

Please feel free to add any ideas to this page for the TPF Google Summer of Code 2015:

**Format:**

Project/Module/Library Name (Perl Project)

Task name

Task Detail

Relevant Links

Main Mentor

Back-up Mentor

Student

**Improve signatures**

Allow references (not only by copy), do not copy arguments twice (omit @\_), allow argument and return types and store them.

**Add type inference and checks**

This is very unlikely to get official p5p support (see the php7 rfc's), but is needed for performance and business environments.

**Perl 6 on CPAN**

Help to port CPAN modules to Perl 6

**Perl Threads**

The use of interpreter-based *threads* in perl is officially *discouraged*. There are partial alternatives but we need a formal solution

**Perl on Android**

Build the tools to develop android apps in Perl

**XML::Twig::LibXML**

A version of XML::Twig with XML::LibXML as the backend instead of XML::Parser. (Just an idea; have not discussed with mirod).

**Native library bindings (NativeCall / Perl 6)**

1) An automatic binding generator for gobject based libraries

**Mentors:** FROGGS

2) An OpenGL binding based on the API description XML file

**Mentors:** timotimo

**P5 Mop**

<https://github.com/stevan/p5-mop-redux>

- 1) Prototype/port some existing (hairy) CPAN modules to use it?
- 2) Work on p5-mop itself?

### **PearlBee**

PearlBee is an open source blogging platform written in Perl

<http://pearlbee.org/>

mentor: Florin Mesaros (Evozon Cluj)

backup mentor: Andrei Cacio (Evozon Cluj)

### **Statocles**

A static site CMS

- 1) Dynamocles: Build a Mojolicious web app to edit Statocles sites
  - a) Minimally, it's a way to navigate through a directory and edit YAML + Markdown files in a web browser
  - b) Maximally, it needs user auth, live preview, creating new sites, one-click deploy, and more

Mentor: Doug Bell (preaction)

### **ETL::Yertl**

An ETL (Extract, Transform, Load) for a shell. Useful for quick data retrieval and transformation.

- 1) Rewrite 'yq' (a data manipulation mini-language) to be parsed by Marpa::R2
  - a) This was started, but was removed
  - b) The existing interpreter is a recursive regex
  - c) A Parse::RecDescent parser exists (2 in fact)
- 2) Develop 'ydoc', an API onto document stores (MongoDB, ElasticSearch)
  - a) Read and write documents
  - b) Execute search queries
  - c) Execute native database commands (MongoDB's db.stats() or db.repairDatabase(), or ElasticSearch's indices and nodes information)
- 3) Add Excel read/write support ('yto' and 'yfrom')

Mentor: Doug Bell (preaction)

### **Project: Rex (<http://www.rexify.org/>)**

Rex is a Deployment and Configuration Management tool written in Perl. It uses Perl to describe the state of your servers and SSH for the communication.

### **Task: Extend Cloud API**

The current implementation of the Rex cloud api only can handle a limited number of basic functions. The work will focus on implementation of more features multiple cloud providers (like Amazon and Rackspace) supports. For example adding support for Loadbalancer, DNS, Networks.

**Mentors:** Jan Gehring (jfried@rexify.org) & Ferenc Erki

**Project:** Rex (<http://www.rexify.org/>)

Rex is a Deployment and Configuration Management tool written in Perl. It uses Perl to describe the state of your servers and SSH for the communication.

**Task:** Add Monitoring Abstraction Module

If you want to deploy your servers they also need to get registered at your monitoring infrastructure. Currently Rex doesn't have any modules to interact with monitoring solutions over a common api. So the work for this task will focus on creating an extensible api that is possible to interact with any monitoring solution.

**Mentors:** Jan Gehring ([jfried@rexify.org](mailto:jfried@rexify.org)) & Ferenc Erki