

# Processing Foundation

## Internationalisation(i18n) of P5.js website



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### Project Abstract

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The aim of this project is to complete Hindi Translation for the P5.js website and to improve the i18n engine. This will include updating i18n engine files to make the site faster when translated. P5.js has a variety of pages that are to be translated to Hindi in different ways. Apart from this, I would like to work on any changes suggested by the project mentor.

### Project Description and Development

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As the P5.js website uses internationalization (i18n). The website is built from templates that retrieve the text content from data files. In this project, the main priority is to get the site up and running for Hindi Translation. I will read and understand the codebase first and then I will start by making appropriate changes. First I would like to complete the leftover translation in the P5.js website in Hindi Branch. P5.js has 3 different kinds of pages which are .hbs format web pages, References and Examples.

- **All Webpages (.hbs format)**

The Web Pages are written in .hbs format. They use handlers to access the i18n data of each language and render them accordingly. Each handler binds a specific spot on the HTML document with specific content stored in a file and is replaced by it when the page is built. Hbs files are stored under **src/template/**.

The files which contain all the i18n are stored in **.yaml**(YAML) format in the src/data folder of this repo. There is a file named hi.yaml which contains translations for Hindi language.

- **Reference Pages**

The Reference pages are built in English based on the inline documentation in the p5.js source code. The English text is then changed with the appropriate translation using JavaScript on the Front-end. All the translation swaps of the Reference pages happen through `updateLanguage()` function in `src\templates\pages\reference\index.hbs` file. The translated versions of the JSON file need to be created and updated for hindi language.

- **Example Pages**

All the Examples of P5.js are present under `src/data/examples`. Within the examples folder, there is a folder for each of the three languages: `en/`, `es/`, and `zh-Hans/`. A `hi/`

The folder has to be created to save all the examples in Hindi language. In Examples text is

hardcoded in the webpages and can't be extracted from the documentation each  
An example needs to be translated separately.

In addition to this I would like to discuss some changes to i18n engine with the mentor. Which might increase the performance of the website. Other than this I will be working on any additional feature suggested by the mentor.

## Timeline

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### Up to May 17

- Make more contributions through issues and Read Code to further my understanding of the codebase.
- Experiment with the p5.js website and make prototypes of the functions I plan to implement.
- Go through the documentation of the p5.js website.

### Community Bonding Period (May 17 - June 7):

- Interacting with mentors and discussing new ideas with mentors for i18n.
- Thoroughly going through the documentation of the p5.js website.
- Start setting up the P5.js website on the local host and solve any dependencies issue.

### **Week 1 (June 7- June 14) :**

- Understanding the code base for the Hindi branch.
- Starting from completing the left over translation of **hi.yml** file. In file hi.yml from line 519 to 600 text is in English.
- Apart from this, I have left some room for new Ideas.

### **Week 2 - 3 (June 15 - June 28) :**

- After the translation is complete , then checking all the text inputs for the hi.yml file and I will make sure that there are no grammatical errors occur.
- Coding **data.json** file for the required changes. This will update the hi.json file as well.
- Updating i18n-tracking.yml file. Need to rewrite this file for the Hindi language.

### **End Semester Exam (June 28 - July 9) :**

I will have my End Semester exams. This week I will only be able to devote 2-3 hours a day. After July 10 I have no obligation and will be devoting all my time to GSOC.

### **Week 4 - 5 (June 30 - July 11) :**

- Working on Reference Pages, updating src/data/references/hi.json file.
- Adding toggle button for the Hindi Language.
- Sync hi-old.txt with hi.yml and then removing hi-old.txt.

### **Evaluation (July 12 - July 16) :**

Mentors and students submit their evaluations of one another.

### **Final Month (July 17 - August 16) :**

- Working on Examples Pages as there are too many examples they will take at least a week.
- Testing the translation with different settings.
- Coding i18n.js for a faster page reload.
- Checking the language-translation word by word. To avoid any grammatical errors.

## Final Evaluations (August 23 - August 30)

- Fixing any bugs, and complete pending work, if left.
- Comprehensive testing of implementation.
- Write Proper documentation, if left.
- Submit the Final Code.

