

# Google Summer of Code 2009 Project Proposal

## Drupal Crisis Management Module

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**DRAFT**

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### Abstract

Imagine a scenario where a shooter has just taken several hostages at the local community college. Crises like this are very real and an organization's Web site can be a powerful tool in disseminating accurate information. I propose Crisis Management, a Drupal module. Crisis Management will allow privileged members of an organization to set in motion tasks that have been predetermined to transition the Web site into crisis mode with the click of a button.

### Problem Scenario

Imagine the following scenario. A troubled student has taken several hostages in the biology lab of the local community college. The faculty and student body have been warned through the campus alert system, the administrative staff are on-site doing what they can to help authorities, and the Public Relations department is swamped handling phone calls from friends, parents, and the media.

Now picture the following two responses:

**Response 1:** A crisis was officially announced by the crisis response team. 30 pass by and it is reported to the president of the college that the Web site does not have any information. The president tells whoever is available to find someone to update the website. A few of the staff are web content managers, but they only have access to the respective divisions. They are unable to post any relevant information on the front page. The webmaster is downtown stuck in traffic, and the Web developer is on vacation. In the words of a well-known pop culture Web site, "Epic Fail."

**Response 2:** A crisis was just announced by the crisis response team. One of the team members was designated at the meeting to activate crisis mode on the Web site and post an update about what is going on. As part of the response team, this member has a normally unavailable menu item (or block) for the Crisis Management module. The member navigates to this page and clicks on "Activate Crisis Mode." In a matter of seconds, the Web site theme is replaced with one made just for this occasion. The member creates a new "Crisis Update," and in less than two minutes, the website contains the most recent information. From

that point forward, any response member that has updated information can log in and create a new “Crisis Update.”

A well planned and executed crisis response procedure is invaluable when a crisis hits. Simply by having a plan in place, teams can be transformed from a bumbling mass of slack-jawed staff to a streamlined and graceful management of a terrible situation.

## Project Proposal

I propose Crisis Management, a module for Drupal. This module will provide privileged members of an organization the power to set in motion a predetermined set of actions to deal with a crisis at the click of a button. Here is how I envision this module working.

After installing Crisis Management, the Web team works with the crisis response team in discovering what should be done to the Web site during a crisis. The Web site administrators then implement the customized actions to meet the organization’s requirements. For example, some actions might include enabling a special theme, creating a crisis blog type, or sending SMS alerts. User accounts and roles are configured to provide privileged access to this module and are distributed to the members of the crisis response team.

During a crisis, one of the members needs simply to login to Drupal and navigate to the crisis management page, which will be clearly visible. Once there, they click “Activate Crisis Mode.”<sup>1</sup> The predefined actions are run and the team member can resume other functions, such as posting an update, or getting back to the situation.

After a crisis has been resolved, a Web site administrator will click “Deactivate Crisis Mode.” The predefined actions that were run will be reversed<sup>2</sup>, restoring the Web site to it’s state before the crisis.

## Schedule of Deliverables

For the sake of simplicity, there will be a single deliverable. The Crisis Management module will consist of the primary framework and any supporting sub-modules to extend functionality.

Crisis Management will come with several actionable options out-of-the box. Here is a preliminary listing:

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<sup>1</sup> Possibilities might include confirmation, no confirmation, or an authorization code.

<sup>2</sup> Handling methods to be researched further.

- Activate an alternative theme (e.g. crisis theme)
- Disable or enable blocks
- Create content types (e.g. "Crisis update" for blog-style updates)
- Change access control permissions
- Disable or enable modules (e.g. improve performance)
- Send Email alerts

Crisis Management will also be built to give developers an easy way to add their own custom actions. For example, an add-on could replace the entire website with a single static HTML file for performance reasons.

## **Open Source Development Experience**

I have made a few patches to the Wordpress project as a result of tweaking my personal blog. I have also contributed to the iPod Linux project. My most recent open source development experience has been with Drupal (see [Work/Internship Experience](#)).

## **Work/Internship Experience**

Last summer (2008) I was hired by the Union College (Lincoln, Neb.) Marketing Communications department as part of an internship to relaunch the Web site using an open source platform, Drupal. I spent the summer wading through Drupal code and community modules to tailor the CMS to the needs of the college. My responsibilities for the transition included writing conversion scripts to move data from the outdated, in-house system to Drupal, as well as finding, modifying, and writing modules to provide the functionality that the college's Web committee had decided on.

Since then, I have continued to work on the college's Web site, providing support, fixing bugs (and submitting fixes back to the community), keeping up with security updates, and continuing to tailor the system to the needs and expectations of the more than 30 area content managers on campus.

## **Academic Experience**

I am currently wrapping up my third year of classes, working towards a degree in Computer Information Systems. I have participated in numerous projects, both individual and team based, involving a variety of technologies. Some notable classes that are pertinent to this project include Enterprise Web Development, SQL with MySQL, and Systems Analysis and Design.

## **Why Drupal?**

Having worked on customizing Drupal for the past year, I am very familiar with the core concepts and the community. Drupal is an amazing creation and has a special place in my heart, and I want to see it become even better.

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## See Also

This proposal can be downloaded in PDF from the following URL.

<http://jonsview.com/projects/google-summer-of-code-2009>

The results of my 2008 internship with Union College are visible at

<http://www.ucollege.edu>

There are several related resources to this proposal on the Drupal Web site:

Proposal discussion: <http://groups.drupal.org/node/20887>

This application format is based on the Wordpress GSoC 2009 application template. [http://codex.wordpress.org/GSoC\\_2009\\_Application\\_Template](http://codex.wordpress.org/GSoC_2009_Application_Template).