ANITA BORG INSTITUTE **Systers-Dev Wiki**
WOMEN TRANSFORMING TECHNOLOGY

Photo Language Translation project

Thank you for joining us for Open Source Day at Grace Hopper Celebration (GHC) 2014.This project aims at the development of a generic picture-dictionary kind of Ruby on Rails web application specifically for all of Peace Corps volunteer sites (eg. Micronesia) to help in development of local languages which have no written script (eg. Chuukese). It is designed with Peace Corps overall country/installation login so that all PCVs can use this application at any installation. The look, feel, functionality and design behaviour of this application is in sync with other Peace Corps projects. This application can be used by four different kind of users - Administrator, Volunteer, Contributor, Guest. The usercase of administrator and volunteer design factor is same as other Peace Corps projects. Please read carefully below the steps for getting started. If you have any questions, please send them to Rose Robinson at rosarior at anitaborg dot org, rosarior@anitaborg.org [mailto:rosarior@anitaborg.org].

Getting Started

The next couple of sections details (1) support from the community and (2) environment preparation. We'll help you set up the environment on Wednesday, but if you want to go ahead and get started, that's fine too. We realize participants get excited about the open source and want to get at least get the environment set up.

Please review which tasks you would like to take on during OSD. If you're not sure what level you are, we'll figure this out together on Wednesday. No pressure. This is supposed to be fun! 😄

Support

1. Please subscribe for our systers-dev [http://systers.org/mailman/listinfo/systers-dev] list. In this community, we discuss our on-going development for Systers projects and our Google Summer of Code which our students have just completed. If you need help with any of the installation, you can always post to the list to get help.

2. Another venue for support is our IRC. Please join #systers-dev on IRC freenode network. Our GSoC students and development community will be here to answer any questions as well.

Environment Preparation

We use a VM (Virtual Machine) for our development so that you can work on individual tasks and not disrupt the dev environment. Please prepare your VM pc-lang environment before OSD. If you have issues, you can always post to the list or ask your question on IRC.

The link to the Vagrantfile for Language Translation can be found here on Github [https://github.com/systers/DevEnvironments/blob/master/pc-lang/Vagrantfile]. If you don't already have Vagrant, you can download it here [https://www.vagrantup.com/].

The original code of this project can be found here: https://github.com/systers/language-translation [https://github.com/systers/language-translation] You need to work on this code according to the tasks written below.

Task List

How do you determine your level?

If you are new to Ruby on Rails, beginner's level tasks will give you an introduction to Ruby on Rails and our environment. We have a few bug fixes you can do to get acclimated with where things are as well as get your hands wet with Ruby on Rails. Try them out! If you feel you need more challenging levels, move on to the intermediate level.

Beginner's Level

For those of you who are new to Ruby on Rails, try out the following tasks.

- Put a constraint on password length while doing sign up in sign up form.
- Put a masked plugin input for contact number(phone number) field in all the forms.
- Try and put other necessary constraints (similar to above) in the forms in application.
- The list of photos is shown in a table format where the increase in size of table rows increases the size of page. Make a fixed sized box for the table with a number of pages where the user can click on the page number or next button to get the appropriate list. [Table styling]
- Do the above task for the rest of the tables like installations(posts) table, languages table, users(volunteers, contributors, guests) table, etc. [Table styling]

Resource:
Codecademy [http://www.codecademy.com/] has a great http://www.codecademy.com/tracks/ruby [http://www.codecademy.com/tracks/ruby] online course for free that will give you basic fundamentals of Ruby language.
Codelearn [http://www.codelearn.org/] has great http://www.codelearn.org/ruby-on-rails-tutorial [http://www.codelearn.org/ruby-on-rails-tutorial] free online modules and code editor that will make you comfortable in working with the Ruby on Rails web framework.

Intermediate Level

- Contributor must be able to upload pronunciation sound file along with the picture upload. The user must be able to play it to hear this sound file when required.
- Volunteers and Admin must be able to add more than one categories to any photo.
- Volunteers and Admin must be able to search photos according to the categories.
- Document the changes done in each task (from beginners to advanced level).
- Deploy the application to Heroku by converting the Sqlite3 database to Postgres.

Resource:
Ruby on Rails Documentation [http://guides.rubyonrails.org/index.html] - A proper Ruby on Rails documentation can be found here.
Rails Girls [http://guides.railsgirls.com/] has solutions for some simple implementation problems in Ruby on Rails framework that will give you a little more idea of how to implement new features.

Advanced Level

- Reload the pages of application automatically when there is any update in application. (User must not require hitting reload button).
- Make the application work offline using HTML5. For help: http://diveintohtml5.info/offline.html [http://diveintohtml5.info/offline.html]
- Test the portal, try finding out the bugs and report them.
- Write rails tests along with the changes made for each task (from beginners to advanced level).

Resource:
Rails Casts [http://railscasts.com/] by Ryan Bates has some free tutorials for many implementation problems ranging from intermediate to advanced level.