## Open Source Contributions

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### Contributions in P5.js website

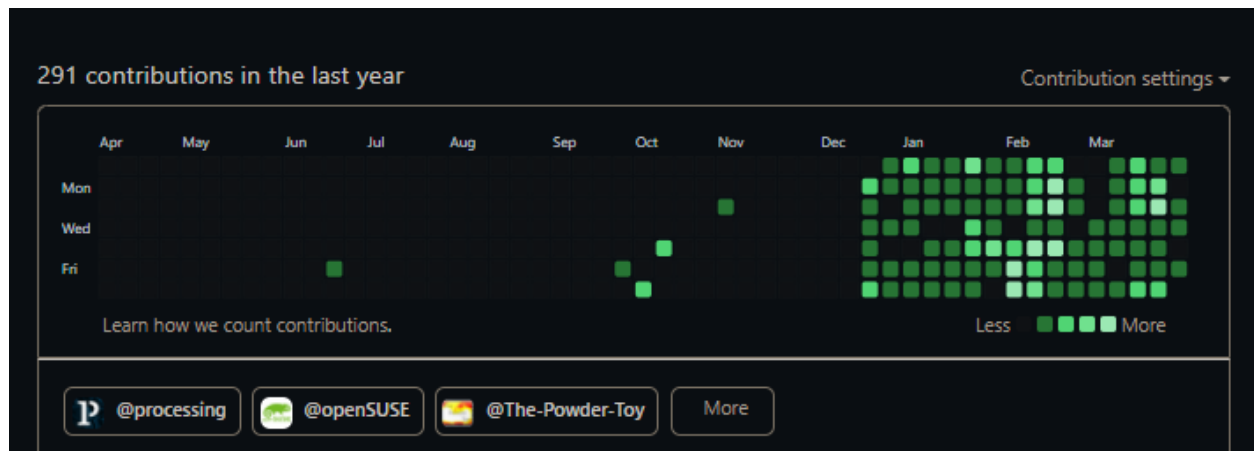
PR	Title	Status
<a href="#">#965</a>	Adding Millisecond's example in Inputs for P5.js	Merged
<a href="#">#967</a>	Brownian Motion example added in Motion From processing.org to p5js.org	Merged
<a href="#">#976</a>	Adding Random Gaussian Example From Processing to Processing.js	Merged
<a href="#">#983</a>	Avenir Font files Removed and Files Updated	Merged
<a href="#">#979</a>	Text Rotation Example Added from processing to processing.js	Merged
<a href="#">#994</a>	<b>Bug Fix</b> - Download page link now points to vX.X.X	Merged
<a href="#">#998</a>	Translating Contributors Conference Pages (2019 and 2015) in Hindi Branch	Merged

## Why Me ?

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Other than being a self-taught developer for over 6-months, and a passionate open-source contributor. I believe I am best suited for this project, because I am already working on this project ([#998](#)), and I already know very well about the project vision and roadmap.

- **Consistency** - I am very consistent with my work, My contributions are regular and consistent in Processing Foundation. I am well versed with the code of the P5.js website.



## Work Experience

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- **Metvy Internship**

**Role - Engagement and Consumer Behavior (Technology)**

It was a great working experience at Metvy. We were working on Consumer Engagement with the help of advanced communication skills and Language Processing. We used artificial intelligence to build good suggestions for better communication between the users.

- **HacktoberFest 2020 Winner**

I started my open source journey with the HacktoberFest. Hacktoberfest is the month-long event held in October, to celebrate open source software worked on 3 different projects with 12 PR's and 2 bug fixes.

## About Me

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I am a first-year student pursuing Electronics and Communication Engineering at The [Institute of Engineering & Technology, DAVV](#) Indore. A Student with keen interests in the fields of Technology, Programming and Data Science. I value teamwork, practical optimism, and compassion for what I love.

My programming languages of choice are C++, JavaScript and Python. I have had experience in working with large codebases as well as making something from scratch

through previous internships. Data Structures and Networking have been two of my favorite subjects in the college curriculum.

## After GSOC

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Well GSOC is just another step of my journey. I will continue to contribute to the open source community. I think open source projects are the best to work on as we can learn and apply new technologies at the same time. There is one advantage to this situation even if the site content changes I will be there to commit changes to Hindi branch, the site will always be up to date for both Languages.