Criterion A Planning

1.Defining the problem

As the new Chinese educational policy, Chinese student need to choose their favorite 3 subjects as their major subjects. Because of the different majors chose by different students, the classroom they need to stay is different. When my computer science teacher, Mrs.Wu, talked about this problem, she said we can make a product to check student's attendance because the number of students is various for different class. She described what she wants: a clear graphical interface can show students' both accumulated and single attendance, a system can automatically calculate the grade of attendance for a student, face recognition is used.

As she talking about the problem, I thought that is good material for my Internal Assessment. Mrs.Wu agreed to be my client and advisor after I talked to her. In order to get more details, I decided to meet Mrs.Wu to make a interview.

2. Rationale for proposed solution

According to the requirements from Mrs.Wu, I decided to use Swift to help me make this product. The reasons I chose this language are:

- 1. Swift is faster than Python and Object-C. Apple enhanced the pace of Swift at their conference.
- 2. Swift is nearer to different platforms. It can build same application on different platforms. The newest language of Apple can minimize the time for extra illustration and clarification.
- 3. Swift is a script language. It can minimize the time of developing, testing, and maintaining.
- 4. Swift is open-resources. The development of Swift is better than other iOS languages in recent years. There are lots of public APP which is wrote by using Swift can be found in the internet.

3. Success Criteria

1. Product need to have teachers' interface and students' interface. They must be available for iPhone's users.

- 2. Product need to automatically recognize students if they walk into the classroom and write the time they walked into the classroom into a file.
- 3. Product can calculate the attendance grade for each student.
- 4. Product need to use face recognition.
- 5. A file contains students' basic information can be input.

word count: 374