Overview
According to the EF English Proficiency Index (EPI), the English level of Hong Kong among non-native English-speaking countries significantly decreased from 12 to 25 out of 60 between 2011 and 2012. Since Hong Kong returned back to China, some of the elementary schools and secondary schools have started using Chinese to teach lectures rather than English. In contrast, the Universities in Hong Kong are still using English to teach their students.

Even though some of education organizations outside of secondary schools try to predict what will be examined in the English papers, they don't have any systematic methods for this, but use personal experience. Also, students usually just arbitrarily learn English from newspapers, TV shows and magazine. But some of the English content might not be suitable for academic usage. For example, spoken English and written English can be totally different. Even they learn English from different media, some of the English might not be useful for their daily life or for examination.

Objective
We would like to create a mobile phone application and website that help students to learn English efficiently and effectively for examination. With analysis of past exam papers, we extract words, essay, topics from the past exam papers by using programming that should be learnt by students. After that the system will use content from examination and articles from newspapers. Each articles we will calculate a “score” for each paragraph based on the word from exam paper, and suggest some essay which is important for students.

Methodology
Past papers and articles analysis
After we capture all the words from past paper, we will using programming to analyze data, for example, we will retrieve the words by their part of speech, and counting when and how many times will this word appear in past exam. In addition, the system will capture article online such as newspapers. We will calculate the “score” for each paragraph based on the word from exam paper, and suggest some essay which is important for students.

Question System
The system will use the existing article to generate questions, the format is fill-in-the-blank, each question will define a topic into it such as sport, education, technology, etc. When students start to use this system, it will record all the answer from him and do analysis again so that we can know about the weakness of the students.

Result
Word cloud on website
Bar chart and pie chart for the word count analysis in different years
Mobile app interface