

Impromptu Dilemma User Guide

Before you are ready to run the program, there are several things that need to be setup, as explained below. After setup, there are instructions below on how to run the program, with some tips to avoid errors.

In addition to these notes, there are helpful Excel pop-ups which will appear and will guide you as you run each procedure.

Executive Summary

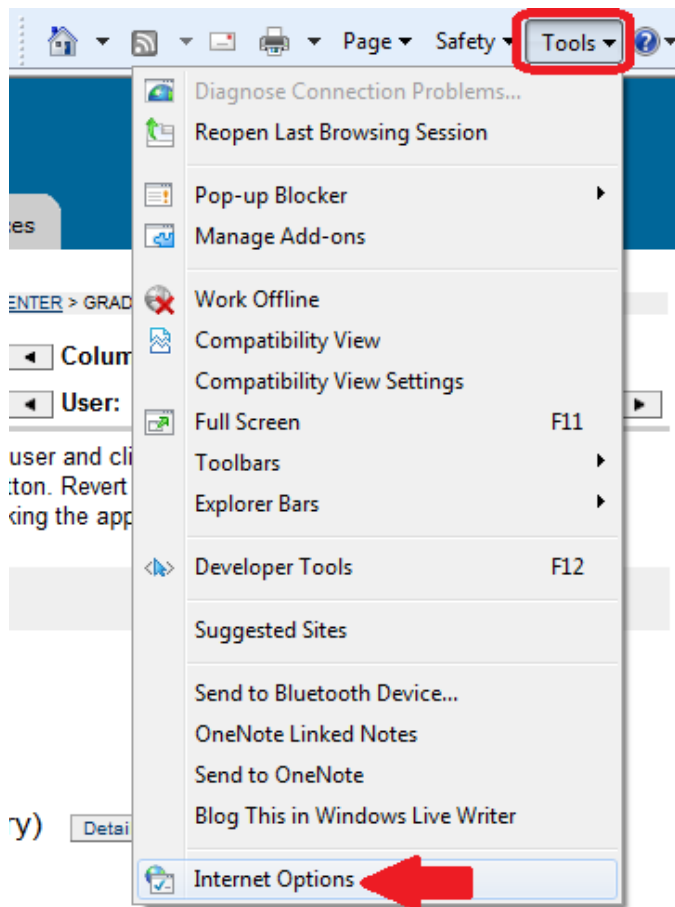
Several times throughout the semester, my Ethics professor has his TA send emails to the class, asking them to respond via email to an impromptu dilemma. The process is tedious and very time consuming. This project attempts to automate the distribution of a Google Forms survey, and the grading of student responses.

The program is run in steps, allowing the user to edit the survey, email the survey, and (after the deadline) download the responses and upload participation points to blackboard.

