This year, when participating in Harvard Summit for Young Leaders in China(HSYLC), I programmed, as a volunteer, one code and one project to assist HSYLC operations. My contribution to HAUSCR/HSYLC community, along with my application, luckily enabled me to be attending Harvard Week in this upcoming November, to take courses in and further explore Harvard.

Here are some more details!

HSYLC:

HSYLC is an annual conference for Chinese high school students organized by the Harvard Association for US-China Relations (HAUSCR). The eight-day conference, conducted by Harvard College undergraduates, faculty, and prominent leaders from both nations, seeks to expose 600 Chinese high school students to liberal arts education. The conference includes Student Seminars led by 60 Harvard College undergraduate students, a Distinguished Speaker Series, and Action for Tomorrow Venture (ATVenture) a creative entrepreneurial program.

(Source: Wikipedia)

MY CODE - A SEMINAR ASSIGNMENT PROGRAM:

Background: Before the conference starts, students get to choose 8 seminars among 60 seminar choices in order of preference. They will be able to attend 4 seminars in total on different days, and a seminar will have 4 different sessions, with class size ranging from 8 to 12. The HSYLC committee will make an seminar assignment: each student will be assigned 4 different seminars on the 4 different sessions.

BEFORE:

Every year, HSYLC committee members will find another two Computer Science Major college students to find a proper assignment.

AFTER:

I implemented a program to automatically generate an excel file containing the optimal seminar assignment for each student, given an excel file containing a list of students’ choices. It was designed to be easy to use for anyone (simply a copy-paste and a double click). It can be used for different years since it can tolerate changes in many aspects (the program will allow you to set up variables such as the number of total different seminars). After coming up with better algorithms, the assignment it generates can outperform the old assignments given old data in different ways (such as the number of students who get all the top 4 choices :-) ).

I also wrote an instruction of my course assignment program for HSYLC/HAUSCR committee members for future use and maintenance. It was used in HSYLC 2015 seminar assignment, and will be continue in use.

(course/seminar replacement)

MY PROJECT - AN ONLINE SEMINAR PORTAL:

BACKGROUND:

Students will be graded by their class performance, optional paper, attendance rate by their teachers from all the 4 seminars separately, like in normal high school. It thus requires an efficient way to collect and manage all the teachers’ gradings and to calculate and combine the final grading results for each student in 4 different seminars.

BEFORE:

There aren’t online systems but only volunteers who need to manually collect and calculate the gradings.

AFTER:

I designed and created an online seminar portal (an website) including student management and grading system. All teachers and a manager will have different accounts, with username being their ID of HSYLC and password customized. It allows teachers to grade students online on “dynamic excel files”. It will automatically generate the different “dynamic excel file” for each teacher, after the manager user upload an excel file about student information (the same one generated using the seminar course assignment program above) and an excel file about seminar information (aka. which teacher teaches which seminar). In the end of the HSYLC conference, the manager will be able to download an automatically generated excel file of grading information.

I used Java Script and XXX to implement. I used and set up Java Web Server Environment(JDK/JRE, database-MYSQL, VPSMATE,TOMCAT) on a Ali Yun, Chinese Amazon Cloud Server. I also wrote an abstract brief, a database design brief and an instruction for convenience of HSYLC/HAUSCR committee members for future use and maintenance. The portal was used in HSYLC 2015 and will be continue in use.

Due to my computer science background in my application to HSYLC, I was asked to volunteer. At first, I .. (顿悟)