

Project Proposal¹

Reporting details:	
Project title	Mapping of speech, occupational and physical therapy centers and updating of tags for educational institutions with SPED classes
Name of Champion/s	Charmyne Mamador
Project Start date	June 1, 2022
Project End date (3-6 month project)	6 months
Target Budget (up to \$5000)	\$4470.00
Location (Region, Country, City/Municipality)	Philippines
Contacts (website, facebook links)	N/A

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¹ Template is customized from [HOT ESA Grants Qualitative Report Template](#) and [Tools4Dev ConceptNote Template](#)

1. Background

Describe the nature of the social problem and data problem your project addressed; include who was / is being affected. Support with data when possible

Autism spectrum disorder (ASD) refers to a broad range of conditions characterized by challenges with social skills, repetitive behaviors, speech, and nonverbal communication.

It is estimated that worldwide about 1 in 100 children has autism.

This translates to 1 in 100 families needing all the support they can get from the community to raise their children.

In the Philippines, out of over 5000 points of interest (pois) identified as a school, only 12 are tagged as 'special needs'.

And fewer than 10 pois are identified as places for therapy.

According to the Philippine Association of Speech Pathologists(PASP) and Philippine Academy of Occupational Therapists(PAOT), in NCR alone, there are over 40 clinics with speech therapy and 29 clinics with occupational therapy. The National Council on Disability Affairs(NCDA) identified 71 schools to have special education classes in Quezon City alone.

With all these data available but not mapped, this project aims to update and enrich our map by adding these therapy clinics, schools with SPED classes, and establishments geared toward the development of differently-abled Filipinos as pois in the map. Also, a web application will be designed and developed to make access, update and validation of data sustainable.

2. Target Results (Objectives)

- **Impact Area(s)** (select all that apply)

Long-term, project aims to contribute to:

- Disasters and climate resilience
- **Public Health**
- Gender
- Sustainable cities and communities
- Displacement and safe migration
- **Other: Reduced inequalities and access to quality education**

- **Project Target Outcomes** (examples below)

By the end of the project, the project will achieve the following:

- *Parents, siblings, teachers, therapists and so on will have increased knowledge on mapping spaces*
- *Increased awareness and understanding about Autism Spectrum Disorder for (but not limited to) the following:*
 - *students/youth*

- *commercial establishments proprietor and employees such as recreational facilities (kids cafe, arcades, theme parks, resorts, and so on), restaurants, malls etc.*
 - *Airline employees*
- *Increase in POIs for tags such as (but not limited to) the following:*
 - *specialized_education=special_needs*
 - *healthcare = speech_therapist*
 - *healthcare = physiotherapist*
 - *healthcare = occupational_therapist*
- **Project Target Outputs** (examples below)

By the end of the project, the project will deliver the following:

 - *60 people trained to map with OpenStreetMap (with preference to siblings, parents, teachers, kids with ASD, students studying speech and occupational interventions and other youth organizations)*
 - *4 sessions of ASD and PWD sensitivity seminars with a targeted audience of 60 people in total*
 - *100% of NCR-based facilities mapped and validated**
 - *30% of non-NCR-based facilities mapped and validated**
 - *1 sustainable web-based application produced for ease of data access, update and validation*
 - *1 community of volunteer data validators, data engineers and application developers*
 - *1 community of parents, siblings, teachers, therapists and so on to serve as a data source and user base for the application*
 - *1 Facebook project page and website*

** based on the data available from the National Council on Disability Affairs, Philippine Association of Speech Pathologists(PASP), and Philippine Academy of Occupational Therapists(PAOT)*

3. Solution

Describe how the project contributes to solving the social problem/data problem. If possible, include the number of people expected to benefit from the project.

For families who have to find a suitable therapy place or sped school for their differently-abled kids, an updated and complete map is essential. Looking for these places, after availability of services, location is the next important factor that positively impacts suitability. To Improve adaptation and usability, a multifunctional web-based application will be created to serve up-to-date map information with some features designed particularly for this user group.

In the Philippines, out of over 5000 points of interest (pois) identified as a school, only 12 are tagged as 'special needs'. And fewer than 10 pois are identified as places for therapy. But as elaborated in the Background section, various organizations have the data that we can add to OSM. Hence, there is a need to update the map information.

1 in 500 Filipinos have Autism and only 10% of them are diagnosed. That's about over 20,000 Filipinos considering the current population (~110M). Moreover, this project aims to support the families of these differently-abled Filipinos. With the average household size in the Philippines, this project aims to help an estimate of 80,000 Filipinos. And impact the rest of the population in order to improve the figures for diagnosis and awareness.

Note: A. POI stats were generated with Overpass Turbo Search. B. Estimates for Filipinos in the Autism Spectrum were based on the figures in this document, <http://legacy.senate.gov.ph/lisdata/48294204!.pdf>

4. Data Use

Describe how the data you generate is intended to be used. How will the data that you collect change / influence the data user's work?

