

Internationalization of P5.js to French

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Project Abstract

(Describe your idea in one or two sentences.)

My project idea is to aid with the internationalization improvements for p5.js, I would like to expand the Processing software capabilities in French.

Project Description

(Describe your project in more detail. How will your project expand the possibilities of the Processing software? Who is the target audience for your project?)

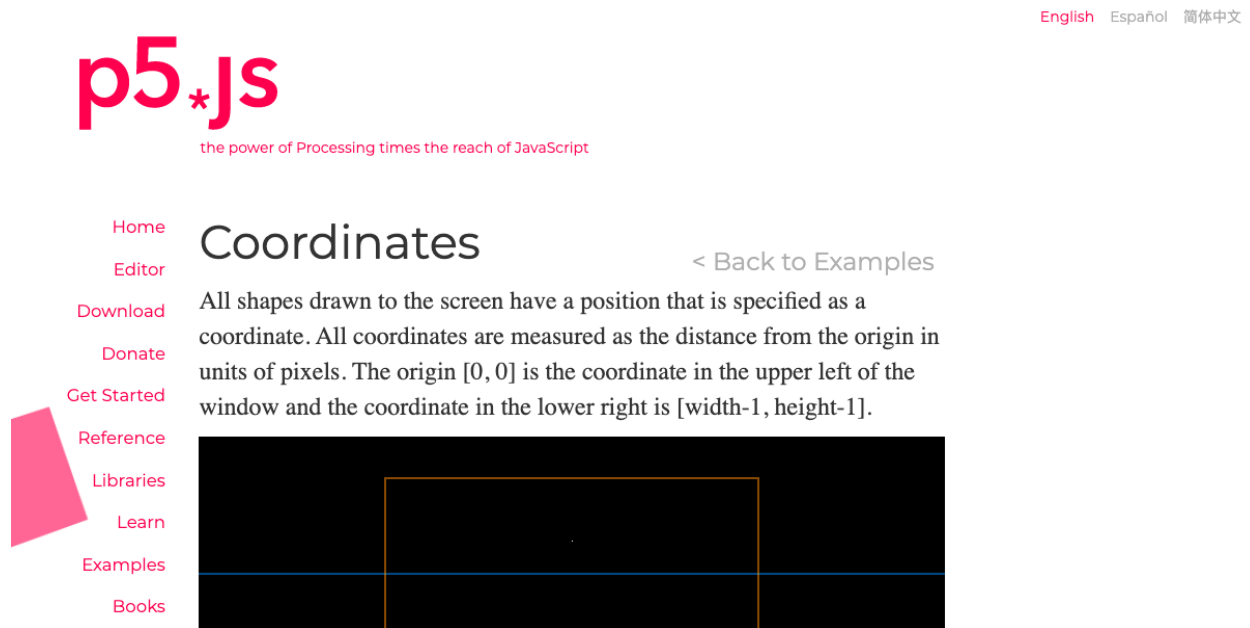
The objective of my contributions would be to expand the availability and accessibility of the Processing libraries to Francophones across the world. French is the fifth most common language in the world with high frequencies in not only France but also Sub-Saharan Africa and Northern Africa. Though spoken, the Franco French and the Africo French can sound quite different with varying accents, the written language remains the same. There are large differences in slang, but since this site and translation would remain academic, the content would not be affected by such variation. Unfortunately for languages such as Creol, though French may be more similar and familiar to it than English or Spanish, there are differences in written language. By expanding accessibility to non-dual language French-seakers, the span of p5.js is not only likely to increase, but will also likely inspire new usage and contributions from previously underserved groups. What I find particularly engaging about this idea is that this invites a demographic that is typically overlooked to join the visualization team. As the Processing Foundation states, “Our mission is to promote software literacy within the visual arts, and visual literacy within technology-related fields — and to make these fields accessible to diverse communities.” Given that the Processing Foundation further aims to empower people of all interests and backgrounds to learn how to program and make creative work with code, the linguistic expansion of its libraries is essential to its accessibility. Though I am French, and France itself would be a target by proxy, reaching African countries could have a greater impact on the diversity of ideas for growth for p5.js, and also the most impact in accordance with the goals of the Processing Foundation.

