

# GPO Personalizer

## Motivation

- Most of us are annoyed by the large number of spam mails in our GPO account such as mails related to other tutorials and divisions, mails related to PGs even if you are a UG and vice versa.
- There is a need to categorise mails as acad related, events related or notices etc. to make it easy to read relevant mails.
- Due to these reasons many students auto forward mails to gmail which starts spamming their gmail account.
- Features like spam filter and auto-categorisation can be added as plugin to squirrel mail(used by GPO) to make it more user friendly.

## Aim

Adding intelligent personalizable spam filter, improving GPO interface and automatic categorisation of incoming mail.

## Broad Vision

We want to see this project as the part of the IITB webmail service GPO so that students start using GPO instead of forwarding gmail keeping their institute related mails separate from other mails.

## Demonstration

We will demonstrate it using squirrel mail on a localhost and through a website. User will create an account on a website like example.com hosted by us and then user can send and receive mails through that account and see the plugin functioning.

## Theory And Steps Of Implementation

In the [developer manual](#) of squirrel mail, we found that managing spam settings, themes etc is possible to add as plugin in squirrel mail.

In squirrel mail there are specific places called 'hooks' where the plugin code can be run and the idea is to find the specific hooks required to implement the given functionality and add it to functions/plugin.php and make corresponding changes in \$plugins and config.php.

The plugin can be developed in stages :

- ❖ **Spam filter** : Making a filter improvising some of the already present filters like [Bayes Spam - Intelligent Spam Filter](#) and [Spam Rule\(simple, flexible mail filter config\)](#) .
- ❖ **Auto-Categorizer** : Process of automated categorization of mails as in [Inbox by Gmail](#) .
- ❖ **Adding user preferences** : Integration of the plugin's settings into another preferences page such as existing Squirrel Mail preference section ("Personal Information", "Display Preferences", "Message Highlighting", "Folder Preferences", or "Index Order" as required .
- ❖ **Improving the interface** : Adding some javascript and maybe ajax functionality improving the visual aspect of GPO.

Finally all the above things will be integrated into a single plugin.

# Timeline

**Week 0(28<sup>th</sup> Apr- 4<sup>th</sup> May):** Study about developing a plugin for squirrel mail using API for it and learning PHP.

**Week 1(5<sup>th</sup>-11<sup>th</sup> May):** Implementing spam filter using a Bayesian. It can be trained on few emails before the filtering starts to become reliable.

**Week 2(12<sup>th</sup> -18<sup>th</sup> May):** Auto categorization of mails depending on the sender and the subject. This means categorisation based on predefined data.

**Week 3(19<sup>th</sup> -25<sup>th</sup> May):** Adding smart features to the categoriser which can learn as user transfer mails from one category to other.

**Week 4(26<sup>th</sup> May-1<sup>st</sup> June):** Improving interface using CSS and javascript and allowing users to select preferences for the plugin.

**Week 5(2<sup>nd</sup>-8<sup>th</sup> June):** Integrating all the above parts into a single plugin and completing the documentation and adding final touches.

**Week 6(9<sup>th</sup>-15<sup>th</sup> June):** Buffer Week

## Things We'll Learn

This project will give a lot of learning opportunities :

- Open source development
- Learn creating plugin for a existing project
- Learning Bayes' algorithm and similar algorithm.
- PHP

## Estimated Cost of Project

Since this is a coding based project no funding is required.

### Team Enigma++

#### Members

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