The map with the generated data will be used as the basemap for a web-based application designed to ease the access, update, and validation of the generated data. It will also be the starting point for an aggregated database that will be used by the web-based application to add more metadata for each POIs to support its features.

The project aims to provide the needed information with regards to therapy clinics, schools with SPED classes, and establishments geared toward the development of differently-abled Filipinos in a centralized location, OSM, that will be kept updated and relevant. This information will help each family in their decisions about choosing the right place for their needs. So instead of investing time and money in looking for these places in various ways, the created web-based application should always provide a good starting point for all the families.

5. Activities

Activity	Activity Type	Activity Dates		Target Participants (if relevant)	
Training					
Sensitivity Training (Understanding autism and how we can build our community to be more inclusive)	Training	Jul 7, 2022	- Aug 15, 2022	60	Stakeholders*; Private business (such as restaurants, retail stores, resorts, recreational spaces and others) workers and owners
Mapathons; How to use and map with OSM	Mapping	Jul 22, 2022	- Sep 15, 2022	60	Stakeholders*
How to Validate Data with OSM	Training	Aug 8, 2022	- Sep 22, 2022	30	Stakeholders*
Data Wrangling with Python Training (Scraping and Normalization)	Training	Aug 1, 2022	- Oct 22, 2022	20	Stakeholders*; OSM volunteer mappers
Data Preparation					
Data Normalization of data gathered from all Mapathons	Others	Aug 1, 2022	- Sep 8, 2022		
Data Normalization for data provided by partner organizations	Others	Aug 8, 2022	- Sep 15, 2022		
Data Structuring for OSM	Others	Sep 8, 2022	- Sep 30, 2022		
Data Validation					
Data validation and quality check	Others	Sep 22, 2022	- Oct 15, 2022		
Data Deployment					
Deployment of validated to OSM	Others	Oct 1, 2022	- Oct 22, 2022		
Design of Web-based application					
Stakeholder consultation - Design thinking workshop	Others	Jul 7, 2022	- Jul 22, 2022	5	Stakeholder* representatives
Create Personas, User stories, User journey, and Service Blueprint	Material development	Jul 15, 2022	- Jul 29, 2022		
Review of created Personas, User stories, User journey, and Service Blueprint	Material development	Aug 1, 2022	- Aug 8, 2022	5	Stakeholder* representatives
Final Design Document for the Web-based application	Material development	Aug 8, 2022	- Aug 22, 2022		
Development of Web-based application					
Development Kickoff with volunteers	Others	Aug 22, 2022	- Aug 29, 2022	15	Volunteer developers (with preference to PWDs, diagnosed individuals with ASD, Asperger's and so on)

Setup project repository (Github/GitLab) with milestones, tasks, and subtasks	Others	Aug 22, 2022	- Sep 8, 2022		
Application development (with weekly sync up and milestone check)	Material Development	Sep 8, 2022	- Oct 15, 2022		
Deployment for UAT	Material Development	Sep 15, 2022	- Oct 15, 2022		
User Acceptance Testing (UAT)	Material Development	Oct 15, 2022	- Oct 31, 2022	20	Stakeholders*
Application development for changes from the UAT responses	Material Development	Oct 15, 2022	- Nov 15, 2022		
Production Deployment	Material Development	Nov 1, 2022	- Nov 15, 2022		
Launch of Web-based application					
Training on usage of web-based application	Training	Nov 15, 2022	- Dec 15, 2022	30	Stakeholders*
Application launch	Others	Nov 1, 2022	- Dec 15, 2022		
Plans for Sustainability and further development	Others	Dec 1, 2022	- Dec 15, 2022		

Activity Type: Training, Mapping, Material Development, Others

**Stakeholders refer to Filipinos on the spectrum ,families, therapists, teachers and school workers, University students (preferably studying special education, speech pathology, occupational therapy and physical therapy), high school students, clinic and hospital workers, government agencies and others*

6. People & Partners

List partners, their roles and contact details.

Partner - Government

- National Council on Disability Affairs
Data Source and expert resource
[https://www.ncda.gov.ph/
council@ncda.gov.ph](https://www.ncda.gov.ph/council@ncda.gov.ph)

Partner - NGO

- Autism Society Philippines
Resource for sensitivity trainings
[http://www.autismsocietyphilippines.org/
autismphils@gmail.com](http://www.autismsocietyphilippines.org/autismphils@gmail.com)

Partner - OSM Community

- GeoLadies PH
Resource for mapping training
[https://www.facebook.com/geoladiesph
geoladiesph@gmail.com](https://www.facebook.com/geoladiesph/geoladiesph@gmail.com)

Partner - Others: Please Specify (ie. academic, etc)

- Philippine Association of Speech Pathologists (PASP)
Data Source and expert resource
[http://pasp.org.ph/
pasp.secretary@gmail.com](http://pasp.org.ph/pasp.secretary@gmail.com)
- Philippine Academy of Occupational Therapists (PAOT)
Data Source and expert resource
[https://paot.org.ph/
paot.education@gmail.com](https://paot.org.ph/paot.education@gmail.com)

7. Sustainability

Briefly describe how the project benefits will be sustained after HOT support ends. How will the lessons learned be shared in the community? How will the benefits be expanded?

