



COMPUTER APP PROGRAMMING (CAP2016) 電腦應用程式比賽 2016

CAP Day 即日解難比賽 (高中)

Regulations:

1. **Please change your Google account password when you first login.**
2. The time limit for this competition is **1 hour**.
3. There are 2 questions in this paper. **Attempt ALL questions.**
4. Follow the instructions on the paper to submit the answers.
5. All candidates must stop their work when the invigilator announces "Time up."
6. Candidates may use their own Android device **ONLY** for program testing purposes.
7. If any candidate is found cheating or violating the regulations by any means, he/she will be disqualified from the competition immediately.

比賽守則：

1. **第一次登入時先更改你的 Google account 密碼。**
2. 本比賽限時 **1 小時**。
3. 本卷共有兩道題目，**需全部作答**。
4. 請依照試題上的指示，完成答卷。
5. 當考場人員宣布「比賽結束」的時候，所有參賽者必須停止作答。
6. 參賽者可以自備 **Android** 裝置，但只能用作測試程序。
7. 若發現任何參賽者作弊或者違反比賽守則，將被即時取消參賽資格。

Question 1: Save the project as "Question_1". 請開新專案，命名為"Question_1"。

Question 2: Save the project as "Question_2". 請開新專案，命名為"Question_2"。

School name			
Student 1 name			
Student 2 name			
Question_1: File saved time		Completion percentage	
Question_2: File saved time		Completion percentage	
Google account		Password	

Note: Participants must follow the rules and regulations of the CAP2016. Their names (together with the school name) may be published in CAP2016-related materials.

Question 1

Download http://cap.comp.polyu.edu.hk/senior_question1.aia.

Develop a form for a user to input his/her name, date of birth and gender (姓名, 出生日期, 性別). When the user clicks the button 'Submit' (提交按鈕), a message should be seen and heard (使用者會看見和聽見信息) (see below). Note that the Text-to-Speech function (文字語音轉換器) should be used.

The app should also perform the following validation (實行以下驗證):

Name and Date of Birth fields should not be blank. (姓名及出生日期不可漏空不填)

After a date of birth is selected, the date should be displayed in the text box. The format should be yyyy/mm/dd. (選擇日期後, 出生日期便會出現在文字方塊內, 日期格式應為: 年/月/日)

Either Male or Female field should be selected (not both). (只可選男或女, 不可同時選擇)

Screen1

Name Chan Tai Man

Date of Birth Select day 1980/1/1

Gender Male Female

Reset Submit

Hello Chan Tai Man. You are 36 years old.

When a user clicks the button 'Submit', the app should first check if the name and date of birth fields are filled. (先檢查姓名及出生日期已輸入, 才提交)

If yes, the message should be seen and heard.

If no, the app should notify the user by using Notifier. (利用對話框提示使用者)

When a user clicks the button 'Reset', the app should clear the name, date of birth and gender information. (按重置按鈕便會清除姓名, 出生日期和性別資料)

Question 2

Download http://cap.comp.polyu.edu.hk/senior_question2.aia.

Complete the missing blocks for this game. In the game, there are a total of 7 characters: C A P 2 0 1 6. The characters will move randomly (隨機移動位置). A player should click the letters in the correct sequence (i.e., C A P 2 0 1 6). (按次序點選字母)

When the player clicks a character, the character will be added to the text box. (點選後字母便會出現在下方的文字方塊內)

After clicking the last letter, the app will check if the character sequence is correct and display the result. (當全部字母都選擇完, 程式便會確認次序是否正確)

