## **Project Proposal**

The <u>Working Hours plugin</u> allows organizations to set build schedules to prevent jobs from running outside of configured hours and/or days. Organizations which automatically deploy each PR to production might use it to prevent deployments from occurring outside normal working hours, on holidays, or to enforce code freezes.

The plugin works by preventing jobs from leaving the build queue during configured no-build times. Projects opt in to enforcement via the plugin by including special configuration in their Jenkinsfile. The plugin itself works well, but the UI needs enhancement. Some of the problems this project will solve:

- Dates must be entered in MM/DD/YY format. This is specific to locales such as the US and doesn't translate well internationally
- Modern apps typically display a calendar to choose dates from rather than entering dates directly
- There's no support for recurring holidays each occurrence must be entered separately.
- All projects that share a Jenkins master must use the same calendar; the plugin should support multiple calendars.
- (stretch) There no support for choosing holidays from a drop down list. This is complicated by the fact
  that holidays vary by location, but there are probably javascript and/or java packages that implement
  this.

#### Goals

The student will complete the following work:

- Moving the configuration information from the Jenkins global settings to a separate settings web app
- Converting the configuration to use React/Javascript
- Adding configuration to indicate that a date repeats
- Researching React based date pickers, and integrating one into the plugin's settings
- Adding the ability to specify which calendar to use to the configuration groovy
- Coming up with a migration plan for existing installations

#### Stretch Goals

Time permitting, the student may optionally complete the following work:

- Provide a way to choose holidays from a dropdown.
- Find a way to support holidays that move around. There are various rules for determining holidays, such as "3rd Thursday in November" (American Thanksgiving). There are also various religious holidays which have different rules. This is a good area for research

### Links

None

# Newbie-friendly issues

Allow custom text when jobs are held

• Repeatable holidays

## **Project Metadata**

Created on: Dec 29, 2018

Title: Jenkins GSoC - Working Hours Plugin Enhancements

Summary: Significant UI enhancements to make plugin easy to use

Champion: Jeff Pearce

Champion Github Id and link: https://github.com/jeffpearce

Champion Jenkins JIRA/LDAP id: jeffpearce

**Champion Time Zone**: PST (UTF-8)

Champion Role: I am a making this proposal as a mentor

Technical advisor: Jeff Pearce

Advisor Github Id and link: https://github.com/jeffpearce

Advisor Time Zone: PST

Project Category: plugin SIG/subproject: none

Project Gitter chat room: gsoc-sig

### **Potential Mentors**

The potential mentors are:

- 1) jeffpearce
- 2)
- 3)

### Skills

- Java
- JavaScript
- React