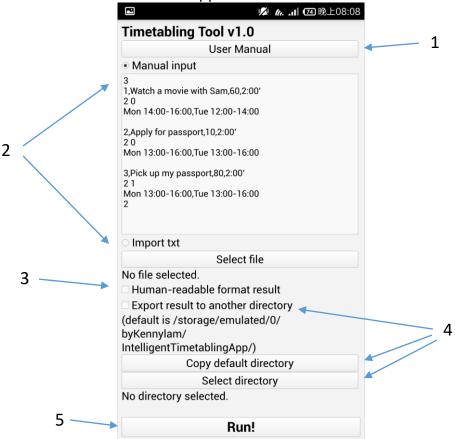
Intelligent Timetabling App User Manual

by Lam Kin Long

This app is used to help you to decide what and when to do next week, from Sunday to Saturday and from 09:00 to 24:00. You can specify the priority, duration, available period(s) and the prerequisite(s) (i.e. activities required to be done before the actual activity) of the activities. Keep reading the manual to learn how to use the app.

First of all, this is the interface of the app:



- 1. At the top, tap the "User Manual" button to open this manual. You will be prompted to select an app to view the PDF.
- 2. Below that, you can choose between "Manual input" and "Import txt". If you tap on the text box below "Manual input", a keyboard will appear and you can enter the activities.

You can also choose to tap "Select file" to import a .txt file. After selecting the file, the path of the file will be shown under the button for you to double check that it is the correct file. Note that both the manual input and the text file should

follow a specific format **strictly** (that is, without extra space/enter). Otherwise, the app will have undefined behaviour (most likely app crash, or give illogical output). Below is the illustration of the input format:

The first line of the input contains an integer, which denotes the number of activities. After that, information of each activity is listed in the file. For each activity, it occupies 4 lines.

- The first line contains the activity number, activity title, priority (bigger means more important) and duration (for example 1:15' equals to 75 minutes), separated by ",".
- The second line contains two integers separated by a space. The first integer is the number of available period(s). The second integer is the number of prerequisite(s).
- The third line shows all available period(s) of the activity. Each available period is presented in the format "[Day] [Begin Time]-[End Time]", where day is like Mon or Sat and time is in universal format like 17:00. All available periods are separated by ",".
- The last line shows the prerequisite(s) (in the form of activity number), each separated by ",". If there is no prerequisite, this line is empty.

```
[Number of Activities]
         [Activity_Number],[Activity_Title],[Priority],[Duration]
         [Number of Available Periods] [Number of Prerequisites]
Activity 1
         [Day 1] [Begin Time 1]-[End Time 1], ...
         [Prerequisite_1],[Prerequisite_2], ...
         [Activity Number],[Activity Title],[Priority],[Duration]
         [Number of Available Periods] [Number of Prerequisites]
Activity 2
         [Day 1] [Begin Time 1]-[End Time 1], ...
         [Prerequisite 1], [Prerequisite 2], ...
and so on
         Here is an example:
         1, Borrow a travel book from library, 5, 1:00'
         4 0
         Sun 10:00-13:00, Sun 14:00-20:00, Mon 10:00-13:00, Mon 14:00-
         20:00
         2, Haircut for wedding, 8, 2:00'
         2 0
         Sun 10:00-18:00, Mon 10:00-18:00
```

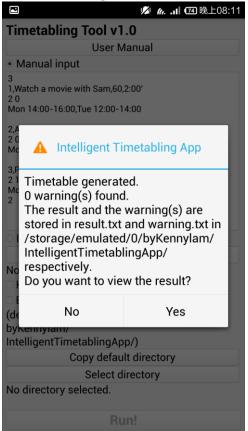
Below is a summarization of the input format:

```
3,Buy a gift for wedding,8,1:00'
2 0
Sun 10:00-18:00,Mon 10:00-18:00

4,Attend the wedding banquet,100,3:00'
1 2
Mon 18:00-21:00
2,3
```

- 3. Check this box if you want to read the timetable manually afterwards.
- 4. If you choose to export the result text file to another directory, check this check box, and select the directory you desire by tapping on the "Select directory" button. The path of the directory will be shown under the button after you select it. If you decide to stick with the default directory, you can copy the path of it into the system clipboard through the "Copy default directory" button.
- 5. Tap "Run!" to generate the schedule.

Wait for 1 second for the schedule to be generated. After that, a message will pop up.



This message shows that the schedule has been generated. If the input file contains any logical errors (for example if activity 1's prerequisite is activity 2, but at the same time activity 2's prerequisite is activity 1, then both activities can never be done), a warning will be generated. O warning means that the input is perfectly valid (the schedule will be generated properly even if the input file contains some logical errors). To view the warnings, tap "No", and after that open the directory that contains warning.txt manually. To view the result, tap "Yes", or "No" if you want to view the result afterwards. The result is stored in the same location with warning.txt, and its name is result.txt.

Thanks for using my app and reading the manual.