, country of origin where it is published, the year they publish and the application of the languages, for example language A is used in the web development field.

## VII. Screenshots

### a) Login Screen

Carrier 

11:11 AM



# Popular languages in Computer Science

Username: Enter your username

Password: Enter your password

Login



Login



Application Information

## **b) Programming List**

5:50



Light mode 

Dark mode 

## Top ten languages



JAVA



PYTHON



C++



Login




Application Information


### **c) Dark mode vs Light mode**



5:50



Light mode 

Dark mode 

## Top ten languages



JAVA



PYTHON



C++

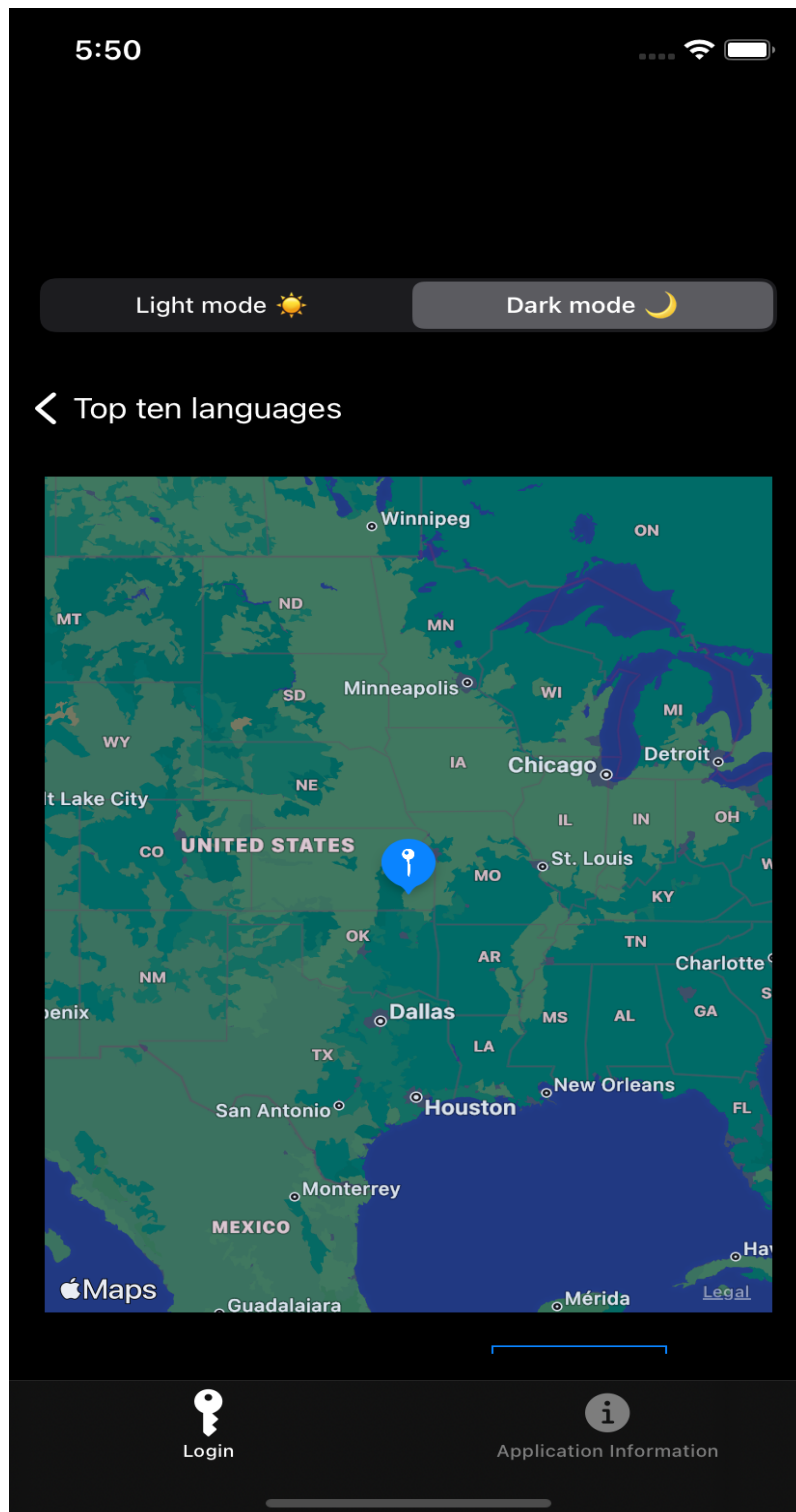


Login




Application Information

d) Detailed View of the item



5:51



Light mode 

Dark mode 

< Top ten languages

Apple Inc



Year published: 2014

Country of origin: USA

The Swift programming language is a general-purpose, open-source programming language designed by Apple. The language is influenced by Python, making it fast and intuitive. Swift is mainly used for native iOS and macOS development. Many popular apps including LinkedIn, Lyft, and WordPress are written in Swift. If you're interested in iOS development, Swift is a great language to learn. Let's learn more about this popular language!. Many features of Swift are:

- . In swift Less execution time because




Login



Application Information

5:51



Light mode 

Dark mode 

< Top ten languages



Yukihiro  
Matsumoto




Login




Application Information

5:51

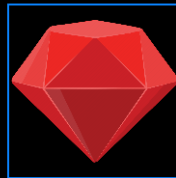


Light mode 

Dark mode 

< Top ten languages

# Yukihiro Matsumoto



Year published: 1995

Country of origin: Japan

Ruby is an open-source object-oriented scripting language invented in the mid-90s by Yukihiro Matsumoto. Unlike languages such as C and C++, a scripting language doesn't talk directly to hardware. It's written to a text file and then parsed by an interpreter and turned into code. These programs are generally procedural in nature, meaning they are read from top to bottom. Object-oriented languages, on the other hand, break out pieces of code into objects that can be created and used as needed. You can reuse these objects in other parts of the program, or even



Login



Application Information

**e) User manual**

5:50



What you can find in this app are:

1. Top programming language around the world
2. Their logo
3. Author who invent the language
4. Main application of the language
5. Country of origin where the language is published
6. The year they are published



Login



Application Information

## VIII. Video link to the demonstration of the app

The link is: [assignment1\\_demoVideo](#)

Additionally, this is the GIF of the demonstration





## **IX. Potential idea for future features extensions**

If possible, I would like to add in a real user authentication system to manage user log in and log out of the app. And have some User Interface revamped.