Internationalization in p5.js web editor (Simplified Chinese)

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Project Abstract

The project aims to create a framework for internationalization and adding Simplified Chinese translation. p5.js web editor is an online platform that aims to let people of all ages and abilities to create, learn and share coding. The p5.js web editor project has been led by Cassie Tarakajian since 2016, and over a million sketches are created on this platform. Currently, p5.js web editor includes no translation, and given that the web editor is widely used by people around the world, it will be beneficial to add translation into it.

Project Description

p5.js has been working on creating a friendly community for people from all fields, stating "We welcome newcomers and prioritize the education of others". Chinese is the most-spoken language in the world, while many of the creative coding resources don't support Chinese, which becomes a barrier for non-bilingual Creators. By internationalization, I'm certain that we can encourage more Chinese-spoken people to create and share their work on web editor. This project proposes to add a new framework for internationalization in p5.js web editor, so as to enable other contributors to follow the framework while they add more translation, and add a Simplified Chinese translation as an example.

The main areas of development are:

- 1) Translate English into Simplified Chinese:
 - a) Document all the words in p5.js eb editor that need to be translated and translate the words based on the standard as p5.js website Simplified Chinese translation.
 - b) Find other native speakers to proofread the translation.
- 2) Create framework for internationalization and implement translation in p5.js web editor:
 - a) Currently p5.js web editor doesn't have a framework for translation. I will apply react-i18next as the standard framework for web editors.

- b) Since internationalization will be a new function in web editor, I will take the UI interface into consideration. One idea in my head now is to put it into settings.
- 3) Document the updates and create guide for further contributors:
 - a) After finishing internationalization, I will create a guide on how to start a new translation in web editor like the <u>guide</u> in p5.js website, so as to help other contributors to engage in this project.

Development Process

May 4 - June 1, 2020 (Before coding starts):

- Get familiar with the code and structure of p5.js web editor, and sharpen my skill on React.
- Bond with community and mentors.
- Collect all the words that need to be translated, the data will be based on Spanish translation issue on <u>github</u> by Aarón Montoya-Moraga and add more according to the web editor.

June 1 - 7, 2020 (week 1):

• Complete the Simplified Chinese translation of interface.

June 8 - 14, 2020 (week 2):

- Complete the Simplified Chinese translation of drop-down menu and pop-up window.
- Publish the issue on github to look for proofhead.
- Meet with Cassie to get further insight and opinion in <u>react-i18next</u> development.

June 15 - July 5, 2020 (week 3-5):

- Start building the framework with React with react-i18next.
- Revise the translation after proofhead.
- Document the process on a weekly basis.
- Evaluation phase 1 due by July 3.

July 6 - 19, 2020 (week 6-7):

- Keep building the framework and add JSON file in it.
- Document the process on a weekly basis.

July 20 - August 2, 2020 (week 8-9):

- Design the UI to switch between languages.
- Implement the UI into Javascript.

• Evaluation phase 2 due by July 31.

August 3 - 16, 2020 (week 10-11):

- Execute the user test of UI, and revise it based on the feedback.
- Write the contributor guide for further translation contributions.
- Reach out to Cassie and the community for more technical feedback.
- If possible, start making Traditional Chinese translation since these two writing languages are pretty similar.

August 17 - 24, 2020 (week 12):

- Go through the whole code and revise the bugs.
- Keep working on the updated documentation on internationalization guide.

August 25 - 31, 2020 (Submit Code and Final Evaluations):

Write up summary documentation and reflection on the experience in Google
Summer of Code working on web editor responsive design.

More about you

Hi, I'm Kuan-Wen Chen (Wen) from Taiwan, a first year graduate student at NYU Tisch's Interactive Telecommunication Program. In graduate school, I started to learn creative coding, especially on p5.js and processing. As a newcomer of programming, p5.js enables me to connect my graphic design background and technology, and feel comfortable when surrounded with these warm community. Recently, I work as a graduate assistant at NYU, tutoring students and giving their assignments feedback for "Code!" and "Code! 2", the online courses of foundation and application of p5.js for NYU undergraduates by Professor Daniel Shiffman.

Before I came to New York, I worked as Assistant Editor in BIOS Monthly, the biggest online lifestyle magazine in Taiwan. Other than that, I also designed posters and visuals for exhibitions and festivals. While working in BIOS Monthly, I was in charge of interviewing international artists in person or via email, then translated it into Chinese, you can see my interview with Thai musician Phum Vipurit here (in Chinese). Through my experience of translation, I found it powerful to cross the language barrier and access more people around the world.

In terms of personal work, I am working on translating LGBTQ history of Taiwan into English. I create an <u>online gallery</u> to present the history of same-sex marriage in Taiwan, and plan to expand

it into a bigger and collective platform for Taiwan LGBTQ community to share their experience during the movements.

You can see my work at https://www.instagram.com/wenandkuan/, please feel free to reach out to me.