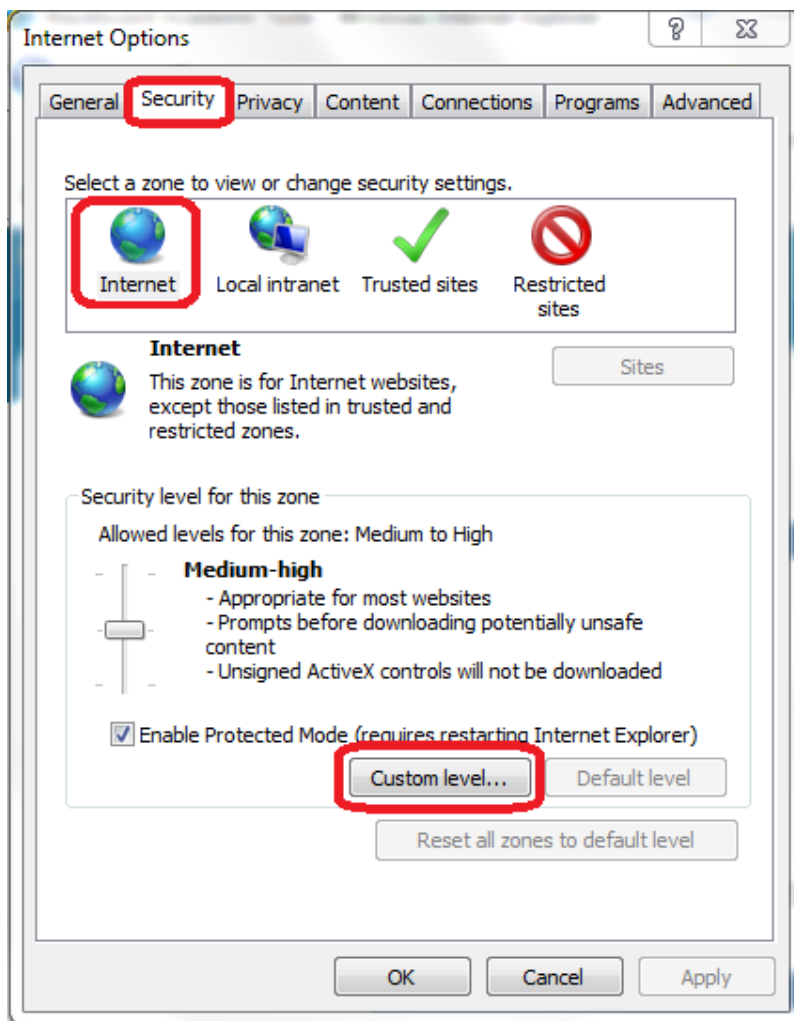
Implementation Documentation

Internet Explorer Setup

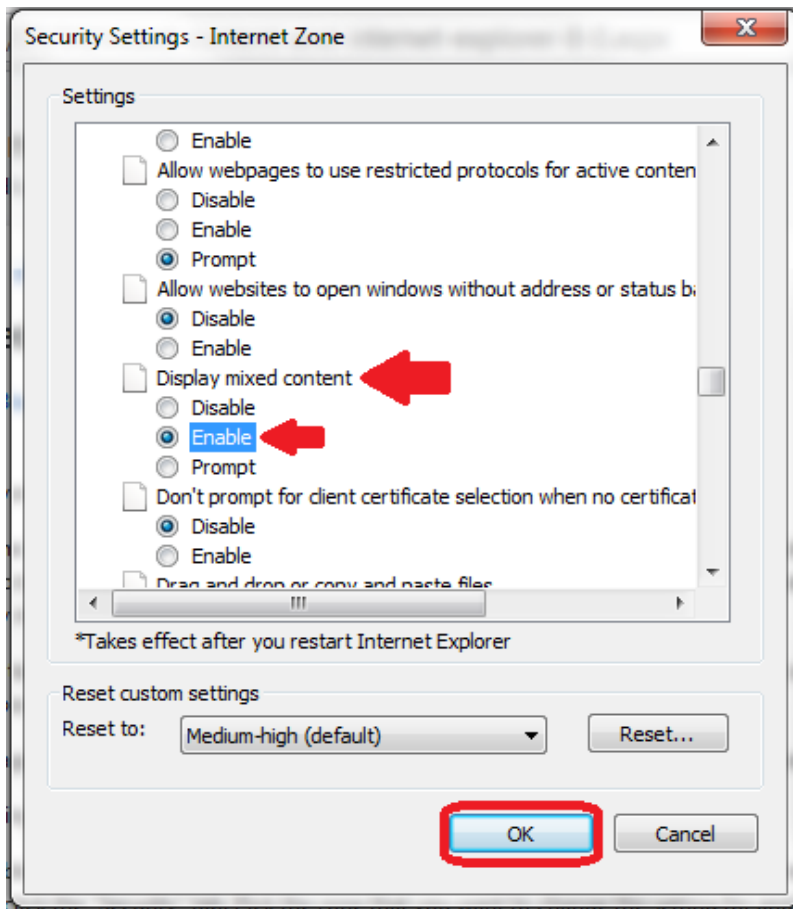
In order for this to work properly, we need to change a setting on Internet Explorer. If we do not change this setting, IE will show certain prompts which will slow things down when this program navigates between blackboard pages. (In fact, the program wouldn't be able to progress until you manually click "OK" at these prompts.)



1. On IE 8, look for the Tools menu, and select Internet Options.



2. Click on the Security Tab.
3. Click on the Internet globe icon.
4. Click the "Custom level" button.



5. Scroll down a little past half way, and look for “Display Mixed Content.”
 - a. Click the “Enable” option.
6. Click OK.

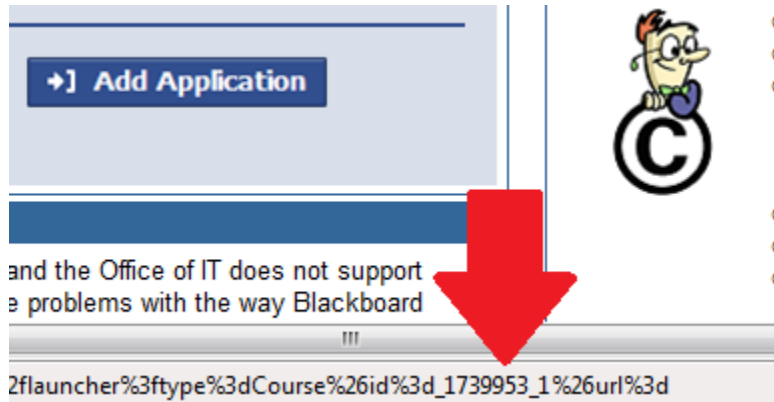
New Semester Setup

There are a few things that will need to be setup at the beginning of each semester. The following is a list of things that will need to be completed before the program can be run.

1. Import email addresses
 - a. In the “email_addresses” sheet, put each student’s email address somewhere- my program will find all the email addresses no matter where they are on that sheet, and no matter how you organize them.
2. Import Course ids
 - a. Each course on Blackboard has a “course id” that is used behind the scenes. We will need each course id to be placed in the “Course_ids” sheet.
 - b. To get the course ids, sign in to Blackboard.