A significant part of this project is how to keep the data evergreen and make maintaining it easy. As a solution, a mechanism for the volunteers to update and validate the data within the application will be designed. Also, various tech infrastructure support is available for open-source projects.

We aim to establish at least two communities. First, for data sourcing and validation. The second is for application development and maintenance. For external communication, a Facebook page, and a website will be created to share project updates.

The future goal of this project is to extend the platform features relating to monetization for support, in-app account creation for users, establishment owners, and others, and a script that will automate validated data deployment to OSM.

8. Relevance

Relevance in relation to the three points listed in 'The Purpose' section

The primary aim of this project is to add/update the data that is relevant to the project on OpenStreetMap.

Communities established through this project will help to maintain data relevance and project sustainability. From these communities, we will train new mappers, developers, and users that will further the awareness of the OSM movement.

The application to be developed is open-source and can be maintained in either GitHub or GitLab. Being in either of these platforms will open the project to more volunteer dev collaboration and sponsorships.

As a result this project will raise understanding and acceptance of Filipinos in the spectrum starting with their representation in OSM.

Relevance to this 3 points:

1. The project should contribute to the growth of the OSM movement in the region as well as your growth as a leader in the OSM movement.
2. The project(s) should be related to:
 - a. Working with local communities in addressing their challenges or advancing their goals through OSM data and tools
 - b. Engagement or training sessions or immersion that increase map data or access to map data
 - c. Mapping activities that contribute to the improvement of lives in your community or contribute to the betterment of your field
3. Projects with a potential for replication, scale-up and sustainability merits in the selection process

Annex 1: Project Timeline (Gantt Chart)

[Link to Google Sheet](#)

Annex 2: Budget

Item	What do you plan to spend the money on?	Unit being purchased (how many?)	Quantity Description	Rate	Rate Description	Total cost for budget item (USD)	Why is it needed? (please give as much detail as possible)
1	Program and Activity Costs						
	<i>Stakeholder consultant</i>	<i>10</i>	<i>consultation</i>	<i>20</i>	<i>USD</i>	<i>\$200</i>	<i>Consultations with the stakeholders for how to build the community to support the project, which metadata is relevant and should be prioritized, what features will be useful for the web-based application</i>
	<i>Expert trainer</i>	<i>24</i>	<i>training session</i>	<i>40</i>	<i>USD</i>	<i>\$960</i>	<i>Experts for the various trainings which includes the following: Sensitivity training, Mapping in OSM, Validating data form OSM, and Data wrangling and scraping with Python</i>
2	Equipment, Online and Digital Costs						
	<i>Server cost</i>	<i>2</i>	<i>annual subscription</i>	<i>100</i>	<i>USD</i>	<i>\$200</i>	<i>Server or virtual machines that will serve the created web application for access, storage and compute (if the features require it)</i>
	<i>Project website domain</i>	<i>2</i>	<i>annual subscription</i>	<i>25</i>	<i>USD</i>	<i>\$50</i>	<i>Website domain for the project and the web application to have an official online presence for application access, project progress, general information and announcements.</i>
	<i>Webinar platform license</i>	<i>1</i>	<i>year</i>	<i>200</i>	<i>USD</i>	<i>\$200</i>	<i>Webinar platform license for the 24 sessions of training or workshops, volunteer sync up meetings, meetings with partners and other possible collaborators.</i>

3	Prizes and Swag, Tokens for Speakers						
	<i>Project promotional items (Shirts, mugs, canvas bags and so on)</i>	<i>150</i>	<i>piece</i>	<i>2</i>	<i>USD</i>	<i>\$300</i>	<i>Project promotional items to give during workshops, training, consultations, and online promotions/events.</i>
4	Administrative & Overhead Costs						
	<i>Volunteer allowance (50% Internet, 25% Electricity, 25% Machine/computer use)</i>	<i>128</i>	<i>volunteer work week or training session organized or facilitated</i>	<i>20</i>	<i>USD</i>	<i>\$2560</i>	<i>Allowance to support the work that project volunteers are tasked to accomplish for the duration of the project. Their tasks include but not limited to administrative, external communication and community management, events organization, mapping, data management, application design and development and so on.</i>

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