Development Process

(Describe your development process. What is your proposed timeline? What do you expect to have completed by midterm and final?)

Very general terms:

The first half would be setting up the backend for this project; setting up the abbreviation, opening a new issue and proposing the addition of French, add the new menu entry, ect... The final would be the translating of the website, examples, and code; more specifically the p5js.org website welcome and [home](#) page, the “[Get Started](#)” tab, the [download](#) tab, the examples’s descriptions:



”All shapes drawn to the screen...”

and the code comments within each example if possible:

```

let y = 100;

// The statements in the setup() function
// execute once when the program begins
function setup() {
  createCanvas(720, 400); // Size must be the first statement
  stroke(255); // Set line drawing color to white
  frameRate(30);
}
// The statements in draw() are executed until the
// program is stopped. Each statement is executed in
// sequence and after the last line is read, the first
// line is executed again.
function draw() {
  background(0); // Set the background to black
  y = y - 1;
  if (y < 0) {
    y = height;
  }
  line(0, y, width, y);
}

```

These were the most useful aspects when I was getting started, and therefore to draw more users in and make learning the workings of this library as smooth as possible, those would be my priority. As in most projects, the setup time tends to be the most tedious and requires the highest learning curve. The implementation phase, despite requiring careful attention to detail, would however lend itself well to consistent and steady development.

Outline:

Community Bonding	May 6 - 27	- Improve any skills that will facilitate the process - Analyse the inner workings of the website and github - Meet and get to know other team members and mentors.
Coding 1	May 28 - June 15	- Construct the necessary backend needed for the addition of a new language - Setting up the abbreviation - Add the new menu entry

Evaluations		- Apply translations to on part of web editor to showcase work - Fix any bugs that may arise during testing
Coding 2	June 20 - July 14	- Implement the new language into the Processing capabilities
Evaluations		- Showcase capabilities and new language development second time
Enhancements	July 17-10	- Fix any aspect mentor's recommend - Make final accessibility recommendations necessary
Submission	Aug 10- 17	Submit
Final Evalution		

Overview of Work to be Completed

As recommended in the GSOC official timeline, there will be three phases of evaluation as follows:

- **Evaluation 1**

Implementation of Backend necessary for the immersion and expansion into a new language

-Using the existing rubrics laid out for Spanish, Chinese, and Hindi.

- **Evaluation 2**

Translation the web editor, examples, mission statement, etc... into French

-Using my native English and French and attention to detail

- **Final Evaluation**

Enhancement to necessary UI aspects as pointed out by mentors.

More about you

(What are your interests and experience? Which of the Processing software projects have you used and what was your experience like? Have you contributed to other open source projects? If you have an online portfolio, github account, or other relevant documentation of your work, please include links.)

I am highly interested not only in technological development outright, but also in the development of approaches to utilize emerging technologies as means to resolve social and economic issues for underserved populations. It is for this reason I was initially drawn to Google Summer of Code, the potential to work alongside and make contributions to organizations with similar objectives. During my time as a student, I have been engaged as a research assistant for over a year with Columbia's Earth Institute, working on projects through the Data Center in NASA's Earth Observing System Data and Information System. Though this was only supposed to last for a summer, I became very engaged and am now leading aspects of the project as it approaches potential publication. For this research I used mainly python and ArcGIS software to create spatial and temporal analysis, with the objective of predicting population trends through nighttime luminosity data. Though my open source contributions are limited at this time, I am heavily involved in computer science education and lead my own weekly class, through Columbia University, instructing high school students on coding and general computer science theory.

Currently I have been using HTML and CSS in my work study job for over two years, I came across the need for Processing software when I wanted to make a personal website, I wanted it to be a little bit more eye catching than HTML could offer so I gravitated to js. After this I met someone who did this the Processing Foundation's Summer of Code last year and their passion for it inspired me to dig deeper as well. I made a few clips/animation using p5.js, and could spend hours playing with its capabilities, compared to my formal education in cs which is very backend heavy, I found p5.js so much more gratifying; there is instant reward in working on it. This is why I think it is an ideal environment to expand to more people, this is a natural hook to get people interested in coding.

Personal website: <http://www.columbia.edu/~dcg2150/index.html>