My Courses	
Courses in which you are enrolled:	
	ISYS 565, Winter 2011
	PMGT 582: Managerial Ethics
Courses in which you are a TA:	
	ISYS 201, Section 7, Winter 2010

- c. Find the links to each Ethics course, and simply hover the mouse over each link. While the mouse pointer is hovering over a link, look at the bottom of the browser:



- d. Notice, there is a big and ugly URL with lots of crazy symbols. Notice at the end, you can see that it says "Course....id....1739953....."

cher%3ftype%3dCourse%26id%3d_1739953_1%26url%3d

- e. The course id is the number between the two underscores
- f. Put each course id into the "Course_ids" sheet in the first column, one after the other, with no empty rows in between. (The placement of course ids on this sheet is critical.) Data in columns B,C,D, etc can be used for your reference.
- g. Putting constants into the "Constants" sheet.
- i. The TA will need a gmail account, and blackboard account. The google survey must already exist in the TA's google docs. With that in mind, enter the passwords, usernames, and links into that sheet. These fields will be referenced when the program is run, so enter them carefully!

Running the Program

Running the program is done from the "Home" sheet and involves several steps.

1. Editing the survey
 - a. Click the button to open and update the survey in Internet Explorer
 - b. The Title, Due Date, and allotted response time will be automatically edited to reflect what the user entered in the "Home" sheet, but the user will need to edit the second question to reflect the subject matter of the current Impromptu Dilemma. (See screen shot below.)

Edit form - [Dilemma #111] - Google Docs - Google Chrome

<https://spreadsheets3.google.com/gform?hl=en&hl=en&key=tFuLpmUeQISQZqY1k1Ngy1g&gridId=0#edit>

+ Add item Theme: Plain Email this form See responses More actions Saved

Dilemma #111

You must respond Immediately. This Dilemma is due April 333th

What is your netid? *

Your employer asks you to steal 333 busses. How would you respond to Him while he is standing in front of you? *

You can view the published form here: <https://spreadsheets3.google.com/viewform?formkey=dEZ1THBvWVRSVNRWnFZMWsxTmd5MWc6MQ>

- c. Step 1 is complete once the user edits the question, clicks Save, and closes the browser.
2. Emailing the survey
 - a. You will be notified when this has finished, and be told how many emails were sent.
 - b. This procedure gets data from the live online survey and prepares an email. Before the emails are sent, the user is shown what the subject and body of the email will contain. After approval, the procedure searches for emails addresses on the “email_addresses” sheet and sends emails, one by one, from the TA gmail account.
 - c. If there were any errors in sending emails, they will appear in the TA’s Gmail inbox. I recommend you check that right after sending the emails.
3. Downloading the Responses
 - a. Responses will be downloaded from an online Google spreadsheet into the “Responses” sheet and will also be saved into a new Excel Workbook file.
 - b. This procedure may be run multiple times and will accumulate the latest responses into the “Responses” sheet.
4. Uploading Grades
 - a. This will take 15-20 second per student. You can start the procedure and then do other things while it runs! Upon completion, you will be notified of how many grades were uploaded. If there are any rows remaining in the “Responses” sheet, it means that those netid’s were not recognized. Grading for each of those responses will have to happen manually.
5. Deleting Response Data
 - a. This is to be done before distributing the next Impromptu Dilemma Survey. The procedure will automatically delete everything in the “Responses” sheet, and will open a browser and take you to the online spreadsheet where the responses will need to be manually deleted. **DO NOT delete the first row.**
 - b. If this happens, it’s not the end of the world- it just deletes the questions from the live survey. You would then need to manually edit the survey and make sure that the first question says “What is your netid?” with that precise wording and punctuation.

Learning and Conceptual Difficulties

I had several challenges in approaching this project.

- The first challenge was attempting to automate the editing of a Google Form survey. That proved unsuccessful after working many hours alone and with Dr. Allen.
- Another challenge was emailing the students. I had to find a way to reliably send email address on a given sheet. I had a genius moment when I realized I could record myself doing a “find” on the “@” symbol. My macro assumes that any cell on that sheet with an “@” symbol is an email address. Then I realized that when you “Find Next” it would take me in an infinite loop, so I had to find the first email address, and save it in a variable. Then when I encountered that email address for the second time, I broke out of the loop.
- Another challenge I had was uploading grades to blackboard, I tried very hard to upload grades via a single spreadsheet upload. That was almost successful! Then Dr. Allen showed me a completely different approach where I was able to grade one student at a time.
 - Then I had to figure out how to only award points for students who completed the assignment. I was able to again leverage the “Find” function to see if the current student in blackboard could be located on my “Responses” sheet, using the netid. I then deleted each student that was found, and awarded them 10s, and were deleted from the spreadsheet. Students who were not identified on my spreadsheet received zero points and remained on the spreadsheet once the grading was complete. This allowed the user to identify any students who did not enter their netid properly, and then adjust the grades manually.